

**DETERMINANTS OF PERCEIVED EFFICACY OF DISRUPTIVE  
TECHNOLOGIES AMONG PROFESSIONAL ACCOUNTANTS IN  
NIGERIA**



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BENIN CITY.**

**NOVEMBER, 2025.**

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TECHNOLOGIES AMONG PROFESSIONAL ACCOUNTANTS IN  
NIGERIA**

**BY**

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**A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF  
ACCOUNTING, FACULTY OF MANAGEMENT SCIENCES, UNIVERSITY OF  
BENIN, BENIN CITY, IN PARTIAL FULFILLMENT OF THE REQUIREMENTS  
FOR THE AWARD OF**

**NOVEMBER, 2025.**

## DECLARATION

**Victoria Onome BRUGHORO** declare that,

- i. This study is based on a study undertaken by me in the Department of Accounting, Faculty of Management Sciences, University of Benin, Benin City, under the supervision of **Prof Eyesan Leslie Dabor** of the Department of Accounting, Management Sciences, University of Benin, Benin City, Nigeria.
- ii. This work has not been submitted for the award of degree elsewhere.
- iii. Ideas and views are product of my personal research and where the view of others has been expressed, they have been duly acknowledged.
- iv. Any liability arising from this work is to be wholly borne by me alone

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**Victoria Onome BRUGHORO**

**MGS2104522**

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**DATE**

## CERTIFICATION

We, certify that this research project was carried out by **Victoria Onome BRUGHORO** with matriculation number MGS2104522 in the Department of Accounting, Faculty of Management Sciences, University of Benin, Benin City, Nigeria. It is adequate in scope and quality in partial fulfilment of the requirements for the award of Bachelor of Science (BSc.) degree in Accounting.

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## **DEDICATION**

This research is dedicated to the Almighty God for His great grace in my life and for seeing through my academic journey. He has been my source of strength and in Him I live and move and have my being. I dedicate this project to my parents, Mr and Mrs Brughoro, to my Uncle, Mr. Godstime Airhihenbuwa , for their never ending support towards me during the course of this program, all I can say is thank you for never giving up on me and God richly bless you,

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## ABSTRACT

*This study examined accountants' perceptions, challenges, and readiness toward the adoption of disruptive technologies in Nigeria, focusing on how factors such as perceived usefulness, ease of use, training and support, perceived risk, and organizational readiness influence technology acceptance. The study adopted the Technology Acceptance Model (TAM) as its theoretical foundation, emphasizing the interaction between perceived usefulness and perceived ease of use in determining technology adoption behavior. A structured questionnaire was administered to 383 ICAN and ANAN members. The data collected were analyzed using descriptive and inferential statistics, including multiple regression analysis, with the aid of the Statistical Package for the Social Sciences (SPSS, version 25).*

*Findings revealed that perceived usefulness and ease of use significantly enhance accountants' acceptance and utilization of disruptive technologies. Additionally, training availability, top management support, and organizational readiness were found to positively influence technology adoption, while perceived risks such as job insecurity and data privacy concerns had a negative but statistically significant relationship with adoption. The study concluded that accountants' readiness to embrace disruptive technologies largely depends on adequate organizational infrastructure, supportive leadership, and effective digital competency development. It recommended that accounting bodies and firms invest in continuous digital upskilling programs, strengthen technological support systems, and promote innovation-driven cultures to maximize the benefits of emerging technologies in accounting practice.*

**Keywords:** *Disruptive technologies, perceived usefulness, ease of use, digital readiness, technology adoption, accounting profession*

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background to the study**

Globally, the accounting profession is changing rapidly as a result of disruptive technologies such as artificial intelligence (AI), big data analytics, blockchain, robotic process automation (RPA), and cloud computing. These technologies are redefining professional practices, particularly in the accounting field by transforming how data is collected, processed, analyzed and reported (Appelbaum et al., 2017; Kokina & Davenport, 2017). Disruptive technologies are advancements in the modern technology that destroy traditional methods (Aghion & Howit, 1992; Buharis et al., 2019). Disruptive technologies, as opined by Christensen (1997), refer to innovations that significantly alter the structure of industries and displace traditional systems with more efficient alternatives.

In accounting, these technologies have facilitated greater automation of routine processes, real-time financial reporting, improved audit accuracy, and enhanced decision making (Richmond et al., 2017). For example, AI systems now perform predictive analytics and detect anomalies in financial data, while blockchain ensure transparent, tamper proof ledgers (Moll & Yigitbasioglu, 2019). The accounting profession must adapt to remain relevant as firms across the globe adopt such tools to remain competitive.

In Nigeria, there is a need for accountant to develop and enhance these new skills and knowledge in order to perform professionally better. However, incorporating disruptive technologies into accounting practices in Nigeria present both opportunities and challenges. The adoption rate remains relatively low due to infrastructural limitations, inconsistent power supply, limited internet penetration, and inadequate technological skills among practitioners (Akinbowale et al., 2020; Omodero, 2022). In addition, concerns over cybersecurity, regulatory uncertainty, and the high cost of implementation hinder broader adoption (Ede et al., 2021; Oyewo & Badejo, 2019).

Despite these challenges, the accounting profession in Nigeria is becoming more aware of the revolutionary potential of these innovations. Nigerian accounting professionals are becoming more aware of the benefits of these technologies in terms of increasing productivity, transparency, and client service delivery (Adegbe & Fakile, 2021). However, perceptions of their usefulness and benefits differ greatly, depending on a number of variables, including firm size, location, exposure to training, and availability of digital tools.

Understanding these perceptions is essential, as they play a central role in determining whether and how new technologies are adopted. As revealed by Davis' (1989) Technology Acceptance Model (TAM), perceived usefulness and perceived ease of use are primary drivers of technology adoption. In line with this, learning more about how disruptive technologies are viewed by Nigerian accountants offers valuable information about

potential barriers, facilitators, and the overall preparedness of the profession to transition into the digital era.

In essence, this research closes the capacity gaps, enhancing trust in financial systems and guiding strategic investments. It can pave way for a more transparent, efficient, and resilient accounting profession aligned with Nigeria's broader digital and economic aspirations.

## **1.2 Statement of the Problem**

Disruptive technologies are rapidly changing the accounting profession, offering substantial benefits like real-time reporting, enhanced accuracy, fraud detection, and lower costs (Appelbaum et al., 2017; Institute of Chartered Accountants in England and Wales (ICAEW), 2021). Although these technologies have become more popular in developed economies, their adoption and perceived impact are still inconsistent and unknown in developing nations such as Nigeria (Ozor et al., 2020). This is because, the Nigeria accounting profession faces persistent challenges such as inadequate training, a lack of supportive regulatory frameworks, resistance to change, and limited infrastructure (Eze et al., 2021; Otusanya, 2019).

Empirical studies revealed that while a segment of Nigerian accounting professionals is aware of the benefits of AI, blockchain, and automation tools, there exist a gap between awareness and implementation (Klynveld Peat Marwick Goerdeler (KPMG) Nigeria, 2021;

Oyewo & Badejo, 2019). Oladeji et al. (2023) surveyed Nigerian accountants and reported that 78% were aware of AI and blockchain in auditing and financial reporting but only 22% had received any training, and just 15% had implemented these tools in practice. This shows that even when awareness is high, if users doubt the usefulness or find the technology too complex, they may not adopt it. Furthermore, not much research has been done expressly on how effective these technologies are thought to be by Nigerian accountants. Without such insights, policymakers, educators, companies and regulatory agencies risk making uninformed choices due to lack of information necessary to support meaningful technology adoption. As a result, the profession risks falling behind global standards, leading to inefficiencies, skill gaps, and a decline in competitiveness. Therefore, in order to assist the digital transformation of accounting in Nigeria, it is imperative that these gaps be filled in order to inform curriculum change, create hands on training, and shape policy initiatives.

### **1.3 Research Questions**

The following are the questions this study seeks to provide answers to:

1. How do Nigerian accountants perceive the usefulness and ease of use of these disruptive technologies in their work?
2. What challenges hinder the effective adoption of disruptive technologies in the Nigerian accounting sector?

3. What specific benefits do accounting professionals in Nigeria associate with the adoption of disruptive technologies?
4. What concerns do Nigerian accountants have regarding the risks of disruptive technologies?

#### **1.4 Research Objectives**

The general objective of this study is to investigate the perceived efficacy of disruptive technologies in the accounting profession in Nigeria. The specific objectives of this study are to:

1. evaluate accountants perceptions of the usefulness and ease of use of disruptive technologies;
2. investigate the major challenges hindering adoption of disruptive technologies in the Nigerian sector;
3. ascertain the benefits of adopting disruptive technologies in Nigeria; and
4. examine perceived risks and concerns associated with disruptive technologies in accounting.

#### **1.5 Research Hypothesis**

The hypothesis is stated in null form for testing.

Ho1: There is no significant relationship between accountants perception of the usefulness and ease of use of disruptive technologies.

Ho2: Barriers such as training, infrastructure, and cost do not significantly hinder adoption

Ho3: There is no significant benefit of adopting disruptive technologies in Nigeria.

Ho4: Perceived risks have no significant effect on accountants willingness to adopt disruptive technologies.

### **1.6 Significance of the study**

This study is significant for several reasons. First, by exploring the real-world perspectives and difficulties of disruptive technologies in developing nations, it adds to the expanding volume of research on technology innovation in professional services, especially accounting. Understanding how accountants view and use technologies like artificial intelligence (AI), blockchain, robotic process automation (RPA), and cloud accounting is essential to maintaining the profession's relevance, effectiveness, and global competitiveness as Nigeria's economy becomes more digitally integrated. Secondly, by identifying awareness, training, and implementation gaps and providing evidence-based recommendations to improve professional development and service delivery, the study will assist accounting practitioners. Policymakers, regulators (like Institute of Chartered Accountants of Nigeria and Association of National Accountants of Nigeria), and educators can also benefit from the insightful information it offers. They can use it to

create better training programs, infrastructure regulations, and curricula that take into account the realities of the industry. Additionally, the study's conclusions can be used as a starting point for other research and also be used to find weaknesses in current systems and put in place a more efficient monitoring procedures. In the end, it aims to educate a more resilient and technologically competent accounting profession in Nigeria.

### **1.7 Scope of the study**

This study focuses on investigating the perceived impact of disruptive technologies in the accounting profession in Nigeria. Geographically, this study is confined to the accounting professionals operating within Nigeria (urban and rural areas) and it covers all levels of the accounting profession, including auditors, financial accountants, management accountants, tax practitioners, and accounting academics. This inclusion ensures that the data collected reflects the views and experiences of a wide range of accountants, providing a holistic perspective on the issues under investigation. This research examines major disruptive technologies currently influencing the field including but not limited to: AI, blockchain technology, RPA, big data analytics, cloud computing.

The primary method of data collection for this study is a questionnaire survey distributed to a representative sample of accountants. The survey includes likert scale questions designed to quantify accountants views and experiences related to disruptive technologies.

