



## A NARRATIVE REVIEW OF SME ADOPTION OF ACCOUNTING INFORMATION SYSTEMS IN NIGERIA

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**ABSTRACT:** *This study theoretically reviewed the relevance of accounting information practice on SMEs in Nigeria. The adoption of Accounting Information Systems (AIS) among Small and Medium-sized Enterprises (SMEs) in Nigeria is essential for improving financial management, operational efficiency, and compliance with regulatory standards. Despite its potential, the adoption rate remains low due to various challenges such as high implementation costs, limited technical expertise, and inadequate infrastructure. This systemic review aims to provide a comprehensive understanding of the current state of AIS adoption among Nigerian SMEs, the factors influencing adoption, the benefits and challenges of AIS implementation, its impact on business processes and financial reporting, and user satisfaction levels. This study adopted library and theoretical literature approach and employed quotient research analysis with the use of secondary publications. The findings highlight the need for targeted interventions and support from the government and private sector to enhance AIS adoption and utilization in the Nigerian SME sector. It so implies that SMEs have the potential to generate a profit using AIS. As a result, studies have shown that funding choices necessitate the use of an objective information system. However, individuals in charge of mentoring, fostering, and revitalizing SMEs in Nigeria should require them to adopt good AIS and refrain from promoting SMEs with loan facilities and other items if correct AIS is not maintained.*

**KEYWORDS:** Accounting, Information Systems, Small and Medium Enterprise, Systematic review.



## INTRODUCTION

Small and Medium-sized Enterprises (SMEs) are crucial to the economic development of Nigeria, contributing significantly to job creation, poverty alleviation, and overall economic growth. Despite their critical role, Nigerian SMEs face numerous challenges, including limited access to finance, inadequate infrastructure, and inefficient management practices (Abosede & Onakoya, 2013; Ogujiuba et al., 2013). One critical area that requires significant improvement is the adoption and utilization of Accounting Information Systems (AIS). AIS are essential for managing financial data, enhancing decision-making processes, and ensuring compliance with statutory requirements (Grande et al., 2011). These systems can help SMEs streamline their accounting processes, improve financial reporting accuracy, and enhance overall operational efficiency. Despite the evident benefits, the adoption rate of AIS among Nigerian SMEs remains relatively low (Agwu & Murray, 2015). Various factors such as limited technological infrastructure, high implementation costs, lack of technical expertise, and resistance to change have been identified as barriers to AIS adoption (Ismail & King, 2007). Additionally, existing studies on AIS adoption in Nigerian SMEs are fragmented, often focusing on specific aspects without providing a holistic view of the challenges and benefits (Olatunji, 2013; Imeokparia, 2013).

This research aims to conduct a narrative review of existing literature on AIS adoption among Nigerian SMEs to address these gaps. By providing a comprehensive understanding of the current state of AIS adoption, the factors influencing it, and its impact on business operations and financial reporting, this study will contribute to the academic discourse on AIS adoption and provide practical insights for policymakers, business owners, and technology providers.

## LITERATURE REVIEW

The adoption of Accounting Information Systems (AIS) among Small and Medium-sized Enterprises (SMEs) has garnered significant attention from researchers and practitioners alike. As critical components of the global economy, SMEs play a vital role in job creation, economic diversification, and innovation. In Nigeria, SMEs contribute significantly to economic development and poverty alleviation (Adebisi et al., 2016). However, these enterprises often face substantial challenges in managing their financial information effectively, which can hinder their growth and sustainability. The integration of AIS into their operations offers a potential solution to these challenges, enhancing financial reporting transparency, decision-making, and overall operational efficiency (Olatunji, 2013).

### Current State of Accounting Information Systems (AIS) Adoption among Nigerian SMEs

The adoption of Accounting Information Systems (AIS) among Small and Medium Enterprises (SMEs) in Nigeria is gradually gaining traction, although it remains fraught with challenges. The implementation of AIS is crucial for enhancing operational efficiency, improving decision-making processes, and ensuring compliance with regulatory requirements. However, the current state of AIS adoption among Nigerian SMEs reflects a mix of progress and persistent obstacles. Recent studies indicate a growing awareness and adoption of AIS among Nigerian SMEs, albeit at a varied pace across different sectors. According to Adebisi and Oladipo (2020), approximately 40% of SMEs in urban areas have integrated some form of AIS into



their operations. This figure, however, drops significantly in rural areas, highlighting a digital divide that affects the uniform adoption of AIS across the country. The extent of AIS use also varies, with many SMEs utilizing basic accounting software for bookkeeping purposes while more sophisticated systems for financial analysis and strategic planning are less common (Obi et al., 2019).

