

Emerging Technologies Used in the Accounting Industry: Evidence from Sefwi Wiawso Municipality, Ghana

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ABSTRACT

This study investigates the adoption and use of emerging technologies within the accounting industry, drawing empirical evidence from the Sefwi Wiawso Municipality in the Western North Region of Ghana. The primary objective of the study was to assess the extent to which accounting professionals and business managers have embraced selected emerging technologies and to identify the dominant technologies influencing contemporary accounting practices within the municipality. A quantitative research design was employed to ensure objectivity and allow for statistical generalization of findings. Primary data were collected through structured questionnaires administered to a sample of 154 respondents, comprising professional accountants and business managers operating in both the public and private sectors. The questionnaires were designed to capture respondents' awareness, usage levels, and perceptions regarding the adoption of emerging technologies in accounting. Descriptive statistical tools, including frequencies, percentages, means, and standard deviations, were used to analyse the data and determine the extent of adoption of the selected technologies.

The findings indicate that Artificial Intelligence (AI) is the most dominant and widely adopted emerging technology within the accounting industry in Sefwi Wiawso. AI applications are primarily used in areas such as automated data processing, error detection, and decision-support systems. This is followed by Big Data analytics, which is increasingly utilized to enhance financial analysis, forecasting, and strategic decision-making. Cloud Accounting also shows a moderate level of adoption, largely due to its benefits in terms of accessibility, cost efficiency, and real-time financial reporting. Robotic Process Automation (RPA), however, records the lowest level of adoption, suggesting limited awareness, high implementation costs, and inadequate technical expertise as possible barriers.

Overall, the study concludes that the accounting industry in Sefwi Wiawso Municipality is gradually transitioning toward technology-driven practices. However, the adoption of emerging technologies is uneven, with significant disparities across different technological tools. These variations are influenced by factors such as organizational size, availability of infrastructure, technical skills, and financial capacity.

Based on these findings, the study recommends targeted capacity-building programmes, including continuous professional training and digital skills development for accounting professionals. It also advocates for increased investment in technological infrastructure and supportive policy frameworks by government and regulatory bodies to facilitate the effective integration of emerging technologies. Such measures would enhance efficiency, accuracy, and competitiveness within the accounting industry, ultimately contributing to improved financial management and economic development in the region.

Keywords: emerging technologies, accounting industry, artificial intelligence, automation.

INTRODUCTION

Background of the Study

Digitalization has emerged as one of the most influential forces shaping contemporary organizations, fundamentally transforming how business activities are designed, executed, and controlled across diverse

industries (Agevall et al., 2018). Through the integration of digital tools and information technologies, organizations are able to streamline operations, enhance productivity, and respond more effectively to an increasingly complex and competitive business environment. The accounting industry, which was traditionally dominated by manual bookkeeping, paper-based records, and periodic reporting, has not been exempt from this transformation. The introduction of computerized accounting systems and advanced digital technologies has significantly altered accounting processes, leading to greater efficiency, accuracy, transparency, and timeliness in financial reporting (Wang et al., 2017). These changes have also redefined the professional roles of accountants, shifting their focus from routine record-keeping to analytical, advisory, and strategic functions (Sun et al., 2017).

In recent years, a range of emerging technologies has gained prominence in accounting practice. Technologies such as Artificial Intelligence (AI), Big Data analytics, Cloud Accounting, Robotic Process Automation (RPA), and blockchain are increasingly being adopted to automate repetitive accounting tasks, improve data quality, and support informed decision-making (Moll & Yigitbasioglu, 2019). AI-driven applications facilitate intelligent data processing, anomaly detection, and forecasting, while Big Data analytics enables accountants to analyse large volumes of structured and unstructured data for enhanced financial insights. Cloud Accounting supports real-time access to financial information, improves collaboration, and reduces infrastructure costs, whereas RPA enhances efficiency by automating rule-based processes such as invoice processing and reconciliations. Collectively, these technologies enable real-time data processing, predictive analysis, and strengthened internal controls, thereby enhancing the overall effectiveness of accounting functions within organizations (Janvrin & Watson, 2017).