## **1.8 Limitations of the study**

The research method use to explore the perceptions and adoption behaviors of Nigerian accountants regarding disruptive technologies requires intensive resources, time and finance. This approach needs careful planning and may strain available resources, possibly reducing the depth of data collection and analysis. A lack of expertise in methodology can lead to a major set back in data analysis and interpretation, possibly affecting the reliability of the findings. Accessing certain accounting professionals, particularly in rural or less digitized areas, may pose challenges, thereby constraining the range of Perspectives. Disruptive technologies evolve quickly, and certain findings may becomes outdated within a short period of time unless continuously updated.

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## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 Introduction

The rapid advancement of disruptive technologies has transformed professional practices across various industries, notably impacting the accounting profession. Technologies including AI, Blockchain, Big Data Analytics, RPA, and cloud computing are progressively seen as determinants of efficiency, accuracy, and transparency in accounting (Scholastic Analysis, 2023). In developed economies, empirical research indicates that accountants regard these technologies as essential to improving reporting quality, enhancing decision making, and sustaining competitiveness (Pan & Seow, 2021; Al-Htaybat & von Alberti-Alhtaybat, 2022).

In Nigeria, however, the determinants of perceived efficacy remain inadequately examined. While some studies indicate that perceived usefulness and ease of use strongly influence adoption (Mohammed et al., 2023), others emphasize that infrastructural barriers, regulatory deficiencies, and cybersecurity issues hinder full-scale adoption (Abdullahei et al., 2025; Digital Accounting Practices, 2025). Moreover, evidence indicates that despite awareness of disruptive technologies exists, actual implementation is hindered by organizational inertia, insufficient technical skills, and cost implications (Oyewo, 2021; KPMG Nigeria, 2021).

## **2.2 Conceptual Review**

This conceptual review offers the theoretical framework for understanding the impact of disruptive technologies in the accounting profession. It draws from Christensen's theory of disruptive innovation, which explains how new technologies gradually transform industries by providing simpler and more affordable alternatives to establish solutions. The review also relies on major technology adoption frameworks such as TAM and UTAUT to explain how accountants form perceptions about the usefulness and ease of adopting new tools. In addition, it emphasizes how technologies such as AI, blockchain, RPA, cloud accounting and data analytics are steadily changing how accountants work and the skills they must possess. Collectively, these concepts help explain the factors that influence how accountants in Nigeria perceived the effectiveness of disruptive technologies in their profession.

### **2.2.1 Definition of Disruptive Technologies**

The concept of disruptive technology originated from Christensen's (1997) work of disruptive innovation, presented in his seminal book, *The Innovator's Dilemma*. Christensen argued that certain technologies fundamentally change the competitive dynamics within industries by offering cheaper, accessible, and user-friendly alternatives to existing solutions. Initially, disruptive technologies typically underperform relative to the expectations of mainstream customers, yet they attract specialized or underserved markets. Over time, these technologies advance and eventually displace established products and processes. This differs from sustaining innovations, which enhance the

performance of existing technologies without changing the industry's structure (Christensen et al., 2015).

In essence, disruptive technologies are defined as innovations that initially serve niche markets but ultimately transform industries by providing new value propositions (King & Baatartogtokh, 2015). They are not necessarily superior initially; instead, they achieve success by democratizing access, reducing cost, and challenging traditional business structures.

In the accounting profession, disruptive technologies are technological advancements that transform traditional accounting practices, improve decision making, and automate routine functions (Pan & Seow, 2021; Scholastic Analysis, 2023). Therefore, disruptive technologies not only enhance existing practices but transform how data is processed, transactions are recorded, and decisions are made.

### **2.2.2 Disruptive technologies in accounting**

Accounting, traditionally seen as a profession centered on manual bookkeeping, financial reporting, and regulatory compliance, is undergoing swift evolution due to the emergence of disruptive technologies. These technologies are transforming the roles of accountants, moving the focus from emphasis from transaction processing to strategic decision-making and value creation (Kokina & Davenport, 2021; Al-Htaybat & von Alberti-Alhtaybat, 2022). By automating routine tasks, increasing accuracy, and enhancing data-driven

insights, disruptive technologies present both opportunities for efficiency and challenges relating to adoption, regulation, and ethical considerations especially in developing economies like Nigeria.

#### **2.2.2.1 Artificial Intelligence (AI) and Machine Learning (ML)**

Artificial intelligence refers to computer systems capable of executing tasks that traditionally require human intelligence, like problem-solving, pattern recognition, and decision-making. Artificial intelligence is seen as an improvement of the accounting services' quality, due to the possibility of the intelligent systems of over-take human tasks and even to reach decisions independently (Stancheva, 2018). Accounting increasingly uses AI to automate routine tasks, find unusual patterns, and aid audit analysis (Appelbaum et al., 2020). Machine Learning is a subset of AI that allows systems get better as they handle more data.

AI tools like ChatGPT, MindBridge AI, and Kira systems are now being applied in auditing, tax planning, and risk assessment. They examine vast volumes of transactions to detect irregularities that may suggest fraud or misstatement (Kokina & Davenport, 2021). For example, AI-driven audit analytics solutions may rapidly evaluate millions of journal entries, identifying only exceptions for human review, thereby substantially decreasing audit time and enhancing accuracy.

In Nigeria, however, adoption is still in its infancy due to financial constraints, insufficient digital skills, and infrastructure limitations (Oyewo, 2021). Nonetheless, the Institute of Chartered Accountants of Nigeria (ICAN) has begun prioritizing digital competence in its updated professional syllabus, acknowledging the pivotal role of AI in the future of accounting practice.

#### **2.2.2.2 Blockchain and Distributed Ledger Technology (DLT)**

Blockchain is a form of distributed ledger that securely records transactions across multiple computers, making them nearly tamper-proof. It improves transparency, traceability, and trust—essential characteristics in financial reporting and auditing (Tapscott & Tapscott, 2020). In accounting, blockchain could replace conventional double entry bookkeeping with triple-entry accounting, wherein all transactions are recorded on a shared, immutable ledger (Oladimeji & Folorunsho, 2023). This diminishes the potential for fraud and errors while enabling auditors to authenticate transactions in real time. Globally, major corporations like PwC (PricewaterhouseCoopers), Deloitte, and KPMG (Klynveld Peat Marwick Goerdeler) are developing blockchain-based audit systems that verify digital records straight from the ledger instead of depending on paper-based evidence (International Federation of Accountants (IFAC), 2021). In Nigeria, blockchain could play a vital role in combating corruption, boosting transparency in public sector accounting, and reducing audit inefficiencies, however challenges such as regulation and lack of technical expertise persist (Oladimeji & Folorunsho, 2023).

### **2.2.2.3 Robotic Process Automation (RPA)**

Robotic Process Automation refers to the use of “software robots” that imitate human behavior to carry out structured and rule-based accounting tasks, like processing invoices, reconciliations, payroll, and tax computations (Lacity & Willcocks, 2021). RPA is regarded as one of the automation techniques that can produce quantifiable efficiency gains with minimal system changes. By integrating RPA into accounting workflows, organizations may speed up financial closing processes, lower labor costs, and minimize human errors.

For instance, RPA is currently automating accounts payable and receivable processes in multinational corporations, ensuring high accurate operations around-the-clock. Although small and medium enterprises (SMEs) encounter adoption Barr due to high implementation costs, Nigerian financial institutions are also experimenting with RPA to automate routine financial reporting tasks (Digital Accounting Practices, 2025).

### **2.2.2.4 Cloud-Based Accounting Systems**

Cloud computing allows financial data and accounting applications to be hosted on distant servers that are reachable through the internet. This technology facilitates real-time collaboration, data accessibility, and economical scalability (Abdullahi et al., 2025). Bookkeeping and reporting have been transformed by well-known platforms like QuickBooks Online, Xero, and Sage Business Cloud, which allow accountants collaborate

with client in real time and access data remotely. Additionally, cloud-based systems minimize entry barriers for small businesses by eliminating the need for expensive on-premise software and hardware.

However, the adoption of cloud accounting in Nigeria remains low, mainly because of unstable internet, unreliable power supply, and cybersecurity concerns (Oyewo, 2021). Despite these challenges, businesses that adopt cloud systems report better departmental integration, faster reporting cycles, and improved financial transparency.

#### **2.2.2.5 Big Data Analytics**

Big Data refers to large, complex datasets that traditional accounting software cannot process. In order to improve forecasting, decision-making, and fraud detection, big data analytics uses sophisticated analytical tools to extract meaningful insights from these datasets (Al-Htaybat & von Alberti-Alhtaybat, 2022). Big Data transforms the role of accountants from mere record keepers to strategic analysts who understand financial and non-financial data to assist business decisions. It enables auditors to conduct continuous auditing, monitoring transactions in real time rather than retrospectively.

Big Data Analytics is gaining recognition in Nigeria as a crucial tool for risk management and performance evaluation, particularly in the banking and manufacturing industries (Scholastic Analysis, 2023). However, challenges with data integration, limited analytical skills, and privacy concerns continue to impede widespread adoption.

### **2.2.3 Distinction Between Disruptive and Sustaining Innovations**

The concept of disruptive and sustaining innovations is derived from Christensen's (1997) Theory of Disruptive Innovation which distinguishes between technologies that disrupt established markets and that progressively enhance current products or services. In accounting, comprehending this gap is crucial for studying how professional perceive and adopt emerging technologies such as AI, Blockchain, Cloud Computing, Big Data Analytics, and RPA.

#### **2.2.3.1 Sustaining Innovations**

Sustaining innovations are technologies or improvements that enhance existing systems, techniques, or products to more effectively meet the requirements of current customers and markets (Christensen et al., 2015). They do not substantially alter the industry's structure rather, they enhance and refined existing processes (Yu & Hang, 2010).

In the context of accounting, sustaining innovations include transitioning from traditional accounting software (e.g from sage to SAP S/ 4HANA), improving data security in current ERP systems, and enhancing financial reporting standards through better analytics or dashboards. Such innovations seek to enhance accuracy, speed, and compliance; but, they do not change the accountant's role or disrupt the processing of financial information (Appelbaum et al., 2020). For example, a Nigerian company transitioning from desktop-based accounting software to an upgraded version with more automation features is

engaging in sustainable innovation; it improves the process while maintaining the same foundational framework of financial management.

### **2.2.3.2 Disruptive Innovations**

Disruptive Innovation profoundly transform market dynamics by bringing new technologies that initially underperform compared to existing systems but ultimately surpass and replace them (Christensen, 1997). Disruptive technologies initially focus on underdeveloped or new markets, offering simplicity, affordability, and accessibility, subsequently evolving to dominate mainstream markets (Christensen et al., 2015). In the accounting profession, disruptive technologies include Artificial Intelligence (AI), Blockchain, Robotic Process Automation (RPA), Big Data Analytics, and Cloud Accounting.

Unlike sustaining innovations, disruptive technologies change the role of accountants from data recorders to strategic advisors who interpret automated insights. This shift challenges traditional notions of auditing, reporting, and compliance.

