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Artificial Intelligence in the Accountancy Profession in Uganda

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Abstract

To provide a study on AI usage, adoption and experiences among professional accountants in Uganda. The accountancy profession has traditionally been commended for its excellency in financial reporting. However, in the past decade, professional accountants have been challenged to graduate towards strategic thinking and trusted business advisors. The advent of AI had rendered the transition even more urgent as anxiety looms about potential job losses among accountants. A mixed research approach whereby key informant interviews supplement the quantitative primary data gathered through a survey. The responses were triangulated with studies conducted in other jurisdictions and the myriad articles published on AI opportunities and threats. A survey questionnaire was dispatched to about 500 respondents via SurveyMonkey. Among the 162 people who responded, only 45 (24%) indicated that their organizations were already utilizing AI. The respondents who had not yet adopted AI cited a lack of robust internet connectivity, a lack of AI skills, non-existent technology, AI governance policies, human capital, and low financial budgets among the bottlenecks they face if they are to embrace AI. The top three areas in accounting where AI was being used are (i) accounting and financial reporting, (ii) writing business proposals, and (iii) client communication and support. The primary reasons for adopting AI are (i) improving accuracy and efficiency, (ii) staying competitive in the marketplace, and (iii) enhancing client service. For those that had adopted AI, the top three challenges they currently faced were (i) lack of expertise and skills, (ii) high implementation costs, and (iii) resistance to change from management and staff. 78% of the respondents believe that AI has had a positive impact on their workforce, while 10% complain that AI has a negative impact. 47% plan to increase AI investment in next 1-3 years while 41% consider to decrease the spend or do not wish to invest at all.

Keywords: Artificial Intelligence, Accountancy, Emerging Technology

1. Introduction

The International Federation of Accountants (IFAC) will be celebrating its 50th anniversary in 2027. IFAC's mission is to strengthen the worldwide accountancy profession by supporting high-quality professional standards, development, and ethical practices. Professional Accountancy Organizations (PAOs) (the country regulators of the jurisdictional accountancy profession) in over 180 countries are active members of IFAC, and these in turn, constitute over 3 million individual professional accountants. Cognizant of the opportunities and implications of Artificial Intelligence (AI), IFAC has created a dedicated library of content on AI and these resources are available on its knowledge gateway at www.ifac.org. A study by Accenture estimates that global economic growth could double from 3% to 6% per annum by 2035, mainly driven by AI. On the other hand, PwC study projected a 14% growth in global Gross World Product of USD120trillion by 2030, bolstered by AI positive impact on businesses.

AI is becoming a booming industry, estimated at over USD200 billion in 2025. North America leads with USD98 billion, Asia-Pacific USD87 billion, Europe USD62 billion, South America USD10 billion, and the Middle East & Africa do not have reliable data but would be in the region of USD1 billion (Cognitive Market Research, 2025). It is also not surprising that the majority shareholders of these technology companies are among the wealthiest in the world, the majority of whom are based in the United States of America (USA). These technology companies include Google/Alphabet, Amazon, Microsoft, Oracle, NVIDIA, OpenAI, Meta/Facebook, among others.

On the African continent, the Pan African Federation of Accountants (PAFA) (www.pafa.org.za) was founded in the year 2011 as a not-for-profit organization. Its mission is to strengthen the capacity and influence of the accountancy profession in Africa. Most of the PAOs in the 54 countries that form the African continent are members of PAFA. Over the years, PAFA has gradually developed the PAO Development Programme to support members, who, in turn, deliver and support quality accountancy professionals in their respective countries. PAFA is cognisant of the role that the accountancy profession can play in the exponential economic leap of Africa and to support the journey towards African Union Agenda 2063. Artificial Intelligence has been identified as one of the technologies that will propel the African continent to faster growth rates, and the professional accountant has a major role to play in data-driven decision-making and strategic advisory.

40% of organizations in Africa have joined the AI journey in the pilot phase, and a handful may have progressed toward a full-blown digital transformation. The top countries in Africa, such as South Africa, Egypt, Nigeria, and Kenya, are the current pace-setters, especially in the financial services and telecommunications sectors (McKinsey & Company, 2025). Many organizations in Africa are held back by infrastructure, given that only 1% of global data centre capacity in available on the continent. Attempts to acquire such capacity from Europe or America that is necessary for AI computing have proved costly. Secondly, Africa has fallen behind in the mass rollout of machine learning engineers, data scientists, AI governance experts, and researchers. Consequently, only 5% of the African AI talent has the computing power desired for complex tasks (UNDP, 2024). Nonetheless, it is estimated that over USD100 billion in economic value could be unlocked for Africa from AI alone. This gives a glimpse of the potential. The World Economic Forum placed the combined Gross Domestic Product (GDP) of all African countries at USD3 trillion as of 2024, which is lower than that of India at USD3.9trillion. The reason India is mentioned is because they have been at the forefront of technological advancements and developing most of the Enterprise Resource Plans (ERPs) and accounting software for enterprises of all sizes and sectors.