Despite the widespread diffusion of these technologies at the global level, their adoption remains uneven, particularly in developing economies. Factors such as limited technological infrastructure, high implementation costs, skills gaps, and regulatory challenges continue to constrain adoption in many contexts. In Ghana, for instance, a significant number of small and medium-sized enterprises (SMEs) and public sector institutions still rely on manual or semi-automated accounting systems. This situation is more pronounced in semi-urban and rural municipalities, where access to advanced digital infrastructure and specialized technical expertise is often limited (Anomah et al., 2024). Within this context, the Sefwi Wiawso Municipality presents a relevant case for examining the practical realities of technology adoption in accounting.

Against this background, the present study focuses on identifying the emerging technologies currently used in the accounting industry within the Sefwi Wiawso Municipality. By providing empirical evidence from a semiurban setting in Ghana, the study seeks to contribute to the growing body of literature on digital transformation in accounting, while offering insights that may inform policy formulation, professional training, and investment decisions aimed at promoting the effective integration of emerging technologies in the accounting industry.

Problem Statement

The rapid advancement of digital technologies has significantly transformed accounting practices across the globe, leading to increased automation, enhanced analytical capabilities, and improved efficiency in financial reporting. Despite these global advancements, many accounting professionals and organizations in developing economies continue to face considerable challenges in adopting and effectively utilizing emerging technologies (Sutton et al., 2016). These challenges often stem from inadequate technological infrastructure, high implementation costs, limited access to digital tools, and insufficient technical competencies among accounting practitioners.

In the Ghanaian context, the adoption of emerging accounting technologies remains uneven, particularly in municipalities outside major urban centres. Accounting practices in such areas are frequently characterized by a heavy reliance on manual or semi-automated systems, constrained access to reliable digital infrastructure, and gaps in digital skills and professional training (Zotorvie et al., 2025). As a result, many organizations are unable to fully benefit from the efficiency, accuracy, and strategic advantages associated with advanced accounting technologies. This situation raises concerns about the ability of accounting professionals in these regions to meet contemporary reporting demands and support effective managerial decision-making.

Although emerging technologies such as Artificial Intelligence, cloud accounting, and data analytics have received increasing attention in the accounting literature, existing studies largely focus on developed economies or major urban centres in developing countries. There is limited empirical evidence on the specific emerging technologies currently being used within the accounting industry in smaller and semi-urban municipalities such as Sefwi Wiawso. The absence of localized and context-specific evidence makes it difficult to accurately assess the extent of technological transformation occurring within the accounting industry at the grassroots level, as well as the practical realities faced by accounting professionals in such settings.

Consequently, this study seeks to address this gap by providing empirical evidence on the emerging technologies used in the accounting industry in the Sefwi Wiawso Municipality. The central research question guiding the study is: what emerging technologies are currently used in the accounting industry in the Sefwi Wiawso Municipality? By answering this question, the study aims to enhance understanding of technology adoption in semi-urban accounting environments and provide insights that can inform policy formulation, professional development initiatives, and strategic interventions to promote digital transformation in the accounting industry in Ghana.

Objective of the Study

The main objective of this study is to identify the emerging technologies used in the accounting industry within the Sefwi Wiawso Municipality.

Significance of the Study

This study is significant from academic, professional, and policy perspectives, as it provides valuable insights into the adoption of emerging technologies within the accounting industry in a semi-urban context in Ghana.

From an academic perspective, the study contributes to the growing body of literature on digital transformation in accounting by providing empirical evidence from a developing economy, particularly within a semi-urban municipality that has received limited scholarly attention. Most existing studies on emerging accounting technologies focus on developed countries or major urban centres, creating a gap in understanding how these technologies are adopted and utilized in less urbanized settings. By examining the case of the Sefwi Wiawso Municipality, this study extends the scope of accounting and information systems research and offers a context specific understanding that can inform future comparative and longitudinal studies.

From a professional perspective, the findings of the study offer practical insights into the technological tools currently shaping accounting practice within the municipality. The study highlights the extent to which accounting professionals and business managers are engaging with emerging technologies, as well as the disparities in adoption across different tools. These insights are useful in identifying areas where digital skills, technical competencies, and continuous professional development are most needed. Consequently, the study can support accounting practitioners, firms, and professional bodies in designing targeted training programmes that enhance technological readiness and improve the quality and efficiency of accounting services.