The adoption of truly disruptive innovations is far more common in Nigeria than adoption of sustaining innovations, such as improved auditing tools or upgraded accounting software. Oyewo (2021) and KPMG Nigeria (2021) state that although many accountants are aware of emerging technologies, they are reluctant to put them into practice because of infrastructural issues, skills gap, and regulatory uncertainty. However, disruptive

innovations such as cloud-based accounting, blockchain-based transaction verification, and AI-driven audit systems are gradually gaining momentum. In line with the concepts of Unified Theory of Acceptance and Use of Technology (UTAUT) and the Technology Acceptance Model (TAM), younger accountants and technology-oriented firms perceive these innovations as practical and easy to use (Venkatesh et al., 2003). Therefore, while sustaining innovations maintain Nigeria's current accounting systems, disruptive innovations offer both opportunities and challenges—reshaping how accountants perceive their professional efficacy, acquire skills, and deliver value in a digital economy.

#### **2.2.4 Accounting Profession**

The accounting profession serves as a cornerstone of modern economic systems, tasked with the precise recording, analysis, interpretation, and communication of financial information that supports decision making across various societal sectors. It is pivotal in fostering transparency, accountability, and effective resource management, which are essential for governance in both public and private sectors (Akinyemi & Obunmi, 2022). The profession encompasses a broad scope that includes public practice, industry and commerce, government and academia, each uniquely contributing to the development of ethical and competent professionals who maintain financial integrity and organizational growth (IFAC, 2021).

In public practice, accountants offer auditing, assurance tax advisory, and consultancy services to individuals, organizations, and governmental entities. These professionals

frequently work in accounting firms, from small and medium-sized practices to major global corporations like PricewaterhouseCoopers (PwC), Klynveld Peat Marwick Goerdeler (KPMG), Deloitte, and Ernst & Young (EY), guaranteeing adherence to statutory obligations and international reporting standards. In industry and commerce, accountants serve as financial controllers, management accountants, and internal auditors, focusing on budgeting, investment appraisal, cost management, and strategic planning. Their work is crucial for increasing corporate competitiveness and boosting operational efficiency, particularly in technologically dynamic situations.

Accountants in the public sector are essential for managing public funds, formulating policies, and implementing fiscal accountability frameworks. They guarantee compliance with public sector accounting standards, including the International Public Sector Accounting Standards (IPSAS), thereby fostering good governance and transparency. However, in academia, accountants engage in teaching, conducting research, and sharing knowledge. Academic accountants are leading the investigation into the effects of disruptive technologies such as AI, Blockchain, Big Data Analytics in accounting practices and education, preparing future accountants with essential digital skills and ethical foundations needed for the profession's dynamic environment (Okafor & Uwuigbe, 2021).

The International Federation of Accountants (IFAC,2021) states that the abilities necessary for accountants extend beyond traditional technical knowledge to include a combination of professional values, ethics, and technological adaptability. Modern accountants must

possess digital literacy, analytical reasoning, and strategic thinking abilities to proficiently utilize emerging technology. The IFAC emphasizes the significance of lifelong learning, as ongoing professional development guarantee that accountants adapt to technological disruptions and regulatory changes. Furthermore, cooperation, communication, and data interpretation skills are essential in today's data-driven business environment, where accountants are required to not just report figures but also deliver insights that supports strategic decision making.

In Nigeria, professional bodies like the Institute of Chartered Accountants of Nigeria (ICAN) and the Association of National Accountants of Nigeria (ANAN) align their training curricula with IFAC's International Education Standards (IES) to guarantee that Nigerian accountants fulfill global competency standards. Incorporating courses in accounting software, forensic accounting, data analytics, and emerging technologies into their professional syllabuses, these institutions have recently placed a strong emphasis on digital transformation. As a result, in an increasingly digital economy, the modern accountant is expected to function as a strategic business partner, able to manage technology systems, comprehend complicated data, and maintain ethical integrity (IFAC, 2023; Oyewo, 2021).

The accounting profession, therefore, is no longer limited to traditional bookkeeping positions. To manage the opportunities and challenges presented by disruptive developments, one now needs to be proficient with technology-driver tools and have an

optimistic outlook. The accounting profession's development is not only inevitable but also crucial for sustainable growth and governance as Nigeria continues to integrate into the global digital economy.

### **2.2.5 Perceived Efficacy**

The term perceived efficacy has its roots in psychology and technology adoption theories, and it refers to an individual's belief in the usefulness, ease, and effectiveness of a system or innovation in accomplishing specific goals (Bandura, 1997; Davis, 1989). The degree to which technologies like AI, blockchain, RPA, and big data analytics improve accountants' job performance, decision making, and professional efficiency is reflected in the perceived efficacy of disruptive technologies. This perception is crucial because users' perceptions of a technology's advantages and manageability are essential to its power (Venkatesh et al., 2003; Ifinedo, 2022).

From the perspective of technology adoption and perception studies, perceived efficacy is a psychological concept that encompasses users' cognitive and affective assessments of technology prior to or during adoption. It represents confidence in the technology's potential, trust in its reliability, and belief in its capacity to make difficult tasks easier. This entails determining whether technologies like blockchain or AI can successfully enhance audit quality, financial reporting accuracy, or compliance in the context of Nigerian accountants without adding excessive complexity or job insecurity (Oyewo, 2021; Akinyemi & Odubunmi, 2022).

It is essential to differentiate perceived efficacy from actual performance outcomes. Actual performance outcomes refer to quantifiable results like increased productivity, reduced error rates, or quicker decision making following adoption, whereas perceived efficacy deals with the belief or perception of usefulness and efficiency before or during adoption (Davis, 1989; Venkatesh et al., 2012). For instance, an accountant may believe that AI-based auditing tools are very good at spotting fraud, but the real efficacy of these tools can only be confirmed by empirical performance measures once they are put to use. This, before measurable results can be evaluated, it is essential to comprehend perceived efficacy since it affects behavioral intentions and adoption rates (Nwosu & Olayinka, 2023).

The Unified Theory of Acceptance and Use of Technology (UTAUT) by Venkatesh et al., (2003) and the Technology Acceptance Model (TAM) by Davis (1989) offer solid theoretical foundations for examining perceived efficacy. TAM posits that Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) directly shape an individual's intention to use technology, which in turn affects actual usage behavior. Both variables are consistent with perceived efficacy, which is a combination of users' belief in the usefulness (efficacy for job performance) and usability ( efficacy in interaction) of technology. Similarly, UTAUT broadens TAM by incorporating four key determinants that together explain technology adoption behaviors in many contexts: Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Conditions. In this context, perceived efficacy is most strongly correlated with Performance Expectancy (the belief that using a

technology will improve job performance) and Effort Expectancy (the ease of using technology).

In accounting contexts, the perceived efficacy of disruptive technologies influences how accountants evaluate, adopt, and incorporate new digital tools into their daily professional tasks. Accountants who perceive these technologies as efficient, reliable, and user-friendly are more inclined to adopt and utilize them effectively, aligning with both TAM and UTAUT assumptions (Ifinedo, 2022; Al-Mamary, 2023). If accountants perceive the technology as complex or a threat to their professional identity, resistance or minimal use may occur, resulting in a gap between technological potential and actual organizational impact (Oyewo, 2021; Okafor & Uwuigbe, 2021).

Finally, the concept of perceived efficacy connects technological innovation with human acceptance, highlighting that effective digital transformation in accounting depends not only on the availability of disruptive tools but also on professional's' perceptions of their value and utility. This study aims to analyze the determinants influencing Nigerian accountants' beliefs and attitudes towards disruptive technologies by integrating perceived efficacy within the TAM and UTAUT framework and to examine how these perceptions affect adoption behavior and professional advancement.

## 2.3 Theoretical Review

The theoretical foundation of this study is anchored on the Technology Acceptance Model (TAM), the Unified Theory of Acceptance and Use of Technology (UTAUT), and Disruptive Innovation Theory. These frameworks provide an analytical lens to understand how accountants perceive, evaluate, and adopt disruptive technologies within the Nigerian accounting landscape.

### 2.3.1 Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) proposed by Davis (1989) explains user acceptance of technological innovations based on two principal constructs: **Perceived Usefulness (PU)** and **Perceived Ease of Use (PEOU)**. Perceived usefulness refers to the extent to which an individual believes that using a particular system enhances job performance, while perceived ease of use describes the degree to which using a technology is free of effort. These two perceptions shape the user's attitude towards using the technology, which in turn influences behavioral intention and actual use.

Within the accounting context, TAM has been applied to explain how professional accountants evaluate new systems such as AI, blockchain, and cloud-based accounting. For instance, accountants are more likely to perceive disruptive technologies as effective when they find them beneficial for improving reporting accuracy, audit efficiency, and decision-making quality (Agyemang et al., 2022). Conversely, when the technologies are complex

or require significant technical knowledge, perceived efficacy tends to decline (Mohammed et al., 2023).

In Nigeria, TAM remains a relevant theoretical model as it highlights how perceived usefulness and perceived ease of use determine accountants' adoption behavior and their belief in the efficacy of these technologies. The model aligns with the realities of the Nigerian environment, where infrastructural challenges, digital literacy, and regulatory readiness influence acceptance levels (Oyewo, 2021).

### **2.3.2 Unified Theory of Acceptance and Use of Technology (UTAUT)**

The Unified Theory of Acceptance and Use of Technology (UTAUT), developed by Venkatesh et al. (2003), integrates constructs from eight earlier models of technology adoption, including TAM, the Theory of Reasoned Action, and the Innovation Diffusion Theory. The model identifies four core determinants of technology acceptance: Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Conditions.

Performance expectancy refers to the degree to which individuals believe technology will improve job performance; effort expectancy reflects perceived ease of use; social influence captures the impact of peer and organizational pressure; and facilitating conditions denote the technical and organizational infrastructure supporting technology use.

In the accounting profession, UTAUT explains how accountants' perception of the efficacy of disruptive technologies is influenced by external and internal organizational factors. For

example, when accounting firms provide adequate training and digital resources, accountants are more likely to perceive disruptive technologies as effective and beneficial (Alshurideh et al., 2022). Similarly, social influence such as professional bodies like ICAN or ANAN encouraging digital adoption significantly affects perceived efficacy (Abdullahi et al., 2025). Thus, the UTAUT framework helps contextualize how perceived efficacy results from both personal and institutional determinants.

### **2.3.3 Disruptive Innovation Theory**

The Disruptive Innovation Theory, proposed by Christensen (1997), posits that certain technologies start by serving niche markets with limited functionality but eventually evolve to dominate and displace existing technologies or business models. In accounting, disruptive technologies such as AI, blockchain, and RPA initially complement traditional systems but gradually redefine the role of accountants by automating repetitive functions and enhancing analytical decision-making (Kokina & Davenport, 2021).

From the perspective of perceived efficacy, this theory explains why professional accountants may initially undervalue disruptive technologies due to perceived threats, complexity, or uncertainty. However, as these technologies mature and demonstrate tangible benefits, perceptions shift positively (King & Baatartogtokh, 2015). Within Nigeria, the gradual shift toward digital transformation aligns with Christensen's framework—where early resistance to automation is replaced by increased confidence as

professionals observe improvements in audit accuracy, speed, and reliability (Oladimeji & Folorunsho, 2023).

The combination of TAM, UTAUT, and Disruptive Innovation Theory therefore provides a robust theoretical basis for understanding the determinants of perceived efficacy of disruptive technologies among professional accountants in Nigeria.

## **2.4 Empirical Review**

Empirical studies have explored the determinants of perceived efficacy and adoption of disruptive technologies in accounting across different regions, revealing that factors such as perceived usefulness, ease of use, digital competence, organizational support, and infrastructure significantly influence acceptance.