The East African Community (EAC) comprises eight partner states of Uganda, Kenya, Tanzania, Rwanda, Burundi, the Democratic Republic of Congo (DRC), the Federal Republic of Somalia, and the Republic of South Sudan. The East African Community Institutes of Accountants (EACIA) comprises PAOs within the EAC. These include the Institute of Certified Public Accountants of Uganda (ICPAU), Institute of Certified Public Accountants of Kenya (ICPAK), National Board of Accountants and Auditors (NBAA) of Tanzania, Institute of Certified Public Accountants of Rwanda (iCPAR), L'Ordre des Professionnels Comptables (OPC) of Burundi, and the Somali Institute of Certified Public Accountants (SICPA). The Ordre National des Experts-Comptables (ONEC) provides the legal framework and oversight for the accountancy profession in the DRC. The EACIA members facilitate professional accountancy recognition across the EAC via a Mutual Recognition Agreement (MRA). The combined GDP of the EAC partner states is estimated at USD320billion (2024) but the ISS African Futures

(https://futures.issafrica.org/geographic/recs/eac/) forecasts that GDP to grow to USD1.7trillion by 2043.

Uganda's GDP stood at USD50 billion (2023), and a Ten-Fold Growth Agenda was launched to coincide with Vision 2040 and to reach a milestone GDP of USD500 billion. Information and communications technology is one of the critical success factors towards Uganda Vision 2040. The Ministry of Information and Communication Technology and National Guidance has developed a number of laws and regulations, including data privacy and computer misuse. In addition, the Ministry has developed the Digital Transformation Roadmap 2028, which includes big data, digital skilling, and last-mile internet connectivity in the grassroots. Internet penetration stood at 15.3% of the population, while mobile phone penetration was much higher at 86%. However, AI internet requirements are much higher due to the large datasets that need to be accessed and modelled. Secondly, the level of AI skills in Uganda is unknown, but the consensus is that Uganda still ranks low across the different indices.

Artificial Intelligence (AI) has become a common buzzword in many discussions and most webinars, conferences, and workshops are incomplete unless a topic on AI has been slotted onto the programme. AI is a new frontier for the transition from the Fourth Industrial Revolution (4IR) to the Fifth Industrial Revolution (5IR), powered by digital technology transformations. AI has the potential to boost productivity, which in turn improves the financial position of entities and the GDP of the countries. However, AI also has the potential to cause anxiety through job displacements, frequent market disruptions, widening digital inequality, and the proliferation of fake news and images. Consequently, it is a double-edged sword, a paradoxical situation of mixed blessings. Research estimates that every dollar spent on AI will generate USD4.60 to the global economy. The consensus is that AI will create a positive net impact on jobs (more new jobs created than displacements) but the exact figures will require data collection over a longer period of time, based on actual AI implementations across the globe.

The accountancy profession is renowned for analysis and reporting of financial information, which is relied upon by many stakeholders in the private or public sector. Notwithstanding that the accountancy professionals have embraced technology in their workplaces, the emergence of AI has caused some anxiety in the profession. Some studies have indicated that by 2030, the AI may wipe out over 70% the work or jobs currently occupied by human professional accountants. This poses a question about the future relevance of accountancy studies and the employability of the existing accountants.

The main objective was to document the level of AI adoption in the Ugandan accountancy profession in Uganda. The sub-objectives of the study were to understand the:

a) Key areas of accountancy where AI has been adopted so far;
b) Driving forces behind the adoption of AI;
c) Challenges organizations face in the adoption of AI; and
d) AI implementation outlook in the next 2-3 years

The accountancy profession is evolving towards business advisory and leadership in many of the organizations, including the public sector. Readers are looking to the professional accountant as a change agent, a tech-savvy advisor, and a person with insights into the future. Therefore, the professional accountant needs to know the state of AI adoption and ensure he/she is not caught flat-footed.

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2. Literature Review

Based on social research studies, it was discovered that Artificial Intelligence (AI) had a positive impact on the accountancy profession (Emetaram & Uchine, 2021; Bako & Tanko, 2022; Holmes & Douglass, 2022; Hossain et al, 2024; Olaoye, 2025). Through the adoption of AI-enabled technologies, there are opportunities for productivity improvement and growth in outputs. Therefore, AI is an enabler and collaborator for the accountancy professional, not a threat to their current job. However, even before AI can be adopted, the employers and employees must first implement basic accounting software and ensure that personnel are trained to maximize benefits from the investment in technology. The following are some of the common accountancy software developed mainly in the USA and deployed at various companies, especially in Africa, and Uganda in particular.