From a policy perspective, the study provides evidence-based insights that can guide policymakers, professional accounting bodies, regulatory agencies, and educational institutions in developing strategies to promote digital transformation within the accounting industry. The findings can inform the formulation of policies related to technology infrastructure development, professional training standards, and curriculum reforms in accounting education. By addressing the technological gaps identified in the study, policymakers and stakeholders can facilitate more effective integration of emerging technologies, strengthen the capacity of accounting professionals, and ultimately enhance financial management and accountability within organizations in Ghana.

LITERATURE REVIEW

Theoretical Framework

This study adopted the Technology Acceptance Model (TAM), originally developed by Davis (1989), as the theoretical framework to explain the adoption of emerging technologies within the accounting industry. The Technology Acceptance Model is one of the most widely used theories in information systems research and provides a robust explanation of how individuals come to accept and use new technologies. According to TAM, users' acceptance of a technology is primarily determined by two key factors: perceived usefulness and perceived ease of use.

Perceived usefulness refers to the extent to which an individual believes that using a particular technology will enhance job performance, efficiency, and overall effectiveness. In the accounting context, this may include improvements in accuracy of financial records, speed of transaction processing, quality of financial reporting, and support for decision-making. Perceived ease of use, on the other hand, relates to the degree to which an individual believes that using a technology will be free of effort. Technologies that are intuitive, user-friendly, and require minimal technical expertise are more likely to be adopted by accounting professionals.

In relation to emerging accounting technologies, TAM suggests that accountants and business managers are more likely to adopt technologies such as Artificial Intelligence, Cloud Accounting, Big Data analytics, and Robotic Process Automation when they perceive these tools as beneficial to their work and easy to operate (Bühler, 2020). For instance, if accountants perceive that AI applications can automate routine tasks, reduce errors, and improve efficiency without requiring complex technical skills, their likelihood of adoption increases. Conversely, technologies perceived as difficult to use or requiring extensive training may face resistance, particularly in contexts with limited digital skills.

The application of TAM is particularly relevant for understanding technology adoption within the accounting industry in the Sefwi Wiawso Municipality. Given the semi-urban nature of the municipality and the varying levels of technological infrastructure and digital literacy, perceptions of usefulness and ease of use play a critical role in shaping adoption decisions. By adopting TAM as the guiding framework, this study provides a structured lens for analysing how accountants' perceptions influence the extent to which emerging technologies are embraced in practice. This theoretical perspective therefore supports the interpretation of the study's findings and enhances understanding of the factors driving technology adoption in the local accounting environment.

Conceptual Review: Emerging Technologies in Accounting

Emerging technologies in accounting refer to advanced digital tools, applications, and systems that leverage modern information technologies to automate accounting processes and enhance the generation, processing, and use of financial information. These technologies represent a shift from traditional, manual, and rule-based accounting practices toward more intelligent, data-driven, and integrated systems. By reducing human intervention in routine tasks, emerging technologies improve efficiency, accuracy, transparency, and timeliness in accounting operations, while enabling accountants to focus on higher-value analytical and strategic roles (Romney & Steinbart, 2021; Moll & Yigitbasioglu, 2019).

One of the most transformative emerging technologies in accounting is Artificial Intelligence (AI). AI enables computer systems to perform tasks that typically require human intelligence, such as learning, reasoning, pattern recognition, and decision-making. In accounting practice, AI is increasingly applied in areas such as automated data processing, anomaly and fraud detection, auditing support, predictive analysis, and decision-support systems. These applications significantly reduce errors associated with manual processing and enhance operational efficiency, thereby improving the quality and reliability of accounting information (Appelbaum et al., 2017; Ahmad et al., 2024).

Big Data analytics is another critical technology reshaping accounting practice. It allows accountants to collect, process, and analyse large volumes of structured and unstructured financial and non-financial data

from multiple sources. Through advanced analytical techniques, Big Data analytics supports improved forecasting, trend analysis, risk assessment, and performance evaluation, thereby enhancing managerial decision-making and strategic planning within organizations (Barreto et al., 2025).

Cloud Accounting has also gained prominence due to its ability to provide remote access to accounting systems through internet-based platforms. This technology facilitates real-time collaboration, timely financial reporting, and scalability, while reducing the need for costly on-premise infrastructure. Cloud-based accounting systems are particularly attractive to small and medium-sized enterprises because of their cost efficiency, accessibility, and flexibility, and their ability to integrate with other digital tools.