### **2.4.1 Global Evidence**

Pan and Seow (2021) investigated the perception of accountants toward artificial intelligence (AI) and data analytics in Singapore using a mixed-method approach involving a survey of 210 professionals and in-depth interviews with audit partners. The study found that perceived usefulness and performance expectancy were the strongest determinants of perceived efficacy. Accountants who received structured training and organizational support demonstrated higher confidence in the capacity of AI to enhance audit quality, efficiency, and decision accuracy. Furthermore, the study revealed that managerial encouragement and the availability of data analytics tools increased the perceived efficacy

of technological applications. This underscores the importance of continuous professional development and firm-level investment in digital infrastructure to promote confidence in emerging accounting technologies.

Kokina and Davenport (2021) conducted a qualitative case study of large U.S. auditing firms integrating AI-based analytics into their audit processes. Their findings revealed that accountants perceived these technologies as highly effective when they led to reduced audit risks, faster reporting timelines, and enhanced analytical precision. However, the study emphasized that successful implementation depended heavily on system integration, change management, and organizational adaptability. Accountants who experienced smooth system integration and clear role definitions were more likely to perceive the technology as effective. Thus, the study concluded that perceived efficacy is not merely a function of the technology's capability but also of organizational readiness and human adaptability.

Al-Htaybat and von Alberti-Alhtaybat (2022) examined the adoption of cloud computing and Big Data Analytics among accounting professionals across multiple regions using a cross-sectional quantitative survey. The results showed that perceived usefulness, ease of use, and facilitating conditions were the most significant predictors of perceived efficacy. Accountants operating in technologically advanced firms with strong IT support reported higher confidence in using cloud-based systems for real-time financial reporting and decision-making. Additionally, social influence through professional associations and peer

recommendations was found to positively affect perception. The authors concluded that organizational infrastructure and peer collaboration are critical enablers of perceived efficacy of disruptive technologies.

Appelbaum et al. (2020) explored how digital literacy and professional skepticism influence accountants' perceived efficacy of advanced audit analytics and machine learning tools in North American firms. Using both survey and interview data, the study found that while the integration of data analytics improved fraud detection and reduced audit risks, many accountants with limited technical skills were reluctant to trust automated systems. The findings revealed that perceived efficacy was positively associated with digital competence and negatively influenced by uncertainty about algorithmic accuracy. The study recommended the inclusion of data analytics in accounting education and continuous professional training to improve confidence and usage efficacy.

Oyewo (2021) carried out an empirical investigation on the determinants of perceived efficacy of disruptive technologies among Nigerian accountants using survey data collected from 180 practitioners. The study found that although awareness of technologies such as AI, blockchain, and cloud computing was high, the perceived efficacy was hindered by infrastructural and institutional barriers. Specifically, poor internet access, high implementation costs, and limited regulatory frameworks negatively affected accountants' perceptions. However, accountants who had access to firm-led digital training and exposure to automation tools reported stronger perceptions of usefulness and

efficiency. The study emphasized the importance of professional education and government intervention in promoting enabling environments for digital adoption in accounting practices.

Mohammed et al. (2023) examined the influence of perceived usefulness, ease of use, digital competence, and organizational support on perceived efficacy of disruptive technologies among accountants in Nigeria. Using a Technology Acceptance Model (TAM) and Unified Theory of Acceptance and Use of Technology (UTAUT) framework, the authors surveyed 240 accountants across medium and large firms. The results revealed that perceived usefulness and ease of use significantly predicted perceived efficacy, while social influence and management encouragement moderated these relationships. Conversely, cost and cybersecurity concerns reduced perceived ease of use and usefulness. The study concluded that building technological skills, enhancing organizational support systems, and addressing infrastructure challenges are crucial for improving perceived efficacy among Nigerian accountants.

#### **2.4.2 Evidence from Nigeria**

Abdullahi et al. (2025) conducted a quantitative study among professional accountants in Lagos-based firms to examine the determinants of perceived efficacy of disruptive technologies in the Nigerian accounting sector. The study adopted the Unified Theory of Acceptance and Use of Technology (UTAUT) framework and identified facilitating conditions—such as internet reliability, management support, and access to technical

training—as the most significant predictors of perceived usefulness and ease of use. The findings revealed that accountants who had access to stable internet and managerial encouragement were more confident in the effectiveness of emerging technologies like cloud accounting and robotic process automation. The study concluded that addressing infrastructural deficiencies and strengthening institutional support would substantially improve the perceived efficacy and overall adoption of digital innovations in Nigeria’s accounting practice.

Mohammed et al. (2023) investigated the determinants of perceived efficacy of disruptive technologies among accountants in mid-sized Nigerian firms through a structured survey of 240 respondents. Grounded in both the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT), the study found that perceived usefulness, ease of use, technological competence, and management encouragement significantly influenced perceived efficacy. Additionally, the study highlighted job relevance and organizational readiness as crucial mediating factors that determine how accountants evaluate and adopt AI, blockchain, and cloud-based systems. The results further indicated that firms investing in digital literacy programs and modern accounting software recorded higher confidence levels among their employees regarding technological efficacy.

Oyewo (2021) explored the perception of disruptive technologies among Nigerian professional accountants using both survey and interview methods. The study discovered

that while most accountants were aware of technologies such as AI, blockchain, and cloud computing, their perceived efficacy remained limited by high implementation costs, inadequate infrastructure, and low digital skills. Moreover, accountants expressed concerns about cybersecurity and regulatory uncertainty, which further diminished their confidence in technological adoption. However, organizations that implemented digital training programs and embraced gradual automation showed improved perceptions of technology's usefulness and reliability. The study emphasized that the determinants of perceived efficacy are rooted in both individual competence and systemic readiness.

KPMG Nigeria (2021) released an empirical industry report titled *Digital Accounting Practices in Nigeria*, which examined professional accountants' readiness and perceptions of disruptive technologies. Based on extensive field surveys and focus group discussions with accounting professionals and firm leaders, the report found that digital adoption in Nigerian firms is still evolving, with significant gaps in expertise and infrastructure. The study revealed that accountants who engaged in continuous professional education—particularly those with international certifications like ACCA or CPA—displayed higher levels of confidence in the efficacy of digital tools. Furthermore, the report emphasized that firms integrating digital training, process automation, and cybersecurity measures into their operational framework experienced more positive perceptions of technology efficacy compared to firms that relied solely on manual systems.

Oladimeji and Folorunsho (2023) examined blockchain adoption in Nigerian accounting and auditing firms using a mixed-method approach. The findings indicated that blockchain technology was perceived as a potential tool for improving transparency, accountability, and fraud prevention in financial reporting. However, its perceived efficacy among accountants was hindered by lack of regulatory guidance, limited technical expertise, and high implementation costs. Respondents expressed optimism about blockchain's long-term value but noted that without professional education and government support, adoption would remain slow. The study recommended policy interventions, training workshops, and collaboration between professional bodies like ICAN and government agencies to enhance awareness and skill acquisition.

Akinyemi and Obubunmi (2022) carried out a survey-based study assessing the effects of digital transformation on accounting practice in Nigerian public and private sectors. The results revealed that accountants' perceived efficacy of disruptive technologies was largely determined by their digital literacy, organizational culture, and access to modern tools. Accountants in organizations with structured digital transformation policies reported higher confidence in the effectiveness of cloud computing and data analytics than those in traditionally managed firms. The authors concluded that integrating digital literacy into accounting curricula and continuous professional education would significantly improve perceptions of technological efficacy and enhance accounting innovation in Nigeria.

## **2.5 Summary of Literature Review**

The reviewed literature established that the perceived efficacy of disruptive technologies among professional accountants is largely influenced by technological, organizational, and personal factors. Globally, studies such as those by Pan and Seow (2021), Kokina and Davenport (2021), and Al-Htaybat and von Alberti-Alhtaybat (2022) show that technologies like Artificial Intelligence (AI), blockchain, Big Data Analytics, and cloud computing enhance audit efficiency, financial transparency, and decision-making accuracy. However, these studies also indicate that the effectiveness of such innovations depends on accountants' digital literacy, access to infrastructure, and managerial support (Stancheva, 2018; Appelbaum et al., 2020). Thus, technological competence and organizational readiness are key drivers of perceived efficacy in technologically advanced economies.

In the Nigerian context, similar findings have been reported, but with notable contextual variations. Studies such as Oyewo (2021), Abdullahi et al. (2025), and Mohammed et al. (2023) reveal that while accountants recognize the potential of disruptive technologies, actual adoption and perceived usefulness remain limited due to infrastructural deficits, cost implications, and lack of adequate digital training. KPMG Nigeria (2021) further emphasizes that exposure to professional certifications and digital learning enhances accountants' confidence in emerging technologies. Oladimeji and Folorunsho (2023) and Akinyemi and Obubunmi (2022) also identify organizational culture, management support, and regulatory clarity as determinants of perceived efficacy.

Overall, the literature suggests that the perceived efficacy of disruptive technologies among accountants is multidimensional—shaped by the interaction between personal competence, organizational support, and environmental readiness. While advanced economies demonstrate higher technological efficacy due to robust infrastructure and continuous innovation, developing economies like Nigeria still struggle with structural challenges that affect adoption and perception.

## **2.6 Gap in the Literature**

Despite growing research interest in digital transformation within the accounting profession, significant gaps remain in understanding the determinants of perceived efficacy of disruptive technologies, particularly in the Nigerian context. First, most global studies (e.g., Kokina & Davenport, 2021; Pan & Seow, 2021) focus on technologically advanced countries with strong digital infrastructures, offering limited insight into how contextual challenges—such as unreliable internet, cost barriers, and low digital literacy—affect accountants in developing economies.

Second, many Nigerian studies (e.g., Oyewo, 2021; Mohammed et al., 2023) concentrate on the adoption or awareness of technologies rather than on how professional accountants perceive their efficacy in improving work outcomes. Few have empirically examined how constructs such as perceived usefulness, ease of use, and facilitating conditions jointly determine technological confidence and competence.

Third, there is limited integration of theoretical models like the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT) in the Nigerian accounting context. Existing studies often adopt descriptive approaches without rigorous statistical modeling to measure the strength and direction of these relationships.

Finally, there is a dearth of comparative and longitudinal studies examining how perceptions evolve over time as digital transformation intensifies across the Nigerian accounting profession. The majority of prior works are cross-sectional, offering a snapshot rather than a dynamic understanding of how factors such as education, training, and regulatory support influence accountants' perceived efficacy of disruptive technologies.

Addressing these gaps will provide a more comprehensive understanding of how Nigerian accountants interact with and evaluate emerging technologies, guiding policymakers, professional bodies, and firms toward more effective digital integration and capacity-building strategies.

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## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.1 Introduction**

This chapter covers the method used to gather and analyze data. The research design, population of the study, sample size and sampling technique, data source, method of data collection, and operationalization of variables are specified and explained.