Table 1. Extracts Respective Websites

QuickBooks	Xero	SAGE Intacct	Oracle NetSuite	VIC.AI
quickbooks.intuit.com	www.xero.com	www.sage.com	www.netsuite.com	www.vic.ai
California, USA	Wellington, NZ	California, USA	California, USA	Oslo, Norway
1992		1999	1998	2017
Bank Feeds Cloud Accounting Invoicing Project Profitability Inventory Data Migration Tax Tracker Expense Tracker Mobile App	Invoicing Inventory Payroll Non_Profit	Accounting Payroll Inventory Invoicing Accounting Practice Distribution Sage AI Copilot	Human Capital Accounting Global Business ERP Integration Professionals Omni Channel Analytics Financial Reports Education	Accounts Payable Analytics Insights Expenses Approvals Purchase Orders ERP Integration Vendors Fraud Prevention

Source: Researchers' extracts from respective websites

Table 2. Extracts Respective Websites

Botkeeper	Zeni	Trullion	FreshBooks	Zoho Books
www.botkeeper.com/	www.zeni.ai/	www.trullion.com/	freshbooks.com/	zoho.com/books/
Florida, USA	California, USA	New York, USA	Toronto, Canada	Chennai, India
2015	2019	2020	2003	1996
Auto Bank Rec Transaction Manager Transaction Insights Activity Hub Bot Reviews JE Automation Smart Connect Close Tracker Audit Logs	Bookkeeping Fractional CFO Payroll Tax Accounting Bill Payments Reimbursements Business Credit Resources Hub Financial Models	Audit Suite Data Match Data Extract FS Validation Lease Accounting Revenue Recog Trulli AI Customer Stories Resource Hub	Invoicing Expenses/Receipts Time Tracker Financial Reports Mobile App Online Payments Estimating Software Accounting Projects Tracker	AI Business SAAS Industry e-Learning e-Publishing Internet-of-Things Non_Profit Consulting OTT/Videos Membership

Source: Researchers' extracts from respective websites

Initially, the accountants used pencils, pens and books to record transactions. However, through the third industrial revolution, computers became common and followed by specialized accounting software. Through the continuous use of the accounting software, the computer eventually learns how the human being is handling different tasks. As an example, a human being would use a voucher to post entries into appropriate subsidiary ledgers and the sum of the debits must equal to the sum of the credits, before the entries can be posted. At end of the accounting period (it could be daily, weekly, monthly and so on), the human being generated a trial balance to be able to view the balances and totals. The developers of the above examples of accounting software have now embedded machine learning (ML) as one of the basic entries into the world of AI. ML enables the computer to predict what the human being would do for process-based and repetitive tasks (Duffy, 2018; Stancu & Duţescu, 2021; Hossain et al, 2024). ML is based on the memory of the computer over a prolonged period of time based on the data that is being captured, the patterns, the timing and other relevant variables. Nonetheless, Human-AI collaboration is the most optimal solution whereby AI provided the human with quick and timely data and the human uses his/her judgement for the data-driven decision-making (Celestin & Vanitha, 2020).

The professional accountant should progress from machine learning to predictive AI and to generative AI. It is important to undertake a situation analysis using the renown strengths, weaknesses, opportunities and threats (SWOT) analysis. This enables the organization to map out an evidence-based AI adoption strategy which also takes into consideration users' perceptions on the usefulness and ease of use of the new technology (Wael et al, 2019). Internally, the professional accountant (working with an independent consultant) can be at the driving seat of research using the Technology Acceptance Model (TAM) and conduct surveys among the staff members (Ma & Liu, 2004). In addition, a survey can be conducted using the Unified Theory of Acceptance and Usage of Technology (UTAUT) as posited by Souza et al, 2017 and modified to suit technological changes introduced by the organization (Dwivedi et al, 2019; Miah & Hasan, 2019; Chukwuani & Egiyi, 2020; Islam et al, 2020; Uyar & Kılıç, 2021).

Nonetheless, other studies have found pockets of anxiety whereby respondents in the accountancy dockets feel that AI may soon replace them (Suleiman et al, 2020). AI tools and technology has already led to benefits of cost-cutting and efficiency. Most of the famous accounting software and ERP are now able to use AI for invoice processing, payroll management, auditing and forecasting which means that the accountant's or clerk's role has to redesigned. The junior accountant has to quickly upgrade into a higher-level role beyond mere data handling to being a strategic advisor (Widasari et al, 2024; Ergasheva, 2025). This has increased the threat of employee layoffs, especially for mundane, monotonous or routine tasks. Machine learning and robotic process automation is being used for repetitive and process-based accounting tasks like daily data entry and monthly bank reconciliations (Karim et al, 2025). Another looming threat is the fact that many smaller and medium organizations have limited budgets for staff training. Hence, the digital skills gap is widening and those who have more financial resources are already ahead of the technology and AI curve, while the rest are lagging behind with potentially devastating implications. The skills gap is higher among senior staff as they are forced to undergo re-skilling on emerging technologies as what they learnt in the last century is no longer applicable as businesses approach the end of this decade. Other studies show that whereas AI will be deployed, new accountancy roles to work with AI will be created. Therefore, it is a win-win scenario which was first observed during

the prolonged work from home models that were made possible by way of different digital technologies including cloud computing, virtual private networks (VPN), video conferencing, Google collaboration tools, among others (Celestin & Vanitha, 2020)