Robotic Process Automation (RPA) focuses on automating repetitive, rule-based, and high-volume accounting tasks such as invoice processing, bank reconciliations, payroll administration, and report generation. By automating these routine processes, RPA improves processing speed, reduces operational costs, and minimizes human error (Jędrzejka, 2019).

Collectively, emerging technologies such as Artificial Intelligence, Big Data analytics, Cloud Accounting, and Robotic Process Automation are fundamentally transforming accounting practice. They position the accounting function as a more strategic, technology-driven, and value-adding role within modern organizations, particularly in environments seeking greater efficiency, accuracy, and decision-support capabilities.

Empirical Review

Empirical studies consistently demonstrate that Artificial Intelligence is increasingly being adopted in accounting practice, particularly in areas such as auditing, fraud detection, and financial analysis. Research by Garanina et al. (2025) shows that AI-driven audit tools enhance audit quality by improving risk assessment, anomaly detection, and audit efficiency. Similarly, Mediaty (2024) finds that AI applications support more accurate financial analysis through automated data processing and predictive modelling, enabling accountants to identify trends and irregularities more effectively. These studies suggest that AI not only improves operational efficiency but also strengthens the reliability and strategic value of accounting information.

Big Data analytics has also been widely examined in the accounting literature, with empirical evidence indicating its positive impact on forecasting accuracy and management accounting functions. Abbas (2025) reports that the use of Big Data analytics enables organizations to process large volumes of financial and non-financial data, resulting in more accurate forecasts, improved budgeting processes, and enhanced performance measurement. The integration of Big Data tools allows management accountants to move beyond traditional historical analysis toward more forward-looking and data-driven decision-making approaches.

In addition, empirical research highlights the benefits of Cloud Accounting and Robotic Process Automation in improving accounting efficiency and reducing processing time. Studies by Coman et al. (2022) indicate that cloud-based accounting systems enhance real-time reporting, data accessibility, and collaboration, while lowering operational costs. Likewise, Shamsudin et al. (2025) find that RPA significantly reduces processing time for repetitive accounting tasks and minimizes human error. However, despite these advantages, the adoption of Cloud Accounting and RPA remains relatively limited in developing contexts. Infrastructural constraints, such as unreliable internet connectivity, limited access to advanced digital tools, high implementation costs, and skills shortages, continue to hinder widespread adoption. These findings underscore the need for context-specific empirical studies, particularly in developing and semi-urban environments, to better understand the realities of emerging technology adoption in accounting practice.

Conceptual Framework of the Study

This study conceptualizes emerging technologies as the independent variable influencing accounting practice within the Sefwi Wiawso Municipality. Drawing on the Technology Acceptance Model (TAM), the framework assumes that the adoption and use of emerging technologies in accounting are shaped by users' perceptions of usefulness and ease of use, which in turn influence accounting practices. The independent variable, emerging technologies, is operationalized through specific technological dimensions relevant to contemporary accounting practice, namely Artificial Intelligence (AI), Big Data analytics, Cloud Accounting, and Robotic

Process Automation (RPA). These technologies are expected to enhance accounting practice by improving efficiency, accuracy, timeliness of reporting, and decision-making support. Within the TAM framework, perceived usefulness reflects the extent to which accounting professionals believe that emerging technologies improve job performance, productivity, and quality of accounting outputs. Perceived ease of use represents the degree to which these technologies are considered user-friendly and free from excessive effort. When accountants perceive emerging technologies as both useful and easy to use, their likelihood of adoption increases, leading to improved accounting practices.

Consequently, the dependent variable, accounting practice, is reflected in outcomes such as improved financial reporting quality, reduced processing time, enhanced internal controls, and better support for managerial decision-making.