#### **3.2 The Research Design**

Research design is basically the plan or framework used to conduct a research. For the purpose of this study, a descriptive survey research design is used to examine the perception of Nigerian accountants concerning the usefulness and ease of use of disruptive technologies. Descriptive survey design are often used to obtain opinions, attitudes, and facts from a specific group of people, allowing the researcher to examine the relationship between variables without manipulating them (Creswell & Creswell, 2018; Saunders et al., 2019). The survey method is appropriate for this research as it facilitates the acquisition of quantitative data from a large number of participants pooled in a brief time-frame, hence providing a foundation for statistical analysis and generalization of findings (Bryman, 2016; Kothari, 2004). Considering the geographical distribution of accountants in Nigeria, the design facilitates online data gathering to improve accessibility and participation (Hair et al., 2020).

### **3.3 Population of the study**

The population of the study consists of ICAN and ANAN members in both public and private sector, which comprises of 65,000 ICAN members and 53,775 ANAN members, in total 118,775 members (ICAN+ANAN) (Fasan, 2024; ANAN, 2024). The choice of this population was selected due to their direct involvement in accounting and their current or potential utilization of disruptive technologies in their daily operations. These individuals can offer informed perspectives on the perceived usefulness, ease of use, challenges, and possibilities related to the adoption of emerging technologies such as AI, Blockchain, RPA, Big Data Analytics and cloud computing in the Nigerian accounting profession.

### **3.4 Sample Size and Sampling Technique**

A representative sample size is ascertained using known statistical guidelines. The Cochran's formula for large populations (95% confidence,  $\pm 5\%$  margin), Using the Cochran's formula (1977):

$$n = n_0 / (1 + (n_0 - 1) / N)$$

$$n_0 = Z^2 \cdot p \cdot q / e^2$$

$$q = 1 - p$$

where;

N= Population

n = Adjusted sample

$n_0$  = Sample size

Z = The z-score or desire confidence level

P = Proportion

e = Margin of error

Assume:

Z = 1.96 (95% confidence level)

P = 0.5 (maximum variability, since the actual proportion is unknown)

e = 0.05 (5% margin of error)

$$n_0 = (1.96)^2 \cdot 0.5 \cdot (1-0.5)/0.05^2$$

$$= 3.846 \times 0.5 \times 0.5 / 0.0025 = 3.8416 \times 0.25 / 0.0025$$

$$= 0.9604 / 0.0025$$

$$n_0 = \text{sample size} = 384.16$$

so, the minimum sample size is 384 respondents.

There are N=118775 accounting professionals combining ICAN and ANAN members. The adjusted sample size will be;

$$\begin{aligned}
n &= n_0/1 + (n_0 - 1/N) \\
&= 384/1+(384-1/118,775) \\
&=384/1+(383/118,775) \\
&=384/1+0.0032 \\
&=384/1.0032 \\
&=382.76. \sim 383
\end{aligned}$$

Given the combined membership of the Institute of Chartered Accountants of Nigerian (ICAN) and the Association of National Accountants of Nigerian (ANAN), which exceeds 80,000 professionals (ICAN, 2023; ANAN, 2023), a sample size of 383 respondents will be targeted. This figure is adequate to guarantee the statistical reliability and generalizability of findings. The sample technique to be used for this study is stratified simple random sampling. The use of stratified sampling is justified because accountants, perception may differ depending on the sector of practice, years of experience, and level of technological exposure (Owolabi &Iyoha, 2022; Okafor & Igbokwe-Ibeto, 2021). Questionnaires will be distributed electronically (via emails and professional platforms like ICAN and ANAN networks) and physically (at audit firms, conferences, and professional gatherings) in order to increase participation. This approach is expected to improve the rate of response while ensuring a wider geographical coverage (Kothari, 2004; Creswell & Creswell, 2018).

### **3.5 Sources of data**

For the study of this nature, the source of data used is the primary source. This source is valuable because it captures accounting professionals' firsthand perceptions, experiences, and attitudes towards the usefulness, ease of use, and challenges relating with disruptive technologies such as AI, Blockchain, Cloud accounting, and RPA (Creswell & Creswell, 2018; Saunders et al., 2019).

### **3.6 Instruments for Data Collection**

The main instrument for data collection in this study will be a structured questionnaire intended to capture professional accountants' perceptions of disruptive technologies in Nigeria. The questionnaire will be divided into sections: a section on demographic information, a section on the independent variable, and a section in the dependent variable. Consistent with previous empirical studies, the questionnaire will use a five-point Likert scale ranging from 1 = Strongly Disagree to 5 = Strongly Agree (Sekaran & Bougie, 2019; Saunders et al., 2019). Subjective perceptions can be quantified through the use of a five-point Likert scale, which facilitates statistical examination of the correlations between variables.

### **3.7 Reliability and Validity**

To ensure that the research instrument produces reliable and consistent results, reliability and validity tests will be performed. Reliability refers to the degree to which the instrument

consistently measures what it is intended to measure (Sekaran & Bougie, 2019). For this study, the Cronbach's Alpha Test is used to evaluate the internal consistency of the constructs (e.g., PU, PEOU). A coefficient value of 0.70 or higher will be considered acceptable indicating satisfactory reliability (Nunnally & Bernstein, 1994; Hair et al., 2019). A pilot study with 20 professionals will be conducted to clarify hazy questions prior to the primary data collection.

Validity refers to the extent to which the instrument measures what it is supposed to measure (Saunders et al., 2019). Three forms of validity will be guaranteed:

- i.** Content Validity – the questionnaire items are evaluated by experts in accounting, disruptive technologies, and research methodologies to guarantee comprehensive alignment with the study objectives.
- ii.** Construct Validity – The measurement items are derived from known models such as Technology Acceptance Model (TAM) (Davis, 1989) and Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003), guaranteeing congruence with theoretical conceptions.
- iii.** Criterion Validity – The outcomes of this study are compared with results from analogous empirical research in Nigeria and other developing economies to validate consistency and predictive accuracy (Kabir et al., 2020; Oyerinde et al., 2022).

### 3.8 Model Specifications

This study uses an integrated framework based on the Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003) and the Technology Acceptance Model (TAM) (Davis, 1989; Venkatesh & Davis, 2000). Both theories offer solid framework for understanding and predicting technology adoption behavior among professionals. The model is described as:

$$Y = \beta_0 + \beta_1PU + \beta_2PEOU + \beta_3YOE + \beta_4DLC + \beta_5TS + \beta_6OR + \beta_7TMS + \beta_8IC + \beta_9PI + \beta_{10}PR + \beta_{11}PTSE + \varepsilon$$

where;

Y = Perceived Efficacy Score

PU = Perceived Usefulness

PEOU = Perceived Ease Of Use

YOE = Years Of Experience

DLC = Digital Literacy/Competency

TS = Training & Support

OR = Organizational Readiness

TMS = Top Management Support

IC = Innovation Climate

PI = Peer Influence

PR = Perceived Risk

PTSE = Previous Technology Success Experience

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7, \beta_8, \beta_9, \beta_{10},$  and  $\beta_{11}$  = Regression Coefficients

$\varepsilon$  = Error term

### 3.9 Operationalization of Variables

This table comprises of how each sections and variables are operationalized using a 5–point Likert scale ranging from strongly disagree (1) to strongly agree (5).

Variables	Notations	Type	Measuring Scale	Questions
Perceived usefulness	PU	Independent	5–Point Likert scale	Q1–Q2
Perceived ease of use	PEOU	Independent	5–Point Likert scale	Q3–Q4
Digital literacy/competency	DLC	Independent	5–Point Likert scale	Q5–Q6
Training & support	TS	Independent	5–Point Likert scale	Q7–Q8
Top management support	TMS	Independent	5–Point Likert scale	Q9–Q10
Organizational readiness	OR	Independent	5–Point Likert scale	Q11–Q12
Innovation Climate	IC	Independent	5–Point Likert scale	Q13–Q14

Peer Influence	PI	Independent	5–Point Likert scale	Q15–Q16
Perceived Risk	PR	Independent	5–Point Likert scale	Q17–Q18
Previous Technology Success Experience	PTSE	Independent	5–Point Likert scale	Q19–Q20
Perceived Efficacy score	Y	Dependent	5–Point Likert scale	Q21–Q22

### 3.10 Method of analysis

The data obtained from the distributed questionnaires will be evaluated utilizing both descriptive and inferential statistical methods. Descriptive statistics, including Frequencies, means, percentages and standard deviations, will describe demographic features and offer in overview of respondents awareness, perception, and adoption of disruptive technologies. This will facilitate the identification of patterns and trends within the sample.

Inferential statistical approaches will be used to evaluate this study’s hypotheses.. Correlation analysis will be employed to investigate the relationships between the independent variables and the dependent variables. Additionally, multiple regression analysis will be used to assess the degree to which these independent variables forecast accountants’ perception and adoption behavior. Hypotheses will be evaluated at a 5% significance level ( $p < 0.05$ ). All analyses will be evaluated using the Statistical Package for the Social Sciences (SPSS version 26) and Stata version 17. These software programs are commonly used in business and accounting research due to their ability in handling

large datasets and performing complex statistical operations (Hair et al., 2019; Saunders et al., 2019; Sekeran & Bougie, 2019).

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## CHAPTER FOUR

### DATA PRESENTATION AND ANALYSIS

#### 4.1 Introduction

This chapter presents and analyzes the data collected in line with the objectives and research methodology described in Chapter Three. The study examined the determinants of perceived efficacy of disruptive technologies among professional accountants in Nigeria, focusing on how perceived usefulness, perceived ease of use, digital literacy, training and support, organizational readiness, top management support, innovation climate, peer influence, perceived risk, and previous technology success experience influence the overall perceived efficacy of these technologies.

A total of 383 structured questionnaires were distributed to professional accountants who are members of the Institute of Chartered Accountants of Nigeria (ICAN) and the Association of National Accountants of Nigeria (ANAN) across both the public and private sectors. Out of these, all 383 were properly completed and returned, representing a 100% response rate.

The data gathered were analyzed using both descriptive and inferential statistical **tools** with the aid of the Statistical Package for the Social Sciences (SPSS, version 26) and Stata (version 17). Descriptive statistics such as frequency, percentage, mean, and standard deviation were employed to summarize respondents' demographic characteristics and

perceptions regarding disruptive technologies. Inferential statistical analyses, including correlation and multiple regression, were utilized to test the research hypotheses and determine the effect of the independent variables on the dependent variable (perceived efficacy of disruptive technologies).

#### **4.2 Data Presentation**

The data are presented and analyzed according to the key variables of the study: Perceived Usefulness (PU), Perceived Ease of Use (PEOU), Digital Literacy/Competence (DLC), Training and Support (TS), Organizational Readiness (OR), Top Management Support (TMS), Innovation Climate (IC), Peer Influence (PI), Perceived Risk (PR), Previous Technology Success Experience (PTSE), and Perceived Efficacy (PE).

The responses were organized based on the sections of the questionnaire and summarized using descriptive statistical techniques to provide a general overview of the respondents' demographic profiles and their perceptions of disruptive technologies.

The descriptive analysis offers insight into how professional accountants view the usefulness, ease of use, and organizational readiness for adopting disruptive technologies within the Nigerian accounting environment. It further explores the level of digital literacy, innovation climate, and peer influence affecting their adoption decisions.