Accountants must not just be aware of the threat, but must act quickly and embrace both generic technology and AI. The starting point is awareness, followed by acquisition of relevant training and then active implementation at respective workplaces in order to demonstrate added value, beyond traditional numbers on the income statement and balance sheet (Strydom & Mohammadali-Haji, 2025). The professional accountant (whether in industry or in practice) must now graduate to a strategic business advisor and this requires technological astuteness, critical insights and data-driven decision making. However, there are concerns about the transparency of the cosy reports that are generated from AI technologies. Data privacy, algorithm bias and window dressing threats can emerge if the entity does not have robust technology governance policies and procedures and the accountant does not comply with the Code of Ethics (Karim et al, 2025). In addition, the challenges of integrating AI into existing systems pose a cost and integrity issue (Nkwede & Aniuga, 2023; Hossain et al, 2024). Secondly, some countries have not designed AI-specific laws and regulations to be able to determine whether there is compliance or not and to allay fears of users and consumers. The professional accountant is already grappling with fragmented, silo-based peripheral systems that pose a challenge to the integrity and completeness of financial reporting. Whereas big data is touted as a game changer, this all depends on the quality and quantity of the data captured through the myriad of peripherals (Saleem et al, 2023). The solution is to acquire a robust Enterprise Resource Plan (ERP), have a protected centralized data warehouse and then utilize Business Intelligence (BI) and data mining tools to extract information from a single source of truth.

Accountancy educational curricula (the accountancy Bachelor degree courses, Certified Public Accountant, ACCA, Chartered Accountant syllabi, among others) and continuous professional development (CPD) programmes need to incorporate AI from now going forward (Bako & Tanko, 2022; Mansor et al, 2022; Hsiao & Han, 2023; Hossain et al, 2024; Mpofu & Sebele-Mpofu, 2024). This enables the professional to create a pipeline of future ready professionals and also for the existing ones to upgrade their skills to match the emerging trends. Accountancy students who have been interviewed have indicated their wish to learn data analytics and AI while at school, and the ball is in the court of the relevant academic institutions to revamp their syllabus before it is too late. There is also a request to all professional accountants to become lifelong learners because technology will never remain static (Holmes & Douglass, 2022). Even after grasping AI, the professional accountant needs to be aware or utilize other accompanying technologies like blockchain, robotics, cloud, big data, Internet-of-Things (IoT) and Industry 4.0 (Aljazeeri & Al-Sartawi, 2023; Olaoye, 2025). Otherwise, the professional accountants' existence could also be threatened by other professionals like lawyers, engineers and tax experts. Technology-enabled pedagogical approaches, in-demand faculty course development, AI ethics education, transparent assessment models and mainstreaming of AI into core curriculum. IFAC, PAFA and different Professional Accountancy Organizations (PAOs) in Africa must also incorporate AI in the annual CPDs for upskilling and matching the rapid technological advancements (Mbizi et al, 2022; Cudia & Legaspi, 2024; Mpofu & Sebele-Mpofu, 2024). For example, the South African Institute of Chartered Accountants (SAICA) has developed a framework codenamed 2025CF to coordinate efforts with major Universities to tailor accountancy academic programmes to incorporate AI concepts (Landsberg & van den Berg, 2023). With regard to accountancy examinations, it was observed that AI chatbots could potentially influence examination scores

and thereby undermine the quality of the human accountants (Amoah et al, 2024). Solutions to such potential fraud include a strong AI legal framework, prohibiting electronic devices in exam rooms and remote proctoring.

In summary, AI has its opportunities and threats to the professional accountant. Therefore, regular surveys to measure the quality of work life (QoWL) need to be undertaken at departmental and organizational level (Fülöp, 2025). Employee satisfaction surveys can also be conducted with all other staff members who may be affected by AI and other issues in their respective jobs. Typically, AI leads to job satisfaction, improved productivity, technological efficiency, and better customer experience. However, these surveys should collect information on employees' fears about AI to avoid resistance to change. In addition, a specific AI policy needs to be documented and applied across the board, including transparency, ethics, and inclusiveness in accessing AI-related training and upskilling to avoid the widening of the digital divide (Celestin, 2024).

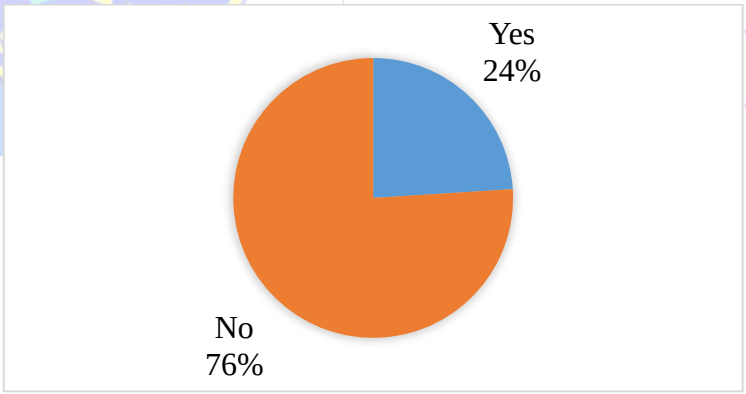
3. Method

Based on the literature review, a survey questionnaire was designed to be completed by a representative sample of professional accountants in employment. Some of the respondents work in accounting firms that primarily provide accountancy-related services to their clients. Other respondents were employees working full-time in private and public sector entities.