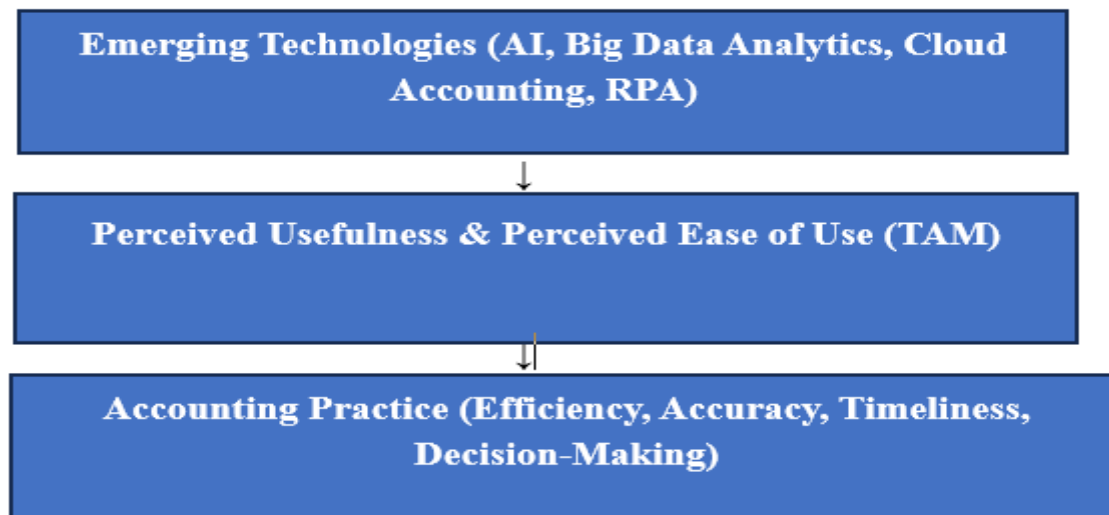


Fig.1. Conceptual framework

Source: Author's construct (2025)

Research Hypothesis

Based on the Technology Acceptance Model (TAM), the study proposes the following hypothesis:

H₁: There is a significant level of adoption of emerging technologies in the accounting industry.

RESEARCH METHODOLOGY

The study adopted a quantitative research approach and employed a descriptive research design to examine the adoption of emerging technologies within the accounting industry in the Sefwi Wiawso Municipality. The quantitative approach was considered appropriate because it allows for the collection of numerical data that can be statistically analysed to describe patterns, trends, and relationships among variables in an objective manner. The descriptive research design was specifically chosen to provide a systematic and accurate description of the current state of technology adoption among accounting professionals and business managers without manipulating the study environment.

Primary data were collected through the use of structured questionnaires, which were administered to a total of 154 respondents, comprising accounting professionals and business managers operating in both the public and private sectors within the municipality. The use of structured questionnaires ensured uniformity in responses and facilitated the collection of quantifiable data relevant to the study objectives. The questionnaire was designed to capture information on respondents' demographic characteristics as well as their level of awareness and adoption of selected emerging accounting technologies.

The collected data were analysed using descriptive statistical techniques, including frequencies, percentages,

means, and standard deviations. These statistical tools were employed to assess the extent of adoption of emerging technologies such as Artificial Intelligence, Big Data analytics, Cloud Accounting, and Robotic Process Automation. The use of means and standard deviations enabled the study to determine the average level of technology adoption and the degree of variability in responses among participants. The results were presented in tables and charts to enhance clarity and facilitate interpretation of findings.

Overall, this methodological approach provided a clear and reliable understanding of the current level of adoption of emerging technologies in accounting practice within the Sefwi Wiawso Municipality and served as a solid foundation for drawing conclusions and making policy and practice-oriented recommendations.

RESULTS AND FINDINGS

Table 1: Profile of Respondents

Category	Criteria	Frequency	Percentage (%)
Gender	Male	102	66.2
	Female	52	33.8
	Total	154	100.0
Age	Below 25	27	17.5
	26-35	68	44.2
	36-45	41	26.6
	Above 46	18	11.7
	Total	154	100.0
Educational Qualification	Diploma	10	6.5
	Degree	70	45.5
	Masters	56	36.4
	Professional	18	11.6
	Total	154	100.0

Source: Field data (2025)

The sample was male-dominated, with males accounting for 66.2% (102) of respondents and females 33.8% (52). Most respondents were within the active working-age group, with 44.2% aged 26–35 years and 26.6% aged 36–45 years, while smaller proportions were below 25 years (17.5%) or above 46 years (11.7%). In terms of education, 45.5% held a bachelor’s degree, 36.4% a master’s degree, and 11.6% professional qualifications, indicating that the respondents were generally well-educated and capable of providing informed responses.

Presentation of Results

The primary objective of this section is to investigate and analyse the emerging technologies currently applied within the accounting profession. Specifically, the study sought to examine the extent to which respondents make use of these technologies in their professional practice. To achieve this, a descriptive statistical approach was employed, focusing on measures such as the mean and standard deviation, in order to generate meaningful insights into usage patterns of emerging technologies in accounting.