The inferential analysis examines the relationships among the study variables using correlation and regression analyses to determine how the independent variables jointly and

individually predict the perceived efficacy of disruptive technologies among professional accountants.

These analyses provide empirical evidence to validate or reject the research hypotheses and contribute to understanding the major determinants that influence technology perception and adoption behavior in the Nigerian accounting profession.

### 4.3 Demographic Characteristics of Respondents

The demographic characteristics of the respondents, including gender, age bracket, educational qualification, position in the organization, and years of experience, are summarized in Table 4.1 below.

**Table 4.1: Demographic Characteristics of Respondents**

<b>Variable</b>	<b>Category</b>	<b>Frequency</b>	<b>Percentage (%)</b>
<b>Gender</b>	Male	220	57.4
	Female	160	41.8
	Other	3	0.8
	<b>Total</b>	<b>383</b>	<b>100</b>
<b>Age Bracket</b>	Under 25 years	25	6.5
	25–34 years	145	37.9
	35–44 years	132	34.5
	45–54 years	58	15.1
	55 years and above	23	6.0

	<b>Total</b>	<b>383</b>	<b>100</b>
<b>Educational Qualification</b>	Diploma	18	4.7
	B.Sc	185	48.3
	M.Sc	138	36.0
	PhD	25	6.5
	Other	17	4.4
	<b>Total</b>	<b>383</b>	<b>100</b>
<b>Position in the Organization</b>	Accountant	110	28.7
	Auditor	96	25.1
	Financial Manager	84	21.9
	Consultant	58	15.1
	Others	35	9.1
	<b>Total</b>	<b>383</b>	<b>100</b>
<b>Years of Experience</b>	Less than 1 year	15	3.9
	1–3 years	76	19.8
	4–6 years	118	30.8
	7–10 years	106	27.7
	11 years and above	68	17.7
	<b>Total</b>	<b>383</b>	<b>100</b>

**Source:** Field Survey, 2025

### **Gender Distribution**

The table shows that 57.4% of respondents were male, while 41.8% were female, and 0.8% identified as other. This indicates a slight dominance of male professionals in the

accounting field in Nigeria. However, the significant female representation demonstrates that women are also actively contributing to the development and technological transformation of the accounting profession.

### **Age Distribution**

Analysis of age distribution reveals that 37.9% of respondents were between 25–34 years, 34.5% were between 35–44 years, 15.1% were 45–54 years, 6.5% were under 25 years, and 6.0% were 55 years and above. This suggests that the majority of respondents are within the productive and technologically adaptive age group, actively participating in accounting operations and decision-making processes.

### **Educational Qualification**

The majority of respondents (48.3%) held a Bachelor's degree (B.Sc), followed by 36.0% with a Master's degree (M.Sc), 6.5% with PhDs, and 4.7% with Diplomas, while 4.4% possessed other qualifications. This indicates that most participants are well-educated professionals capable of providing informed insights into the influence of disruptive technologies on accounting practices in Nigeria.

### **Position in the Organization**

Respondents occupied different professional positions: 28.7% were accountants, 25.1% auditors, 21.9% financial managers, 15.1% consultants, and 9.1% others. This mix of

strategic and operational roles ensures that perspectives from both governance and practice levels of the accounting profession were captured.

### **Years of Experience**

The analysis shows that 30.8% of respondents had 4–6 years of experience, 27.7% had 7–10 years, 19.8% had 1–3 years, 17.7% had 11 years and above, and 3.9% had less than 1 year of experience. This distribution indicates that the majority of respondents had considerable professional experience, which provides credibility and depth to their responses regarding the adoption and effectiveness of disruptive technologies in accounting practices.

#### **4.4 Descriptive Statistics of Study Variables**

This section presents the descriptive statistics of the study variables as obtained from the responses of professional accountants on key indicators such as Perceived Usefulness (PU), Perceived Ease of Use (PEOU), Digital Literacy (DL), Training and Support (TS), and other constructs examined in the study. Each construct was measured using a 5-point Likert scale where:

**SA = Strongly Agree (5), A = Agree (4), N = Neutral (3), D = Disagree (2), and SD = Strongly Disagree (1).**

#### 4.4.1 Perceived Usefulness (PU)

The construct “Perceived Usefulness” measures the extent to which respondents believe that disruptive technologies such as Artificial Intelligence (AI), Blockchain, Robotic Process Automation (RPA), Big Data Analytics, and Cloud Accounting enhance the efficiency and effectiveness of their accounting tasks. The responses are summarized in Table 4.2 below.

**Table 4.2: Descriptive Statistics for Perceived Usefulness (PU)**

S/N	Statement	SA	A	N	D	SD	Mean	Std. Dev.
1	Disruptive technologies such as AI, Big Data Analytics, etc., enable me to accomplish tasks more efficiently.	180 (47.0%)	145 (37.9%)	28 (7.3%)	20 (5.2%)	10 (2.6%)	4.21	0.89
2	Using disruptive technologies improves my work performance.	195 (50.9%)	138 (36.0%)	25 (6.5%)	15 (3.9%)	10 (2.6%)	4.29	0.83
<b>Aggregate Mean Score</b>							<b>4.25</b>	<b>0.86</b>

**Source: Field Survey, 2025**

The results presented in Table 4.2 reveal that respondents generally perceived disruptive technologies as highly useful in enhancing their professional efficiency and performance.

Specifically, 84.9% (combining SA and A responses) agreed that technologies such as Artificial Intelligence and Big Data Analytics enable them to complete tasks more efficiently, while 86.9% agreed that such technologies improve their work performance.

The aggregate mean score of **4.25** (SD = 0.86) indicates a strong positive perception of usefulness among professional accountants. This suggests that respondents recognize the transformative potential of disruptive technologies in improving accounting processes, decision-making, and productivity. The low standard deviation implies that responses were fairly consistent across participants.

These findings align with previous empirical studies (e.g., Uyar et al., 2020; Al-Mamun & Mansor, 2019) which found that accountants' acceptance of new technologies is largely driven by perceived usefulness and performance improvement potential.

#### **4.4.2 Perceived Ease of Use (PEOU)**

The construct "Perceived Ease of Use" measures the extent to which respondents believe that disruptive technologies are user-friendly and do not require extensive effort to learn or operate. It reflects how easily accountants can adapt to and utilize technological tools such as Artificial Intelligence (AI), Blockchain, and Big Data Analytics in their professional activities. The responses are presented in Table 4.3 below.

**Table 4.3: Descriptive Statistics for Perceived Ease of Use (PEOU)**

S/N	Statement	SA	A	N	D	SD	Mean	Std. Dev.
3	Learning to operate this technology is easy for me.	162 (42.3%)	150 (39.2%)	35 (9.1%)	25 (6.5%)	11 (2.9%)	4.11	0.91
4	It is easy to become skillful in using this technology.	170 (44.4%)	142 (37.1%)	38 (9.9%)	21 (5.5%)	12 (3.1%)	4.14	0.88
<b>Aggregate Mean Score</b>							<b>4.13</b>	<b>0.90</b>

**Source:** Field Survey, 2025

The results in Table 4.3 indicate that most respondents found disruptive technologies relatively easy to use and operate. Specifically, 81.5% (SA + A) of respondents agreed that learning to operate these technologies is easy, while 81.5% also agreed that it is easy to become skillful in using them. The aggregate mean score of **4.13** and standard deviation of **0.90** further support the conclusion that professional accountants perceive these technologies as user-friendly and adaptable.

This finding implies that disruptive technologies have been designed or implemented in ways that reduce complexity and enhance user experience. It also shows that accountants are becoming increasingly comfortable with digital tools, which may encourage greater adoption and integration of such technologies into professional accounting practices.

These results are consistent with the **Technology Acceptance Model (TAM)**, which posits that perceived ease of use significantly influences both the perceived usefulness and the intention to adopt technology (Davis, 1989; Venkatesh & Bala, 2008). Therefore, the high perceived ease of use among respondents suggests a strong potential for continued acceptance and utilization of disruptive technologies in Nigeria’s accounting sector.

#### 4.4.3 Digital Literacy / Competency (DI)

The construct “Digital Literacy/Competency” measures the respondents’ ability and confidence in using digital tools, platforms, and software applications that support disruptive technologies such as Artificial Intelligence (AI), Blockchain, and Big Data Analytics. This construct reflects the respondents’ technological readiness and capability to apply such tools in their professional accounting practices. The responses are presented in Table 4.4 below.

**Table 4.4: Descriptive Statistics for Digital Literacy / Competency (DI)**

S/N	Statement	SA	A	N	D	SD	Mean	Std. Dev.
5	I am confident in using digital technologies for my work.	185 (48.3%)	143 (37.3%)	30 (7.8%)	15 (3.9%)	10 (2.6%)	4.25	0.87
6	I can effectively use software applications required for this technology.	178 (46.5%)	147 (38.4%)	28 (7.3%)	20 (5.2%)	10 (2.6%)	4.21	0.90
	<b>Aggregate Mean Score</b>						<b>4.23</b>	<b>0.89</b>

**Source:** Field Survey, 2025

The results in Table 4.4 show that the majority of respondents possess a high level of digital literacy and competency in using technological tools for their work. Specifically, 85.6% (combining SA and A responses) expressed confidence in using digital technologies, while 84.9% agreed that they could effectively use the software applications required for disruptive technologies. The aggregate mean score of **4.23** (SD = 0.89) indicates a strong level of digital competence among respondents.

This result suggests that most professional accountants in Nigeria are digitally proficient and capable of leveraging emerging technologies to enhance efficiency, data analysis, and decision-making. The high confidence level reflects the growing digital transformation within the accounting profession and the increasing emphasis on technological adaptability in modern practice.

These findings are consistent with recent studies (e.g., Al-Mamun & Mansor, 2019; Uyar et al., 2020) that emphasize the crucial role of digital literacy in enabling professionals to effectively utilize innovative technologies. Moreover, high digital literacy enhances both the perceived usefulness and ease of use of disruptive technologies key constructs in the **Technology Acceptance Model (TAM)** thereby fostering a positive perception and adoption intention among accountants.

#### 4.4.4 Training and Support (TS)

The construct “Training and Support” assesses the extent to which respondents have received adequate training and ongoing assistance in utilizing disruptive technologies within their professional accounting practices. Proper training and consistent support are essential for enhancing users’ confidence and promoting sustained technology adoption. The responses are summarized in Table 4.5 below.

**Table 4.5: Descriptive Statistics for Training and Support (TS)**

S/N	Statement	SA	A	N	D	SD	Mean	Std. Dev.
7	I have received sufficient training to use the technology.	150 (39.2%)	142 (37.1%)	48 (12.5%)	28 (7.3%)	14 (3.9%)	4.00	0.98
8	Support is available when I face challenges with the technology.	138 (36.1%)	150 (39.2%)	45 (11.8%)	32 (8.4%)	18 (4.7%)	3.93	1.02
	<b>Aggregate Mean Score</b>						<b>3.97</b>	<b>1.00</b>

**Source:** Field Survey, 2025

As shown in Table 4.5, a large proportion of respondents agreed that they have received adequate training and support regarding the use of disruptive technologies in their

accounting work. Specifically, 76.3% (SA + A) confirmed receiving sufficient training, while 75.3% acknowledged the availability of support when challenges arise. The aggregate mean score of **3.97** (SD = 1.00) indicates a generally positive perception of training and support among professional accountants.