To supplement the survey questionnaire, the author also undertook key informant interviews with some targeted respondents to understand further the themes that emerged from the questionnaire.

4. Result and Discussion

Does your organization currently use Artificial Intelligence (AI) technologies?



Source: Researchers' survey results from 162 responses

Figure 1. Respondent

The following are the thematic areas based on the qualitative responses provided:

Internet: In Uganda, the major internet service providers like MTN and Airtel who have both mobile and fibre. Other providers include Liquid Telecom, ROKE, Canal+, Zuku. Average internet speeds vary from 10-35Mpbs for mobile and lower for the fixed-line. The connectivity, reliability and speed of the internet will be influenced by the package that an individual or organization pays for. Using cloud-based computing, these tools are critical for

AI for purposes of training personnel on vast datasets via video conferencing as well as e-learning. Secondly, internet is important for AI to run the relevant models for it to produce the desired output. Thirdly, as the internet helps AI, in turn the AI enables many other technologies to work efficiently.

AI Skills: The Uganda Institute of Communications and Technology (UICT) has commenced a specialized Diploma in Data Science. Other universities, such as Makerere, Kyambogo, Makerere University Business School, ISBAT, and UTAMU, offer Bachelor's and Master's degrees in Data and AI. Like any other skill, grasping AI can vary from a few weeks to several years, depending on the course level and content. An organization needs to undertake a gap analysis of its technology and AI landscape and develop or acquire the necessary skills.

Technology: In Uganda, organizations have a vast array of AI technology that they can deploy, including ChatGPT/OpenAI, MetaAI, Microsoft Copilot, Google Gemini, Amazon Web Services (AWS), DeepSeekAI, among others. Each of these has different products and services, and the choice depends on each organization. In the accountancy profession, one needs to adopt technology before upgrading to AI-based versions. For example, one cannot think about AI, and yet they are using manual bookkeeping. Secondly, where existing systems are in place, integrating them and optimizing AI becomes part of the next steps.

Governance: In every organization, there is some level of governance and structure. Ideally, technology governance starts from the top leadership (corporate governance) via policies and then cascades to every employee through operational manuals and procedures. In the case of the technology policy, it needs to be amended to incorporate AI governance, given its uniqueness and potential for opportunities and threats. Key principles under AI governance are ethics, accountability, fairness, and transparency. The professional accountants in finance, risk and audit do play a crucial role in advising management on how to tailor the governance structures for AI;

Funding: To recruit the skilled AI personnel, the acquisition of the AI tools themselves and the continuous training and development of the professional accountants on the team. For an SME, the deployment of AI could cost, say USD100 per month per user, for off-the-shelf tools (including chatbots). Often, such amounts could become unsustainable if the concomitant benefits are not realized. For custom made AI, the entity may require between USD100,000-500,000, which could be out of reach for many SMEs.

If yes, which areas of your organization utilize AI?