Table 2: Emerging technologies used in the accounting profession

Variables	N	Mean	Std. Dev.	Rank
Artificial Intelligence (AI)	154	4.87	0.329	1 st
Big Data	154	3.77	0.326	2 nd
Cloud Accounting	154	3.24	1.891	3 rd
Robotic Process Automation (RPA)	154	2.92	1.690	4 th

Source: Field Survey, (2025)

DISCUSSION OF RESULTS

This study examined the adoption of emerging technologies in the accounting industry within the Sefwi Wiawso Municipality. The findings reveal clear differences in the extent to which accounting professionals have embraced various technologies, reflecting uneven patterns of digital transformation in a semi-urban context.

Artificial Intelligence emerged as the most widely adopted technology among respondents. This dominance suggests that accounting professionals strongly perceive AI as useful for improving efficiency, accuracy, and decision-making, consistent with the Technology Acceptance Model (TAM). The strong consensus observed indicates that AI applications are increasingly viewed as practical and manageable within existing accounting workflows, particularly for tasks such as data processing, error detection, and analytical support. Given the relatively young and well-educated profile of respondents, the high adoption of AI may also reflect greater openness to digital tools among early- and mid-career professionals. This finding aligns with prior studies that identify AI as a leading technology in contemporary accounting practice (Yoshikuni et al., 2023; Vasarhelyi et al., 2023; Göktürk et al., 2024). This finding aligns with prior studies that identify AI as a leading technology in contemporary accounting practice (Yoshikuni et al., 2023; Vasarhelyi et al., 2023; Göktürk et al., 2024). The result further supports the argument that when technologies deliver clear performance benefits, adoption can occur even in resource-constrained environments.

Big Data analytics recorded a moderate level of adoption, suggesting growing awareness of its analytical value but limited full-scale integration into accounting practice. While respondents recognize its potential for enhancing financial analysis and forecasting, its adoption appears constrained by technical complexity and skills requirements. This finding is consistent with earlier studies that report gradual uptake of data analytics in accounting, particularly in developing and semi-urban contexts where advanced analytical expertise is still emerging.

In contrast, Cloud Accounting and Robotic Process Automation exhibited lower and more uneven adoption levels. These results indicate persistent concerns related to data security, cost, infrastructure, and organizational readiness. The limited uptake of RPA, in particular, suggests that technologies requiring higher upfront investment and technical sophistication are less likely to be adopted in smaller or less-resourced accounting environments. These findings align with studies emphasizing infrastructural and financial barriers to automation in developing economies (Liu et al., 2021; Vitali & Giuliani, 2024).

Comparatively, while this study identifies AI as the dominant technology, the broader literature shows variability across contexts. Some studies report cloud accounting or enterprise resource planning systems as more prevalent in other regions and organizational settings (Mancini et al., 2021; Igou et al., 2023). This divergence highlights the importance of contextual factors such as organizational size, regulatory environment, and digital infrastructure in shaping technology adoption patterns.

Overall, the findings suggest that the adoption of emerging technologies in the accounting industry within the Sefwi Wiawso Municipality is progressing, but in an uneven manner. Technologies perceived as immediately beneficial and relatively easy to use are adopted more readily, while those associated with higher costs,

technical demands, and perceived risk lag behind. This pattern reinforces the relevance of TAM in explaining technology adoption while underscoring the need to account for contextual constraints in semi-urban and developing environments

Implications for Theory and Practice

Theory: This study offers several important implications for accounting and information systems theory, particularly in relation to technology adoption in developing and semi-urban contexts. First, the findings provide empirical support for the Technology Acceptance Model (TAM) by demonstrating that perceived usefulness and perceived ease of use are central in explaining the adoption of emerging technologies within the accounting industry. The dominance of Artificial Intelligence (AI) over other technologies suggests that accountants are more likely to adopt technologies they clearly perceive as enhancing efficiency, accuracy, and decision-making outcomes, even in resource-constrained environments.

Second, the uneven adoption levels observed across AI, Big Data analytics, Cloud Accounting, and Robotic Process Automation extend TAM by highlighting the contextual sensitivity of technology acceptance. While TAM assumes rational evaluation by users, this study shows that infrastructural availability, cost considerations, and digital skills significantly shape perceived usefulness and ease of use in semi-urban settings. This suggests that TAM-based studies in developing economies should more explicitly incorporate contextual and environmental factors—such as infrastructure and institutional capacity as boundary conditions influencing technology acceptance.