Several factors drive the adoption of AIS among Nigerian SMEs. Key among these is the need for enhanced accuracy and efficiency in financial reporting. The traditional manual accounting processes are prone to errors and are time-consuming, which can impede business growth. AIS provides a streamlined alternative that can handle complex transactions and generate real-time financial data, thus improving business operations (Adeyemi & Fagboyo, 2018). Another significant driver is the regulatory environment. Nigerian SMEs are increasingly required to comply with financial reporting standards set by regulatory bodies such as the Financial Reporting Council of Nigeria (FRCN). Compliance necessitates the adoption of reliable accounting systems capable of producing standardized financial statements (Onyema & Eke, 2019).

Despite these drivers, several barriers hinder the widespread adoption of AIS among Nigerian SMEs. High initial costs and the lack of affordable solutions tailored to the needs of small businesses are primary obstacles. Many SMEs operate on tight budgets and view the investment in AIS as a non-essential expense (Eze, Chinedu-Eze, & Bello, 2020). Additionally, there is a significant skills gap. The effective use of AIS requires a certain level of technical proficiency, which many SME owners and their staff lack. This lack of expertise leads to resistance to change and a preference for familiar manual systems (Afolayan, Plant, & White, 2020). Furthermore, inadequate infrastructure, such as unreliable internet connectivity and frequent power outages, particularly in rural areas, exacerbates the problem (Udo & Edoho, 2021).

The Nigerian government and various institutions have recognized these challenges and are making efforts to promote the adoption of AIS among SMEs. Initiatives such as the introduction of subsidized AIS software packages and training programs aimed at enhancing digital literacy are steps in the right direction (Olatunji, 2018). Additionally, financial incentives, such as grants and loans specifically targeted at technology adoption, are being explored to alleviate the financial burden on SMEs (Ojo & Olawale, 2019). The adoption of AIS among Nigerian SMEs is on an upward trajectory, driven by the need for improved financial management and regulatory compliance. However, significant barriers, including high costs, skills shortages, and infrastructural deficiencies, continue to impede progress. With concerted efforts from the government, financial institutions, and educational bodies, these challenges can be mitigated, paving the way for broader and more effective adoption of AIS in the Nigerian SME sector.



### **Factors Influencing the Adoption of AIS in Nigerian SMEs**

The adoption of Accounting Information Systems (AIS) among Nigerian SMEs is influenced by a myriad of factors that collectively determine the pace and extent to which these systems are embraced. Central to this adoption is the perceived need for enhanced accuracy and efficiency in financial reporting. Traditional manual accounting processes, which are often error-prone and time-consuming, hinder the operational efficiency of SMEs. Consequently, the necessity for a streamlined alternative that can handle complex transactions and generate real-time financial data becomes a significant motivator for adopting AIS (Adeyemi & Fagboyo, 2018).

Regulatory requirements also play a crucial role in driving AIS adoption. Nigerian SMEs are increasingly mandated to comply with financial reporting standards set by regulatory bodies like the Financial Reporting Council of Nigeria (FRCN). This compliance requires the use of reliable accounting systems capable of producing standardized financial statements, thus pushing SMEs towards AIS adoption (Onyema & Eke, 2019). Additionally, the growing competition within the business environment compels SMEs to adopt advanced technological solutions to maintain a competitive edge, further enhancing the appeal of AIS.

However, the adoption of AIS is not without its challenges. High initial costs and the scarcity of affordable solutions tailored to the specific needs of small businesses present substantial obstacles. Many SMEs operate on limited budgets and often perceive the investment in AIS as an unnecessary expense, which deters them from embracing these systems (Eze, Chinedu-Eze, & Bello, 2020). This financial constraint is exacerbated by the lack of external funding and the reluctance of financial institutions to provide loans for technology investments, creating a significant barrier to AIS adoption. The skills gap within the SME workforce also hinders the effective adoption of AIS. The utilization of these systems demands a certain level of technical proficiency, which is often lacking among SME owners and their employees. This deficiency leads to resistance to change and a preference for familiar manual systems over new technological solutions (Afolayan, Plant, & White, 2020). The situation is further complicated by inadequate training opportunities and the absence of continuous professional development programs that could help bridge this skills gap.

Moreover, infrastructural deficiencies pose a considerable challenge to the adoption of AIS. Unreliable internet connectivity and frequent power outages, particularly in rural areas, disrupt the seamless operation of these systems. This infrastructural instability makes it difficult for SMEs to rely on AIS for their daily operations, thereby discouraging widespread adoption (Udo & Edoho, 2021). Despite these challenges, there are efforts by the Nigerian government and various institutions to promote AIS adoption. Initiatives such as subsidized software packages and digital literacy training programs are aimed at making AIS more accessible to SMEs (Olatunji, 2018). Additionally, financial incentives, including grants and loans specifically designed for technology adoption, are being explored to alleviate the financial burden on SMEs and encourage the uptake of AIS (Ojo & Olawale, 2019).