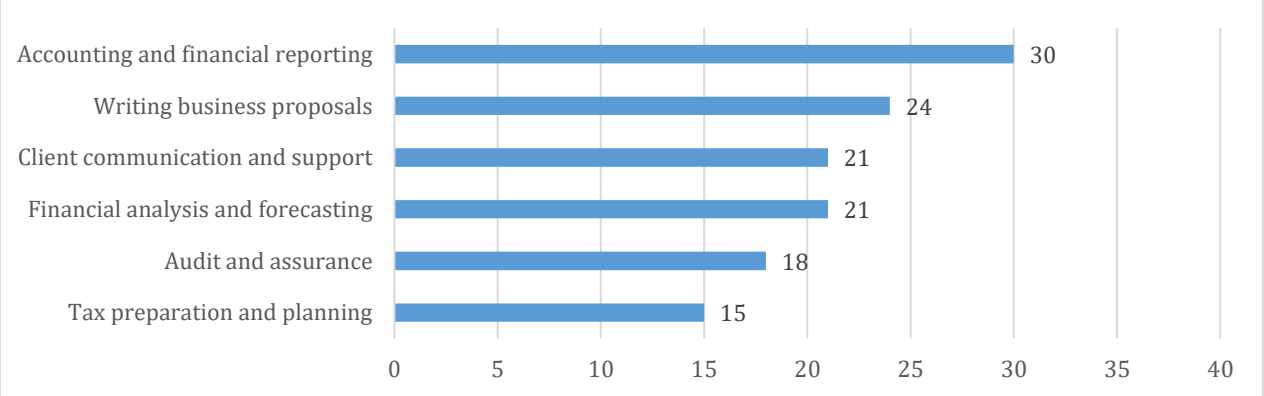


Figure 2. Organization Utilize AI

Accounting and financial reporting: The Optical Character Recognition (OCR) tools embedded in the accounting software can be used to scan and extract data from physical or PDF documents. This helps improve turnaround time and enhance accuracy of data capture. Thereafter, the AI algorithm is able to classify financial transactions and post them to the correct subsidiary ledgers on a timely basis. Often, due to fatigue, human accountants accumulate a backlog of vouchers and documents that remain unposted for several months. Thirdly, AI is used to reconcile data in one or more documents. For example, the OCR extracts data from a bank statement and then AI compares that data with the cash book from the accounting software and generates a bank reconciliation statement;

Writing business proposals: There are many tools including Grammarly, Jenni, ProposalGenie, among others. Often bids and proposals have very tight deadlines. Therefore, AI can be used to generate a first draft using data from past similar proposals or an existing content library, which has a repository of the technical methodology, financial templates and CVs of key personnel. This reduces the lead time as opposed to starting from scratch for every proposal. AI can scan the Request for Proposal (RFP) and create a summary of the key attachments and deadlines. AI can summarize general information (via condensed CVs, trimmed word count, proposal meetings), create draft zero (introduction sections, boiler plate content, creative ideas), editing draft one (proof reading, spelling, grammar, simplified language, tone), conduct competitor analysis (industry outlook, competitor weaknesses and strengths) and financial quotation;

Client communication and support: Tools include Zoho, Emitrr, Aircall, Sprinklr, Tidio, among others. Using chatbots and virtual assistants, organizations can provide 24/7 client communication and support. AI can also extract data for customer satisfaction trends and patters for purposes of sentiment analysis;

Financial analysis and forecasting: Using cloud-based accounting software, the accountant is able to generate real-time financial reports which can be exported to spreadsheet for basic analysis. However, advanced data analytics generated by AI provides trends, patterns, anomalies and enables the organization move from predictive AI towards generative AI. Lastly but not least, the AI can provide a forecast for the future based on the data patterns and trends, implying that the professional accountant is able to be a trusted and insightful advisor to the Board and Management;

Audit and assurance: In Uganda, there are over 250 auditing firms, including the Big_4 of KPMG, EY, PwC and Deloitte. These international firms have the requisite resources to adopt AI technologies in audit and assurance which is commensurate with the level of sophistication of their clients. However, Small and Medium-sized Practices (SMPs) may be slow to adopt and deploy AI since majority of their clients are SMEs. While some SMEs have since acquired accounting software like QuickBooks, SAGE, Tally, they have not yet upgraded to AI-enabled versions. Nonetheless, the SMPs can use off-the-shelf audit software like DraftWorx, CaseWare, TeamMate;

Tax preparation and planning: Monthly tax returns can be classified as routine and process-based tasks. For example, the monthly return for employment tax is to be filed by the 15th of the subsequent month. Some of the information remains static for month, if the employees have not changed and their salaries have also remained constant. The initial file can be generated using AI plus a summary of the changes from the previous file. The accountant can then approve the file for upload;

What are the primary goals for adopting AI technologies in your organization?

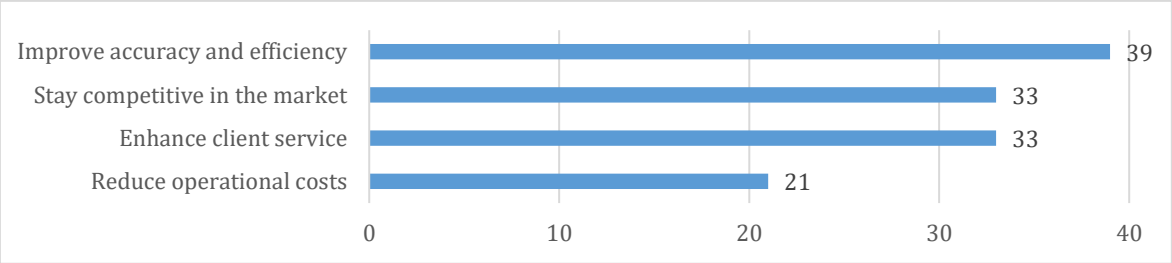


Figure 3. Adopting AI Technologies

Accuracy and efficiency: Traditionally, paperwork in different organizations has been used as proof of work done, authorizations and approvals by way of manual signatures. As indicated above, most respondents want AI to help them improve accuracy and efficiency in the areas of accounting data entry, invoice processes, tax returns, financial reporting and forecasting. On the downside, some auditing firms have experienced a reduction in audit fees due to AI deployed by clients for anomaly detection, data analytics and less errors in the management accounts;