Third, by providing evidence from the Sefwi Wiawso Municipality, the study contributes to the decentralization of accounting technology literature, which has traditionally focused on developed economies or major urban centres. The findings challenge the implicit assumption that emerging technologies diffuse uniformly across geographic and economic contexts. Instead, they support a more nuanced theoretical understanding that technology adoption in accounting follows asymmetric and incremental pathways, particularly in semi-urban and developing regions.

Finally, the study reinforces the evolving theoretical conception of the accountant's role. The high adoption of AI and Big Data analytics suggests a shift away from traditional bookkeeping functions toward analytical and decision-support roles, thereby supporting theories that position accounting as a strategic and knowledge-driven profession in the digital era.

Practice: From a practical perspective, the findings have significant implications for accounting professionals, firms, professional bodies, and policymakers. First, the strong adoption of Artificial Intelligence implies that accounting practitioners in semi-urban municipalities are increasingly receptive to advanced technologies when their benefits are clear. Accounting firms and organizations should therefore prioritize AI-enabled tools for tasks such as data processing, error detection, and financial analysis to improve efficiency and service quality.

Second, the moderate adoption of Big Data analytics and Cloud Accounting, alongside the low adoption of Robotic Process Automation, highlights the need for targeted capacity-building initiatives. Professional accounting bodies and training institutions should design continuous professional development programmes that focus not only on basic digital literacy but also on advanced competencies in data analytics, cloud-based systems, and automation tools. Such targeted training would enhance perceived ease of use and reduce resistance to less adopted technologies.

Third, the findings suggest that cost, infrastructure, and technical expertise remain practical barriers to full-scale technology adoption. Accounting firms, especially small and medium-sized practices, may benefit from phased implementation strategies, starting with scalable and affordable cloud-based solutions before transitioning to more complex automation technologies. Vendors and technology providers should also tailor solutions to the needs and capacities of semi-urban accounting environments.

From a policy perspective, the study underscores the importance of supportive institutional and regulatory frameworks. Government agencies and regulatory bodies should invest in digital infrastructure particularly

reliable internet connectivity and promote policies that incentivize technology adoption within the accounting profession. In addition, accounting education curricula should be revised to integrate emerging technologies, ensuring that future accountants enter the profession with relevant digital and analytical skills.

Overall, the practical implication is clear: while the accounting industry in semi-urban Ghana is moving toward digitalization, intentional investment in skills development, infrastructure, and supportive policies is essential to ensure that emerging technologies are adopted more evenly and effectively. Doing so will enhance accounting efficiency, improve financial reporting quality, and strengthen the profession's contribution to organizational performance and economic development.

CONCLUSION

This study examined the adoption of emerging technologies in the accounting industry within the Sefwi Wiawso Municipality. The findings indicate that Artificial Intelligence is the most widely adopted technology, followed by Big Data analytics, while Cloud Accounting and Robotic Process Automation remain less extensively used. These results suggest that although the accounting profession in the municipality is gradually embracing digital transformation, technology adoption remains uneven across different tools.

From a practical perspective, the findings imply that accounting professionals should prioritize developing competencies in AI and data analytics, as these technologies are increasingly shaping modern accounting practice. Accounting firms and practitioners can enhance efficiency and decision-making by integrating AI-driven tools into routine accounting and analytical processes.

For policymakers and regulatory bodies, the study highlights the need for supportive policy frameworks and targeted investment in digital infrastructure, particularly in semi-urban areas. Improving internet connectivity, reducing technology acquisition costs, and promoting digital innovation will facilitate broader adoption of advanced accounting technologies.

Training institutions and professional bodies also play a critical role in accelerating technology adoption. Accounting curricula and continuous professional development programmes should be updated to incorporate emerging technologies, with a focus on practical, hands-on training in data analytics, cloud-based systems, and automation tools.

Overall, coordinated efforts among practitioners, policymakers, and training institutions are essential to ensure more balanced and effective integration of emerging technologies in the accounting profession, thereby enhancing efficiency, competitiveness, and the strategic relevance of accounting in Ghana's evolving digital economy.

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