## **Benefits and Challenges of AIS Implementation in Nigerian SMEs**

The implementation of Accounting Information Systems (AIS) in Nigerian SMEs presents a range of benefits and challenges that significantly impact their operational and strategic capabilities. One of the foremost benefits of AIS implementation is the enhancement of financial accuracy and efficiency. By automating various accounting processes, AIS reduces the likelihood of human error and ensures that financial records are maintained with a high degree of precision. This automation not only streamlines bookkeeping but also facilitates quicker and more reliable financial reporting, enabling SMEs to make more informed business decisions (Adeyemi & Fagboy, 2018).

Another significant benefit is the improvement in decision-making processes. AIS provides real-time access to financial data, which is crucial for monitoring the financial health of a business. This accessibility allows SME owners and managers to quickly identify trends, forecast future financial performance, and make strategic decisions that can enhance business growth and profitability. The analytical capabilities of AIS also support comprehensive financial analysis, budgeting, and planning, which are essential for sustaining a competitive advantage in a dynamic market environment (Obi et al., 2019). AIS implementation also aids in regulatory compliance. Nigerian SMEs are subject to various financial regulations and standards imposed by bodies such as the Financial Reporting Council of Nigeria (FRCN). AIS helps ensure that financial statements and reports adhere to these standards, thereby avoiding potential legal and financial penalties. This compliance not only instills confidence among stakeholders but also enhances the credibility and reputation of the business (Onyema & Eke, 2019).

Despite these benefits, the implementation of AIS in Nigerian SMEs is fraught with challenges. One of the primary challenges is the high cost associated with acquiring and maintaining these systems. Many SMEs operate on limited budgets and view the investment in AIS as a significant financial burden. This perception is particularly prevalent among smaller businesses that struggle to justify the upfront and ongoing costs of sophisticated accounting systems (Eze, Chinedu-Eze, & Bello, 2020). Additionally, the lack of affordable, scalable solutions tailored to the needs of SMEs exacerbates this financial challenge. Another critical challenge is the skills gap. Effective utilization of AIS requires technical proficiency, which is often lacking in the SME sector. Many SME owners and their employees have limited experience with advanced accounting software, leading to resistance to adoption and suboptimal use of these systems when they are implemented. This skills deficiency underscores the need for comprehensive training programs and continuous professional development to ensure that SMEs can fully leverage the capabilities of AIS (Afolayan, Plant, & White, 2020).

Infrastructure inadequacies also pose a significant barrier to AIS implementation. Reliable internet connectivity and stable power supply are essential for the seamless operation of AIS, yet these are often lacking, especially in rural areas of Nigeria. Frequent power outages and poor internet service disrupt the functionality of AIS, leading to operational inefficiencies and frustrations among users (Udo & Edoho, 2021). These infrastructural challenges make it difficult for SMEs to rely on AIS for their day-to-day accounting needs, thereby limiting the effectiveness of these systems. Furthermore, there is the issue of data security. As SMEs adopt AIS, they become more susceptible to cyber threats and data breaches. Ensuring the security of sensitive financial data is a significant concern, particularly for businesses that may lack the





resources to implement robust cybersecurity measures. This vulnerability can deter SMEs from fully embracing AIS, as the potential risks are perceived to outweigh the benefits (Olatunji, 2018).

### **AIS Adoption Impact on Business Processes and Financial Reporting in Nigerian SMEs**

The adoption of Accounting Information Systems (AIS) has a profound impact on business processes and financial reporting within Nigerian SMEs, driving substantial improvements in efficiency, accuracy, and strategic decision-making. One of the most notable effects is the transformation of business processes, where AIS streamlines and automates routine accounting tasks. This automation reduces the reliance on manual processes, which are often prone to errors and inefficiencies, and allows for the swift handling of transactions, payroll, and other financial operations (Adeyemi & Fagboy, 2018). As a result, SMEs can allocate resources more effectively, focusing on core business activities rather than administrative overheads.

The integration of AIS also enhances the accuracy and reliability of financial data. Traditional manual accounting methods are susceptible to human error, which can lead to inaccurate financial records and misinformed business decisions. AIS minimizes these errors by providing a systematic and automated approach to data entry and processing. This increased accuracy is crucial for maintaining reliable financial records, which in turn supports better financial management and planning (Obi et al., 2019). Additionally, the real-time processing capabilities of AIS enable SMEs to access up-to-date financial information, facilitating more responsive and informed decision-making. Moreover, AIS adoption significantly improves the quality and timeliness of financial reporting. Nigerian SMEs are required to comply with various financial reporting standards and regulations set by bodies such as the Financial Reporting Council of Nigeria (FRCN). AIS provides tools for generating standardized financial statements and reports that adhere to these regulatory requirements, ensuring compliance and reducing the risk of legal and financial penalties (Onyema & Eke, 2019). This compliance is essential for building trust with stakeholders, including investors, creditors, and regulatory authorities, thereby enhancing the credibility and reputation of the business.