Stay competitive in the market: AI tools provide regular reports on activities of competitors in the market, including scanning social media to track their promotional agenda and technology innovations. AI is also used in writing business proposals and one of the critical success factors is to know the competition's strengths and gaps; Rather than manually scan the environment and lose proposal writing time, the virtual assistant enables the auditing firm to prepare a solid proposal, on time. Secondly, the Big_4 and SMPs have to stand out of the crowd by demonstrating knowledge, skills and tools that integrate with those of the clients. This way, the firm is more competitive given that it provides data analysis and more value-adding recommendations;

Enhance client service: At end of the day, the output from an auditing firm is the audited financial statements and the internal control report or management letter. The collaboration between the human auditor and AI leads to faster audits, hence less fatigue for audit clients. The outputs are also delivered on a timely basis to ensure clients meet regulatory deadlines. Thirdly, the insights and data analytics help the firm to write value-adding recommendations rather than the traditional backward-looking audit findings;

Reduce operational costs: AI is a double-edged sword that brings both gains and losses. At enterprise level, some of the mundane tasks in the finance and audit departments could be automated and replaced by AI robotic process automation. Consequently, there will be job displacements that lead to lower employment costs. AI chatbots have been used in place of call centre personnel to receive and provide answers to frequently asked questions. AI anomaly detection can lead to proactive remedial action to avert any losses of money. AI also helps professional accountants in more accurate financial reporting and forecasting which enables better decision-making and avert knee-jerk reactions

What challenges has your organization faced in AI adoption?

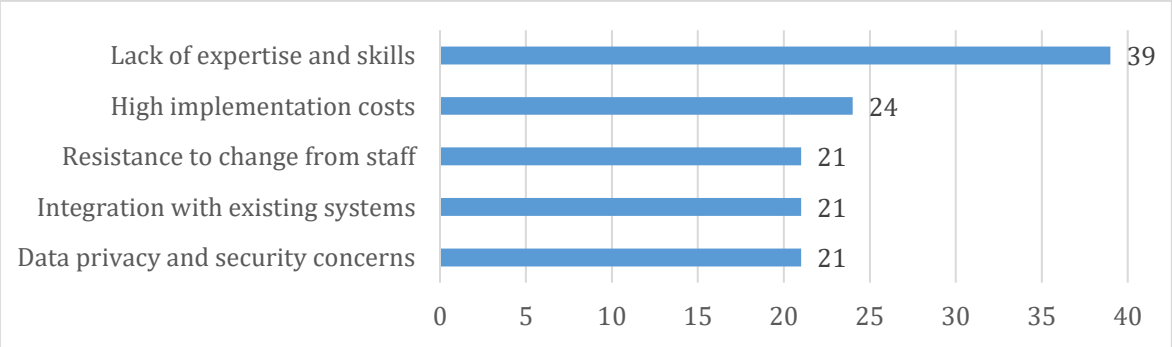


Figure 4. Organization Faced In AI Adoption

Lack of expertise and skills: AI is an emerging concept within the realm of rapid technological advancement. Many technical institutions and Universities have not been able to quickly adjust their teaching and curriculum to incorporate AI. Consequently, the demand for AI experts is higher than the supply, leading to a shortage. In the short-run, this is good news for the professional accountants that were quick-footed and pragmatically acquired AI skills and expertise in that they are in-demand and gotten themselves fat salary increments. The challenge for organizations is that acquisition of AI skills has become an expensive necessity, which is not a bigger price to pay compared to ignoring AI altogether;

High implementation costs: Costs of an AI expert vary from USD100 per hour for junior personnel to very experienced AI developers who command a salary of USD200,000 per annum. Project implementation costs do vary from say USD10,000 to above USD250,000 depending on scope, geographical location and timelines. In Uganda, SMEs can start with the basic subscription model of say USD100 per month per user.

Resistance to change from staff: This is not restricted to AI, but cuts across many changes. The resistance is caused by users not fully understanding the rationale for the change and also anxiety about being taken away from the comfort zone. Secondly, resistance to AI may stem from its complexity to use thus requiring existing staff members to undergo reskilling and the laggards may feel that the new system was deliberately brought to render them jobless. The quiet resistance to change manifests in deliberate under-utilization of the AI tools and giving false reports of system failure and constant unavailability;

Integration with existing systems: A number of professional accounting firms already use audit software, while their clients use different accounting software and ERPs. The dedicated AI tool has to integrate with these existing systems in order to reduce resistance to change, but also maximize benefits. The creation of Application Programming Interfaces (API) to allow systems to 'talk' to each other comes with benefits and challenges. Professional accountants can work with existing API tools to integrate AI into their own areas of work. However, these additional APIs also come at a cost;

Data privacy and security concerns: AI tools have been used to collect as much personal information and data. Since the majority of these tools are cloud-based and developed in USA and Asia, concerns arise as to how the collected data is being used. The Uganda Data Privacy and Protection Act was enacted in 2019, but users are often left worried about whether the Government had adequate jurisdiction over the cloud-based providers.