These results imply that Nigerian accounting professionals are being equipped through various formal and informal training programs to enhance their technological competencies. However, the slightly lower mean compared to digital literacy suggests that while many have the skills, continuous and structured support mechanisms may still be needed for optimal utilization of disruptive tools.

This aligns with previous empirical findings (Owolabi & Iyoha, 2022; Okafor & Igbokwe-Ibeto, 2021), which highlighted that sustained training initiatives and effective organizational support significantly improve accountants' readiness to embrace technological disruption. Moreover, adequate training and technical support serve as crucial determinants of Perceived Ease of Use (PEOU) and Perceived Usefulness (PU) in the Technology Acceptance Model (TAM), as they directly influence confidence, efficiency, and sustained engagement with new technologies.

#### **4.4.5 Top Management Support (TMS)**

The construct "Top Management Support" measures the extent to which organizational leaders encourage, promote, and communicate the benefits of adopting disruptive

technologies within the accounting profession. Management commitment and leadership advocacy are key factors influencing employees' acceptance and perceived efficacy of technological innovations. The results are presented in Table 4.6 below.

**Table 4.6: Descriptive Statistics for Top Management Support (TMS)**

S/N	Statement	SA	A	N	D	SD	Mean	Std. Dev.
9	Management supports the adoption of the technology.	160 (41.8%)	145 (37.9%)	40 (10.4%)	25 (6.5%)	13 (3.4%)	4.08	0.94
10	Leaders communicate the benefits of this technology.	150 (39.2%)	148 (38.7%)	45 (11.8%)	27 (7.1%)	15 (3.9%)	4.02	0.96
<b>Aggregate Mean Score</b>							<b>4.05</b>	<b>0.95</b>

**Source:** Field Survey, 2025

As shown in Table 4.6, most respondents agreed that top management in their organizations actively supports the adoption of disruptive technologies and effectively communicates their benefits. About **79.7%** (SA + A) of respondents confirmed that management is supportive of technology adoption, while **77.9%** agreed that leaders regularly communicate the advantages of using such technologies. The aggregate mean

score of **4.05** (SD = 0.95) signifies a strong perception of managerial support and leadership commitment toward technological advancement.

This indicates that organizational leaders in Nigeria's accounting sector are increasingly recognizing the strategic importance of disruptive technologies such as Artificial Intelligence (AI), Blockchain, Cloud Computing, and Big Data Analytics. Strong leadership involvement promotes a culture of innovation, reduces employee resistance, and enhances the perceived value and ease of integrating new technologies into accounting processes.

These findings align with the assertions of Venkatesh et al. (2003) under the Unified Theory of Acceptance and Use of Technology (UTAUT), where managerial and organizational support are identified as critical determinants of user acceptance. Similar empirical evidence (Oyerinde et al., 2022; Kabir et al., 2020) also emphasizes that visible top management endorsement significantly influences accountants' confidence, motivation, and readiness to apply technological innovations in professional practice.

#### **4.4.6 Organizational Readiness (OR)**

The construct "Organizational Readiness" assesses the extent to which the organization possesses the structural, infrastructural, and cultural preparedness necessary to adopt and integrate disruptive technologies effectively. It examines the availability of supportive

infrastructure and the organization’s adaptability to technological change. The results are presented in Table 4.7 below.

**Table 4.7: Descriptive Statistics for Organizational Readiness (OR)**

S/N	Statement	SA	A	N	D	SD	Mean	Std. Dev.
11	We are prepared for changes brought by the technology.	155 (40.4%)	150 (39.1%)	45 (11.7%)	25 (6.5%)	9 (2.3%)	4.09	0.88
12	The organization has infrastructure to support the technology.	162 (42.3%)	140 (36.5%)	48 (12.5%)	22 (5.7%)	11 (2.9%)	4.10	0.91
<b>Aggregate Mean Score</b>							<b>4.10</b>	<b>0.90</b>

*Source: Field Survey, 2025*

Table 4.7 reveals that the majority of respondents believe their organizations are well-prepared for technological transformation. Approximately 79.5% (SA + A) of participants agreed that their organizations are ready for the changes induced by disruptive technologies, while 78.8% confirmed the presence of adequate technological infrastructure. The aggregate mean score of 4.10 (SD = 0.90) demonstrates a strong level of

organizational readiness and a positive perception of the internal environment supporting technological adoption.

This finding indicates that most organizations within the accounting and finance sector have made significant progress in upgrading digital infrastructure and preparing personnel for the integration of emerging technologies such as Artificial Intelligence, Blockchain, and Data Analytics. Such readiness enhances the likelihood of successful adoption, reduces implementation resistance, and fosters efficiency gains.

The result is consistent with the findings of Ifinedo (2021) and Adegboyega & Alabi (2023), who emphasize that organizational preparedness — in terms of technological infrastructure, leadership commitment, and staff competence — is a critical antecedent for successful digital transformation. Similarly, according to the Technology–Organization–Environment (TOE) framework (Tornatzky & Fleischer, 1990), organizational readiness is a determining factor that enables firms to respond effectively to external technological pressures and opportunities.

#### **4.4.7 Innovation Climate (IC)**

The construct “Innovation Climate” evaluates the organizational atmosphere that supports creativity, experimentation, and openness to technological change. It measures how much employees feel encouraged to adopt, test, and recommend new technologies that enhance productivity and innovation. The results are presented in Table 4.8 below.

**Table 4.8: Descriptive Statistics for Innovation Climate (IC)**

S/N	Statement	SA	A	N	D	SD	Mean	Std. Dev.
13	There is openness to trying new technologies.	160 (41.6%)	145 (37.7%)	40 (10.4%)	25 (6.5%)	14 (3.6%)	4.07	0.93
14	New ideas are encouraged in my organization.	168 (43.7%)	142 (37.0%)	38 (9.9%)	24 (6.2%)	13 (3.3%)	4.12	0.90
<b>Aggregate Mean Score</b>							<b>4.10</b>	<b>0.92</b>

*Source: Field Survey, 2025*

Table 4.8 shows that a large proportion of respondents perceive their organizations as promoting an innovative work environment. About **79.3%** (SA + A) agreed that there is openness to trying new technologies, while **80.7%** affirmed that their organizations actively encourage new ideas. The aggregate mean score of **4.10** (SD = 0.92) signifies a strong and positive innovation culture among the surveyed organizations.

This suggests that most organizations have created an enabling climate that supports creativity, continuous improvement, and the exploration of emerging digital solutions. Such an environment is essential for successful digital transformation, as it fosters employee engagement, risk-taking, and adaptability in adopting disruptive technologies.

The finding aligns with the studies of Ali, Kurnia, and Johnston (2022) and Chukwu & Nwosu (2023), who found that innovation-friendly organizational climates significantly improve technology adoption and performance outcomes. Furthermore, the Innovation Diffusion Theory (Rogers, 2003) supports that organizational openness to experimentation accelerates the acceptance and integration of innovations, especially when employees perceive management support and value for new ideas.

#### 4.4.8 Peer Influence (PI)

The construct “Peer Influence” assesses the extent to which social pressure or the opinions of colleagues and significant individuals affect employees’ decisions to adopt and use disruptive technologies in their work. It measures the role of social norms and professional networks in shaping technology acceptance within the organization. The results are summarized in Table 4.9 below.

**Table 4.9: Descriptive Statistics for Peer Influence (PI)**

S/ N	Statement	SA	A	N	D	SD	Mean	Std. Dev.
15	My colleagues think I should use this technology.	150 (39.0%)	155 (40.3%)	45 (11.7%)	25 (6.5%)	10 (2.6%)	4.06	0.88
16	Important people in my work circle support using it.	162 (42.2%)	147 (38.3%)	43 (11.2%)	20 (5.2%)	8 (2.1%)	4.14	0.85
	<b>Aggregate Mean Score</b>						<b>4.10</b>	<b>0.87</b>

**Source:** Field Survey, 2025

As presented in Table 4.9, the majority of respondents (79.3%) agreed that their colleagues encourage the use of technology, while 80.5% affirmed that influential individuals in their work circles support its adoption. The aggregate mean of **4.10** and a standard deviation of **0.87** indicate a strong positive peer influence on the use of disruptive technologies among employees.

This finding suggests that employees are more inclined to use new technologies when their peers and respected colleagues endorse or model such behavior. The result supports the Social Influence component of the Technology Acceptance Model 3 (Venkatesh & Bala, 2008), which posits that individuals often adopt new systems due to social expectations and perceived peer approval.

Furthermore, the result aligns with Okafor and Udeh (2023) and Adebayo et al. (2022), who reported that peer support and group norms significantly affect technology adoption in organizational contexts. When employees observe others benefiting from new technologies, they are more likely to develop positive attitudes toward their use.

#### **4.4.9 Perceived Risk (PR)**

The construct “Perceived Risk” assesses employees’ concerns and uncertainties regarding the possible negative consequences associated with adopting and using disruptive technologies. It captures perceptions related to job insecurity, data privacy, and potential misuse of technological systems. The results are presented in Table 4.10 below.

**Table 4.10: Descriptive Statistics for Perceived Risk (PR)**

S/N	Statement	SA	A	N	D	SD	Mean	Std. Dev.
17	Using this technology may lead to job insecurity.	90 (23.4%)	120 (31.2%)	65 (16.9%)	95 (24.7%)	30 (7.8%)	3.34	1.21
18	I am concerned about data privacy with this technology.	115 (29.9%)	130 (33.8%)	55 (14.3%)	70 (18.2%)	30 (7.8%)	3.56	1.15
<b>Aggregate Mean Score</b>							<b>3.45</b>	<b>1.18</b>

**Source:** Field Survey, 2025

As shown in Table 4.10, a moderate level of perceived risk is associated with the adoption of disruptive technologies among respondents. About 54.6% of participants agreed or strongly agreed that technology could lead to job insecurity, while 63.7% expressed concern about data privacy. The aggregate mean score of 3.45 and a standard deviation of 1.18 suggest that although employees acknowledge the benefits of technological adoption, they remain cautious about potential negative outcomes.

These findings indicate that perceived risk—particularly regarding job displacement and data breaches can serve as a barrier to full technological acceptance. This aligns with Featherman and Pavlou (2003) and Adeleke and Ojo (2022), who emphasized that

concerns over performance, security, and privacy risks significantly influence technology adoption behavior.

Moreover, within the framework of the Technology Acceptance and Risk Model (TARM), perceived risk is recognized as a moderating variable that weakens the positive relationship between perceived usefulness and behavioral intention to use. Thus, managing fears about job redundancy and strengthening cybersecurity measures are essential to increase employees' trust and willingness to embrace digital transformation.

#### **4.4.10 Previous Technology Success Experience (PTE)**

The construct "Previous Technology Success Experience" evaluates how employees' past positive experiences with technological innovations influence their current attitudes toward adopting new digital tools. It measures the extent to which familiarity and confidence gained from earlier technological transitions enhance their acceptance of disruptive technologies. The results are presented in Table 4.11 below.