The analytical capabilities of AIS also contribute to more sophisticated financial analysis and strategic planning. AIS systems often include modules for budgeting, forecasting, and financial analysis, which allow SMEs to perform detailed assessments of their financial performance and prospects. This analytical power supports strategic decision-making by providing insights into financial trends, identifying potential risks, and highlighting opportunities for growth and improvement (Eze, Chinedu-Eze, & Bello, 2020). Consequently, SMEs can develop more effective strategies and respond proactively to market changes. Despite these benefits, the impact of AIS adoption is not without challenges. The transition to AIS requires a significant investment in technology and training. SMEs must ensure that their staff are adequately trained to use the new systems effectively, which can be a time-consuming and costly process. Additionally, the initial setup and ongoing maintenance of AIS can strain the financial resources of smaller businesses, particularly those operating on tight budgets (Afolayan, Plant, & White, 2020). However, these challenges can be mitigated through government and institutional support, such as subsidies for AIS software and training programs aimed at enhancing digital literacy among SME employees (Ojo & Olawale, 2019).

Infrastructural issues also pose a significant challenge to the effective implementation of AIS. Reliable internet connectivity and a stable power supply are essential for the smooth operation



of AIS; however, these are often lacking in many parts of Nigeria, particularly in rural areas. These infrastructural deficiencies can disrupt the functionality of AIS, leading to operational inefficiencies and frustrations among users (Udo & Edoho, 2021). Addressing these infrastructural challenges is critical for ensuring that SMEs can fully leverage the benefits of AIS.

### **Level of User Satisfaction with AIS among Nigerian SMEs**

User satisfaction with Accounting Information Systems (AIS) among Nigerian SMEs varies significantly, reflecting a complex interplay of benefits, challenges, and individual business contexts. Generally, there is a positive trend in user satisfaction, driven primarily by the substantial improvements in efficiency and accuracy that AIS brings to financial management. Many SMEs report enhanced operational efficiency as a direct result of adopting AIS. By automating routine accounting tasks, AIS reduces the time and effort required for bookkeeping, payroll, and financial reporting, which in turn allows business owners and managers to focus more on strategic activities and growth opportunities (Adebisi & Oladipo, 2020). This increased efficiency is a key factor contributing to user satisfaction. Additionally, the accuracy and reliability of financial data generated by AIS significantly boost user confidence in these systems. SMEs appreciate the reduction in errors and the ease of tracking financial transactions, which supports better decision-making and financial planning (Obi, Chinedum, & Ekenedirichukwu, 2019). The ability to generate real-time financial reports and access up-to-date information enhances transparency and control over financial operations, leading to higher satisfaction levels among users.

However, satisfaction with AIS is not uniform across all SMEs. One significant source of dissatisfaction is the high cost associated with implementing and maintaining these systems. For many SMEs, the financial burden of purchasing AIS software, along with the expenses related to training and technical support, can be substantial (Eze, Chinedu-Eze, & Bello, 2020). This financial strain is particularly pronounced in smaller businesses and those operating in less economically developed areas, where resources are limited and the return on investment is scrutinized more rigorously. The level of technical expertise required to effectively use AIS also influences user satisfaction. Many SMEs struggle with a lack of adequately trained personnel who can navigate and utilize the full capabilities of these systems. These skills gaps often lead to suboptimal use of AIS, causing frustration and limiting the perceived benefits of the investment (Afolayan, Plant, & White, 2020). Consequently, SMEs that invest in comprehensive training and ongoing support tend to report higher levels of satisfaction compared to those that do not. Infrastructural challenges further complicate the user experience with AIS in Nigeria. Frequent power outages and unreliable internet connectivity, particularly in rural areas, disrupt the smooth operation of these systems, leading to dissatisfaction among users (Udo & Edoho, 2021). These disruptions can negate the efficiency gains provided by AIS, making it difficult for SMEs to rely on these systems consistently.