How do you perceive the impact of AI on your organization's workforce?

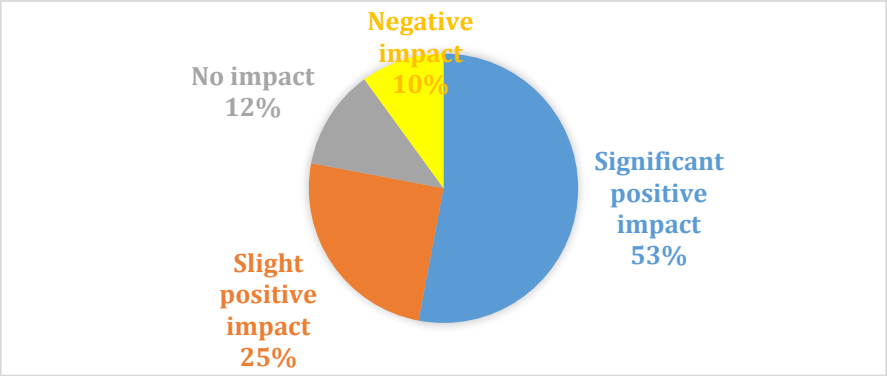


Figure 5. The Impact AI on Organizations workforce

In the 2025 report by Goldman Sachs titled 'How Will AI Affect the Global Workforce", there will be a modest and temporary impact on the employment levels. About 0.5% reduction in global employment as the displaced workers undergo reskilling or placement in newly created jobs. CNBC also agrees that impact is small, but not zero. From the survey, the 78% of the respondents agree that AI has had a positive impact while only 10% think that AI has had a negative impact. A 30% Rule suggests that AI and Automation could handle 70% of the tasks, while the remaining 30% is reserved for human personnel for decision-making and strategic thinking. On the other hand, the Boston Consulting Group suggests the 10-20-70 rule whereby10% is for AI, 20% for Technology/Data and 70% for human personnel.

What is your organization's plan regarding AI investment in the next 1-3 years?

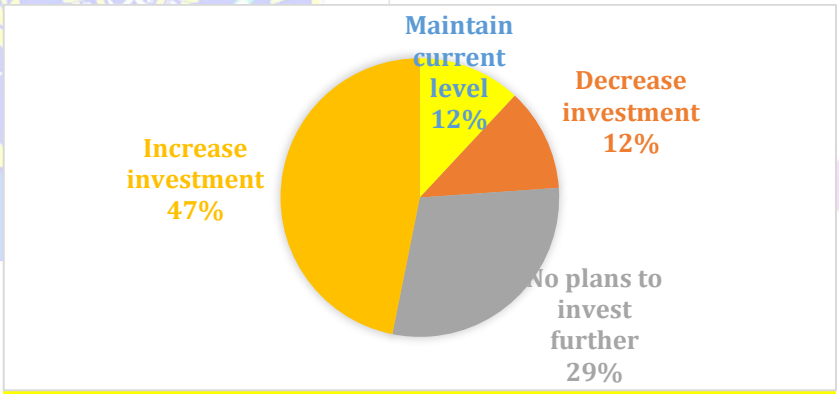


Figure 6. The Impact AI on Organizations workforce

The figures being touted in the developed economies are mind-boggling. For example, Gartner estimates that USD1.5trillion will be spent on AI in the year 2025 alone. From the Ugandan survey, 47% of the respondents plan to increase investment. This is probably informed by the benefits that they have observed to-date and upgrading may yield additional gains. Although the data about AI spend by SMEs is not readily available, McKinsey projects that majority of these entities have expressed interest to join the bandwagon in the next 2-3 years.

5. Conclusion

ICPAU can partner with the ISACA Kampala Chapter whose mandate is to help businesses and IT leaders to maximize value and manage risks related to information and technology. ISACA helps business and IT leaders maximize value and manage risk related to information and technology. An annual joint seminar would help blend accountancy and technology, and AI will be at the centre of the discussions. Panellists can be sourced from both ICPAU and ISACA members and practical experiences can be shared, including failures and success stories.

RESEARCH LIMITATIONS

The respondents were primarily professional accountants in Uganda, majority of whom are running SMPs that provide services to SMEs. Whereas 62 responses were received, 76% had not yet adopted AI and hence did not continue with the additional questions. Consequently, a cross-cutting view of AI adoption in Uganda cannot be determined using this particular survey report.

FUTURE RESEARCH

An AI adoption comparative analysis targeting selected professionals who often collaborate with the Accountants in the course of delivering services to clients. These include the Lawyers, Engineers, Architects, Surveyors.

PRACTICAL IMPLICATIONS

AI should be promoted in the Accountancy Profession in Uganda. ICPAU can partners with the ISACA Kampala Chapter to conduct joint annual webinars to increase awareness and promote the adoption of technology among professional accountants, while simultaneously equipping them with skills to mitigate technology risks. ISACA helps business and IT leaders maximize value and manage risk related to information and technology.

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