Despite these challenges, there is a consensus that the benefits of AIS outweigh the drawbacks, particularly when businesses receive adequate support and training. Government and institutional initiatives aimed at subsidizing AIS costs and improving digital literacy are crucial in enhancing user satisfaction. For instance, programs that provide affordable AIS solutions and training workshops help bridge the skills gap and make these systems more accessible to a broader range of SMEs (Olatunji, 2018). Additionally, SMEs that receive external support in



navigating the implementation process tend to report higher satisfaction levels, as this assistance alleviates some of the financial and technical burdens associated with AIS adoption. Thus, user satisfaction with AIS among Nigerian SMEs is influenced by several factors, including the efficiency and accuracy improvements provided by these systems, the financial costs of implementation, the level of technical expertise available, and infrastructural reliability. While many SMEs report positive experiences with AIS, ongoing challenges related to cost, training, and infrastructure continue to affect overall satisfaction levels. Addressing these challenges through targeted support and initiatives can enhance user satisfaction and encourage broader adoption of AIS across the SME sector in Nigeria.

### **Theoretical Framework**

The adoption of Accounting Information Systems (AIS) in Small and Medium-sized Enterprises (SMEs) can be analyzed through several theoretical lenses. This study will primarily utilize the Technology Acceptance Model (TAM), Technology-Organization-Environment (TOE) framework, Diffusion of Innovations (DOI) theory, and Resource-Based View (RBV) to understand the factors influencing AIS adoption among Nigerian SMEs.

#### **Technology Acceptance Model (TAM)**

The Technology Acceptance Model (TAM), introduced by Davis (1989), posits that perceived ease of use and perceived usefulness are the primary determinants of technology acceptance. In the context of AIS adoption among SMEs, several studies have validated TAM's relevance. For instance, Venkatesh and Davis (2000) extended TAM to include additional constructs such as social influence and facilitating conditions, which further elucidate the adoption process. In Nigeria, Olatunji (2013) applied TAM to explore the adoption of AIS and found that perceived usefulness significantly influenced SMEs' decision to adopt AIS, highlighting its practical implications for enhancing financial reporting accuracy.

#### **Diffusion of Innovations (DOI) Theory**

Rogers' Diffusion of Innovations (DOI) theory (2003) suggests that the adoption of innovations is influenced by factors such as relative advantage, compatibility, complexity, trialability, and observability. In the Nigerian context, studies by Agwu and Murray (2015) and Imeokparia (2013) identified these factors as critical determinants of AIS adoption among SMEs.

#### **Empirical Reviews**

Research by Oladele and Salami (2017) demonstrated that AIS implementation significantly improves financial accuracy and efficiency in Nigerian SMEs. By automating routine accounting tasks, AIS reduces errors and ensures timely financial reporting, enabling SMEs to make informed business decisions. Similarly, studies by Imeokparia (2013) have shown that AIS adoption facilitates better financial management and compliance with regulatory requirements, which are essential for building trust with stakeholders and enhancing business credibility.

Despite the benefits, the adoption rate of AIS among Nigerian SMEs remains relatively low, primarily due to high implementation costs and limited technological infrastructure. Agwu and Murray (2015) highlighted that many SMEs operate on tight budgets and view the investment in AIS as a non-essential expense. This financial constraint is further exacerbated by the lack





of affordable, scalable AIS solutions tailored to the specific needs of small businesses (Ismail & King, 2007). Additionally, infrastructural deficiencies, such as unreliable internet connectivity and frequent power outages, particularly in rural areas, pose significant barriers to AIS adoption (Udo & Edoho, 2021). The skills gap within the SME workforce also hinders the effective adoption of AIS. Many SME owners and employees lack the technical proficiency required to utilize AIS effectively, leading to resistance to change and a preference for familiar manual systems. A study by Ifinedo (2011) emphasized the importance of comprehensive training programs and continuous professional development to ensure that SMEs can fully leverage the capabilities of AIS. The absence of such initiatives often results in suboptimal use of these systems and diminishes the potential benefits of AIS adoption.

Regulatory compliance is a significant driver of AIS adoption among Nigerian SMEs. The Financial Reporting Council of Nigeria (FRCN) and other regulatory bodies have mandated stricter compliance requirements, compelling SMEs to adopt AIS to meet these standards and avoid penalties. Onyema and Eke (2019) noted that adherence to financial reporting standards not only ensures legal and financial accountability but also enhances the credibility and reputation of businesses. As a result, regulatory pressures are expected to continue playing a crucial role in driving AIS adoption. Government and institutional support are critical in promoting AIS adoption among Nigerian SMEs. Ojo and Olawale (2019) highlighted initiatives such as subsidized AIS software packages, grants, and loans targeted at technology adoption and digital literacy training programs as vital in making AIS more accessible to SMEs. These programs help alleviate the financial burden and provide the necessary skills for effective implementation, thereby encouraging more SMEs to adopt AIS.

## METHODS

This review outlines the methodology employed to conduct the narrative review of SME adoption of Accounting Information Systems (AIS) in Nigeria. The methodology is designed to ensure a comprehensive and systematic approach to reviewing existing literature, identifying key themes, and drawing meaningful conclusions about the factors influencing AIS adoption among Nigerian SMEs. The study adopts a systematic review, which involves systematically searching, analyzing, and synthesizing existing literature on the topic. A narrative review is appropriate for this study because it allows for a comprehensive examination of diverse sources and the identification of patterns, themes, and gaps in the literature. This approach facilitates a holistic understanding of the factors influencing AIS adoption among SMEs in Nigeria. The literature search strategy involves identifying relevant academic articles, conference papers, reports, and other scholarly sources. The search was conducted using electronic databases such as Google Scholar, JSTOR, ScienceDirect, and ProQuest. The following keywords and phrases were used to identify relevant literature: SME adoption of Accounting Information Systems, AIS adoption in Nigeria, Accounting Information Systems in SMEs, Benefits of AIS adoption, AIS implementation in SMEs, Barriers to AIS adoption. Data extraction involved systematically identifying and recording key information from the selected studies. This included the study's title, authors, year of publication, research objectives, methodologies, key findings, and conclusions. A standardized data extraction form was used to ensure consistency and comprehensiveness in capturing relevant information from each study. The data analysis process involved thematic analysis, which is appropriate for synthesizing qualitative data from



diverse sources. Thematic analysis allows for the identification of recurring themes, patterns, and trends in the literature, providing insights into the factors influencing AIS adoption among Nigerian SMEs.

## **DISCUSSION**

The discussion section of this review examines the findings from the literature concerning the adoption of Accounting Information Systems (AIS) among Nigerian SMEs, with particular reference to the research questions and objectives of the study. The insights garnered from various studies are synthesized to provide a comprehensive understanding of the factors influencing AIS adoption, its benefits and challenges, its impact on business processes and financial reporting, and the level of user satisfaction.

### **Challenges in AIS Adoption**

Several studies have highlighted the challenges that Nigerian SMEs encounter when implementing AIS. These include financial constraints, a lack of technical skills, and insufficient infrastructure (Olatunji, 2013; Adeyemi & Fagbemi, 2017). Financial constraints are a major impediment, as many SMEs operate on limited funds that emphasize immediate operational demands above technical advances. Furthermore, the lack of technical skills among SME workers impedes the successful deployment and exploitation of AIS. This difficulty is exacerbated by poor infrastructure, such as unpredictable internet connectivity and intermittent power supply, both of which are required for AIS to work properly (Olatunji, 2013).

### **Benefits of AIS Adoption**

Despite the difficulties, adopting AIS provides significant benefits to SMEs. Studies have demonstrated that AIS can improve financial reporting accuracy, decision-making processes, and overall operational efficiency (Onaolapo & Odetayo, 2012; Adebisi & Ayoade, 2017). Improved financial reporting accuracy is especially crucial for SMEs, since it helps them secure loans and attract investors by providing clear and dependable financial data. Furthermore, AIS helps SMEs make better decisions by delivering real-time data and insights, allowing them to adapt quickly to market developments and opportunities (Adebisi & Ayoade, 2017).

### **Factors Influencing AIS Adoption**

Several factors influence AIS adoption among Nigerian SMEs. These include organizational characteristics, technical factors, and external influences. Organizational variables such as business size, management support, and staff ICT expertise all have a substantial impact on AIS adoption (Onaolapo and Odetayo, 2012). Larger SMEs, with more resources and managerial backing, are more likely to use AIS. Technological variables such as perceived ease of use and usefulness are also important considerations. SMEs are more likely to implement AIS if the systems are easy to use and offer apparent benefits (Adeyemi & Fagbemi, 2017). External pressures, such as competitive pressure and regulatory obligations, accelerate AIS implementation. SMEs facing fierce competition are more likely to use AIS to gain a competitive advantage, while regulatory obligations force businesses to strengthen their financial reporting methods (Adebisi & Ayoade, 2017). According to the research, while Nigerian SMEs face major challenges to implementing AIS, the prospective advantages justify



the expenditure. To overcome financial constraints, authorities and financial institutions could provide targeted assistance and incentives to SMEs that adopt technological solutions. Furthermore, training programs aimed at improving SME staff's ICT skills could help to address the lack of technical experience. Addressing infrastructure concerns necessitates collaborative efforts between the government and the business sector to increase internet connectivity and power supply. Moreover, fostering a supportive regulatory environment that encourages technological adoption can further drive the uptake of AIS among SMEs. The role of competitive pressure in influencing AIS adoption suggests that creating awareness about the benefits of AIS and showcasing success stories can motivate more SMEs to embrace these systems.

## CONCLUSION, PROSPECTS, AND RECOMMENDATIONS

### Conclusion

The adoption of Accounting Information Systems (AIS) among Nigerian SMEs presents a promising yet challenging landscape. This review has highlighted the significant benefits AIS can offer, such as enhanced financial accuracy, improved operational efficiency, and better decision-making capabilities. These advantages are crucial for SMEs aiming to remain competitive and compliant in an increasingly regulated and technology-driven business environment. Despite these benefits, the adoption of AIS among Nigerian SMEs is hampered by several persistent challenges. High implementation costs, a lack of technical expertise, and infrastructural deficiencies, particularly in rural areas, remain significant barriers. These issues prevent many SMEs from fully leveraging the potential of AIS, thereby limiting their operational and strategic effectiveness. The findings from studies by Alade and Ajayi (2016), Eze, Chinedu-Eze, and Bello (2020), and Udo and Edoho (2021) underscore the critical need for targeted interventions to address these barriers. Government and institutional support play a pivotal role in promoting AIS adoption. Initiatives such as subsidized software packages, digital literacy training programs, and financial incentives are essential to make AIS more accessible to SMEs. Studies by Ojo and Olawale (2019) and Uzoigwe and Ibe (2019) have demonstrated the positive impact of such support measures in enhancing the adoption rates and user satisfaction with AIS. Furthermore, the regulatory environment significantly influences AIS adoption. Compliance with financial reporting standards and other regulatory requirements necessitates the use of reliable accounting systems. This compliance not only ensures legal and financial accountability but also enhances the credibility and reputation of SMEs, as noted by Onyema and Eke (2019).

The level of user satisfaction with AIS among Nigerian SMEs is generally positive, particularly concerning improvements in efficiency and accuracy. However, this satisfaction is tempered by the challenges of high costs and technical proficiency requirements. Adebisi and Oladipo (2020) and Afolayan, Plant, and White (2020) highlighted the need for ongoing training and support to bridge the skills gap and enhance the user experience. In conclusion, while the adoption of AIS among Nigerian SMEs holds substantial promise for improving financial management and operational efficiency, overcoming the existing barriers requires concerted efforts from both the public and private sectors. By addressing the high costs, enhancing technical expertise through training, and improving infrastructural support, Nigerian SMEs can



better harness the benefits of AIS. This, in turn, will contribute to their growth, competitiveness, and overall economic development.

### **Future Prospects**

The prospects for the adoption of Accounting Information Systems (AIS) among Nigerian SMEs appear promising, provided that concerted efforts are made to address the existing challenges. With the ongoing digital transformation globally, the adoption of AIS among Nigerian SMEs is expected to increase. Several factors contribute to this optimistic outlook. First, advancements in technology and the proliferation of affordable cloud-based AIS solutions are likely to lower the entry barriers for SMEs. Cloud-based systems offer scalability, flexibility, and cost-effectiveness, making them an attractive option for SMEs with limited resources (Eze, Chinedu-Eze, & Bello, 2020). Second, increased awareness of the benefits of AIS will drive higher adoption rates. As more SMEs recognize the advantages of enhanced financial accuracy, improved operational efficiency, and better decision-making capabilities, the demand for AIS is expected to rise. This trend is supported by studies such as those by Adeyemi and Fagboyo (2018) and Vincent (2018), which highlight the positive impact of AIS on business performance.

Third, regulatory pressures will continue to play a significant role in AIS adoption. As the Financial Reporting Council of Nigeria (FRCN) and other regulatory bodies enforce stricter compliance requirements, SMEs will increasingly adopt AIS to meet these standards and avoid penalties (Onyema & Eke, 2019). Finally, the Nigerian government and various institutions are likely to continue their efforts to promote digital literacy and support technological adoption among SMEs. Initiatives such as subsidized AIS software packages, grants, and loans targeted at technology adoption and training programs will be critical in driving the adoption of AIS (Ojo & Olawale, 2019; Olatunji, 2018).

### **SUGGESTED AREAS FOR FURTHER RESEARCH**

Despite the extensive research conducted on the adoption of Accounting Information Systems (AIS) among Nigerian SMEs, several areas remain underexplored. Addressing these gaps can provide a more comprehensive understanding of the dynamics influencing AIS adoption and utilization, leading to more effective strategies for promoting these systems. The following areas are suggested for further research:

- a. **Impact of Government Policies on AIS Adoption:** While some studies have touched on the role of government support in promoting AIS adoption, there is a need for more detailed research on how specific government policies, subsidies, and incentives influence the adoption rates among SMEs. Examining the effectiveness of different policy instruments and their implementation can provide insights into how government interventions can be optimized to support SMEs.
- b. **Comparative Studies Across Regions:** Most research has focused on AIS adoption in urban areas, with limited attention given to rural regions. Comparative studies that examine the differences in AIS adoption between urban and rural SMEs can highlight



unique challenges and opportunities in different geographical contexts. This can inform targeted interventions to address regional disparities in technology adoption.

- c. **Longitudinal Studies on AIS Impact:** There is a lack of longitudinal studies that track the impact of AIS adoption over time. Such studies can provide valuable insights into the long-term benefits and potential drawbacks of AIS implementation, helping SMEs to make more informed decisions about their technology investments. Longitudinal research can also identify the stages at which SMEs derive the most value from AIS and the factors that sustain or diminish these benefits over time.
- d. **Role of Organizational Culture in AIS Adoption:** The influence of organizational culture on the adoption and effective use of AIS has not been extensively studied. Researching how different cultural factors within SMEs, such as management attitudes towards technology, employee readiness for change, and the overall innovation climate, affect AIS adoption can provide a deeper understanding of the human factors that drive or hinder technological uptake.
- e. **Integration of AIS with Other Business Systems:** The integration of AIS with other business management systems (e.g., Customer Relationship Management (CRM), Enterprise Resource Planning (ERP)) remains an underexplored area. Research on how AIS can be effectively integrated with these systems to create a more holistic business management environment can offer significant operational advantages for SMEs. Such studies can also explore the technical and organizational challenges associated with system integration.
- f. **Cybersecurity Concerns and AIS Adoption:** With increasing digitalization, cybersecurity is a critical concern for SMEs adopting AIS. Research focusing on the cybersecurity challenges specific to AIS, the awareness levels among SMEs regarding these threats, and the effectiveness of various cybersecurity measures can provide essential guidance for SMEs to protect their financial data and maintain trust with stakeholders.
- g. **User Experience and Interface Design:** The user experience (UX) and interface design of AIS software significantly influence its adoption and effective use. Studies examining how the design of AIS interfaces impacts usability, employee satisfaction, and productivity can lead to the development of more user-friendly systems tailored to the needs of SMEs. This can help in reducing resistance to adoption and enhancing the overall user experience.
- h. **Gender and AIS Adoption:** Exploring the role of gender in AIS adoption within SMEs can uncover unique barriers and facilitators experienced by women-owned and men-owned businesses. Such research can inform the development of gender-sensitive approaches to promoting AIS adoption, ensuring that support mechanisms are inclusive and address the specific needs of all business owners.
- i. **Environmental and Sustainability Impacts:** The environmental and sustainability impacts of AIS adoption are areas that have not been widely explored. Research in this area can examine how AIS contributes to sustainable business practices, such as reducing paper usage, enhancing energy efficiency, and supporting sustainable decision-making





processes. Understanding these impacts can align AIS adoption with broader environmental goals.

- j. **Post-Adoption Challenges and Support:** While much research focuses on the factors influencing the initial adoption of AIS, there is a need to explore the post-adoption challenges that SMEs face. This includes issues related to system maintenance, updates, user training, and scalability as businesses grow. Identifying these challenges and providing recommendations for ongoing support can ensure that SMEs continue to benefit from AIS in the long term.

### **Recommendations**

To fully realize the potential of AIS and ensure its widespread adoption among Nigerian SMEs, several key recommendations can be made:

- i. **Financial Support and Incentives:** The government and financial institutions should provide financial support to SMEs in the form of subsidies, grants, and low-interest loans specifically for AIS adoption. This financial assistance can help mitigate the high initial costs associated with implementing AIS (Alade & Ajayi, 2016).
- ii. **Training and Capacity Building:** Comprehensive training programs and continuous professional development initiatives are essential to bridge the skills gap among SME owners and employees. These programs should focus on enhancing digital literacy and providing hands-on experience with AIS to ensure effective utilization (Afolayan, Plant, & White, 2020).
- iii. **Infrastructure Development:** Addressing infrastructural deficiencies, such as unreliable internet connectivity and frequent power outages, is crucial. Investments in improving the IT infrastructure, particularly in rural areas, will create a conducive environment for the seamless operation of AIS (Udo & Edoho, 2021).
- iv. **Public-Private Partnerships:** Collaborative efforts between the government, private sector, and educational institutions can foster innovation and support the development of tailored AIS solutions that meet the specific needs of Nigerian SMEs. These partnerships can also facilitate knowledge sharing and best practices for AIS implementation (Uzoigwe & Ibe, 2019).
- v. **Regulatory Framework and Compliance:** Strengthening the regulatory framework to encourage AIS adoption while ensuring compliance with financial reporting standards is essential. Regulatory bodies should provide clear guidelines and support to SMEs in adopting and using AIS effectively (Onyema & Eke, 2019).
- vi. **Awareness Campaigns:** Increasing awareness about the benefits of AIS through targeted campaigns can help change the perception of AIS from being an unnecessary expense to a valuable investment. These campaigns should highlight success stories and case studies of SMEs that have successfully implemented AIS (Adeyemi & Fagboyoye, 2018).



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