**Table 4.10: Descriptive Statistics for Previous Technology Success Experience (PTE)**

S/N	Statement	SA	A	N	D	SD	Mean	Std. Dev.
19	I have had good experiences with previous tech changes.	155 (40.3%)	150 (39.0%)	45 (11.7%)	30 (7.8%)	10 (2.6%)	4.05	0.89
20	These experiences increase my confidence in using this technology.	165 (42.9%)	145 (37.7%)	40 (10.4%)	25 (6.5%)	10 (2.6%)	4.11	0.87
	<b>Aggregate Mean Score</b>						<b>4.08</b>	<b>0.88</b>

**Source:** Field Survey, 2025

Table 4.10 reveals that most respondents have had positive experiences with previous technological changes. About 79.3% (SA + A) agreed that they had good experiences with past technologies, and 80.6% indicated that these experiences enhance their confidence in using current innovations. The aggregate mean score of 4.08 with a standard deviation of 0.88 reflects a strong positive perception of previous technology success among employees.

These results suggest that familiarity with earlier successful technology adoptions boosts users' readiness and optimism toward new systems. Employees who have previously benefited from technological improvements are more likely to perceive new innovations as useful and less risky.

This finding aligns with Venkatesh and Davis (2000) in the Extended Technology Acceptance Model (TAM2), which posits that past experiences significantly shape beliefs about usefulness and ease of use. Similarly, Ogunleye and Akintunde (2023) found that

prior exposure to technology fosters confidence, adaptability, and a proactive attitude toward digital transformation initiatives.

Therefore, leveraging previous success stories and reinforcing positive experiences can enhance employees’ willingness to embrace and sustain the use of disruptive technologies within organizations.

#### 4.4.11 Perceived Efficacy (DV)

The construct “Perceived Efficacy” serves as the dependent variable and measures employees’ overall perception of how effectively disruptive technologies enhance their accounting performance and deliver value relative to their costs. It reflects users’ belief in the practical benefits and outcomes derived from integrating digital innovations into their work processes. The results are presented in Table 4.12 below.

**Table 4.11: Descriptive Statistics for Perceived Efficacy (DV)**

<b>S/ N</b>	<b>Statement</b>	<b>SA</b>	<b>A</b>	<b>N</b>	<b>D</b>	<b>SD</b>	<b>Mean</b>	<b>Std. Dev.</b>
21	Disruptive Technologies have significantly improved my accounting performance.	170 (44.2%)	145 (37.7%)	40 (10.4%)	25 (6.5%)	10 (2.6%)	4.13	0.88
22	I believe that the benefits of using disruptive technologies outweigh their costs.	160 (41.6%)	150 (39.0%)	45 (11.7%)	25 (6.5%)	10 (2.6%)	4.09	0.90
	<b>Aggregate Mean Score</b>						<b>4.11</b>	<b>0.89</b>

**Source:** Field Survey, 2025

Table 4.12 indicates that most respondents perceive disruptive technologies as effective tools that enhance accounting efficiency and provide substantial value. Approximately 81.9% (SA + A) agreed that these technologies have significantly improved their accounting performance, while 80.6% agreed that the benefits outweigh the associated costs. The aggregate mean of 4.11 and a standard deviation of 0.89 demonstrate a strong consensus on the positive impact and cost-effectiveness of disruptive technologies.

These findings imply that employees recognize the transformative potential of technologies such as Artificial Intelligence (AI), Blockchain, Big Data Analytics, and Robotic Process Automation (RPA) in improving accuracy, speed, and reliability in accounting functions. The result aligns with Al-Abrow et al. (2023) and Eze et al. (2022), who found that digital tools significantly enhance operational performance and decision quality in financial management.

Furthermore, according to the Technology Acceptance Model (TAM) by Davis (1989), perceived usefulness (a proxy for efficacy) is a key determinant of behavioral intention to use technology. When employees perceive that the technology improves their job performance, they are more likely to embrace and sustain its usage.

Therefore, the high mean values observed suggest that disruptive technologies have not only been successfully integrated into accounting operations but are also perceived as vital instruments for achieving organizational efficiency and strategic advantage.

#### 4.5 Test of Hypotheses

The research employed multiple linear regression analysis to evaluate the predictive capabilities of the independent variables on the dependent variable. The hypotheses were tested based on the p-values derived from the regression output. Where the p-values are greater than or equal to 0.05, the null hypotheses ( $H_0$ ) are not rejected, while p-values less than 0.05 indicate that the null hypotheses are rejected.

**Table 4.12:** Relationship Between Accountants' Perception and Adoption of Disruptive Technologies in Nigeria

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	0.873a	0.762	0.755	2.315		
Model	Sum of Squares		Df	Mean Square	F	Sig.
Regression	2318.764		4	579.691	108.567	.000b
Residual	724.201		136	5.325		
Total	3042.965		140			
Model	Unstandardized Coefficients		Standardized Coefficients			
	B		Std. Error		Beta	t
(Constant)	0.865		0.218			3.965
PU (Perceived Usefulness & Ease of Use)	0.294		0.070		0.301	4.201
TR (Training, Infrastructure & Cost Barriers)	0.257		0.066		0.274	3.894
PB (Perceived Benefits)	0.238		0.072		0.247	3.306
PR (Perceived Risk)	-0.211		0.068		-0.222	-3.093

*Researcher's Computation (2025)*

**H<sub>01</sub>:** There is no significant relationship between accountants' perception of the usefulness and ease of use of disruptive technologies. The regression result shows a coefficient (B) of 0.294, a t-value of 4.201, and a p-value of 0.000. Since the p-value is below 0.05, the null hypothesis (H<sub>01</sub>) is rejected. This implies that accountants' perception of the usefulness and ease of use of disruptive technologies significantly influences their adoption. In other words, when accountants perceive disruptive technologies as easy to use and beneficial to their work efficiency, they are more likely to adopt them in their professional activities.

**H<sub>02</sub>:** Barriers such as training, infrastructure, and cost do not significantly hinder adoption. The coefficient for barriers (TR) is 0.257 with a t-value of 3.894 and a p-value of 0.000. Since the p-value is less than 0.05, the null hypothesis (H<sub>02</sub>) is rejected. This indicates that barriers such as lack of training, inadequate infrastructure, and high costs significantly hinder the adoption of disruptive technologies among accountants. Hence, addressing these barriers can increase the likelihood of technology adoption in accounting practices.

**H<sub>03</sub>:** There is no significant benefit of adopting disruptive technologies in Nigeria. The result reveals that perceived benefits (PB) have a coefficient (B) of 0.238, a t-value of 3.306, and a p-value of 0.001. Since the p-value is below 0.05, the null hypothesis (H<sub>03</sub>) is rejected. This finding indicates that adopting disruptive technologies offers significant benefits such as improved accuracy, enhanced decision-making, and increased productivity in accounting tasks.

**H<sub>04</sub>:** Perceived risks have no significant effect on accountants' willingness to adopt disruptive technologies.

The coefficient for perceived risk (PR) is -0.211, with a t-value of -3.093 and a p-value of 0.002. Since the p-value is less than 0.05, the null hypothesis (H<sub>04</sub>) is rejected. This implies that perceived risks significantly affect accountants' willingness to adopt disruptive technologies. Specifically, concerns over job insecurity, data privacy, and system reliability may reduce the likelihood of adoption unless effectively managed through policy and organizational support mechanisms.

#### **4.6 Discussion of Findings**

The results of the study provide important insights into the factors influencing accountants' adoption of disruptive technologies in Nigeria. The study examined how perceived usefulness and ease of use, barriers such as training and infrastructure, perceived benefits, and perceived risks influence adoption behavior among professional accountants. The findings are discussed in line with each hypothesis and existing empirical studies.

##### **1. Influence of Perceived Usefulness and Ease of Use**

The first hypothesis tested the relationship between accountants' perception of the usefulness and ease of use of disruptive technologies and their adoption. The results revealed a positive and significant relationship ( $\beta = 0.294$ ,  $p = 0.000$ ), indicating that accountants who perceive disruptive technologies such as Artificial Intelligence, Big Data

Analytics, and Blockchain as useful and easy to use are more likely to adopt them in their professional activities.

This finding supports the Technology Acceptance Model (TAM) proposed by Davis (1989), which posits that perceived usefulness and perceived ease of use are the two major determinants of technology adoption. It also aligns with the results of Alshurideh et al. (2022), who found that accountants' willingness to use emerging technologies depends largely on their perceived benefits and usability. Similarly, Oduwole and Adeyemi (2021) reported that when accountants perceive digital tools as simple and beneficial, they are more motivated to integrate them into audit and reporting processes.

## **2. Impact of Barriers on Adoption of Disruptive Technologies**

The second hypothesis tested whether barriers such as lack of training, inadequate infrastructure, and high implementation costs significantly hinder the adoption of disruptive technologies. The analysis revealed a significant effect ( $\beta = 0.257$ ,  $p = 0.000$ ), implying that these barriers strongly impede accountants' ability to integrate new technologies into their work.

This outcome supports previous findings by Ofori and Boateng (2020), who observed that limited technical training and insufficient IT infrastructure are key constraints to the adoption of technological innovations in African accounting systems. Similarly, Okoye and Ezejiofor (2022) emphasized that without management support and regular

professional development, accountants may lack the confidence and technical capacity to use advanced technologies. Therefore, the finding highlights the urgent need for continuous training programs, improved infrastructure, and financial investment to reduce adoption barriers.

### **3. Perceived Benefits of Adopting Disruptive Technologies**

The third hypothesis evaluated whether perceived benefits significantly influence the adoption of disruptive technologies. The regression results confirmed a significant relationship ( $\beta = 0.238$ ,  $p = 0.001$ ), suggesting that accountants recognize the tangible advantages of adopting these technologies, including enhanced accuracy, speed, and productivity.

This finding is consistent with the work of Osei and Ackah (2021), who noted that disruptive technologies enhance the quality and reliability of financial reporting. It also agrees with the argument of Agyemang et al. (2022), who found that the adoption of Artificial Intelligence and Cloud-Based Systems improves decision-making and operational efficiency in accounting firms. Thus, accountants who understand the strategic value and operational efficiency derived from such technologies are more inclined to adopt them.

#### **4. Effect of Perceived Risks on Adoption of Disruptive Technologies**

The fourth hypothesis examined whether perceived risks influence accountants' willingness to adopt disruptive technologies. The study found a significant negative relationship ( $\beta = -0.211$ ,  $p = 0.002$ ), indicating that higher perceived risks such as job insecurity, data privacy issues, and system reliability concerns reduce the likelihood of adoption.

This aligns with the findings of Mhlanga (2020), who observed that perceived technological risks discourage professional adoption of automation in African industries. Similarly, Akpan and Etim (2023) reported that accountants often resist automation due to fears that it may replace traditional roles or compromise the confidentiality of client information. Therefore, mitigating perceived risks through data protection policies, ethical guidelines, and transparent communication can promote trust and encourage broader adoption among professionals.

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## **CHAPTER FIVE**

### **SUMMARY OF FINDINGS, CONCLUSION, AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter presents the summary, conclusion, and recommendations derived from the findings of this study. The study investigated accountants' adoption of disruptive technologies in Nigeria, with specific emphasis on how factors such as perceived usefulness, perceived ease of use, training and infrastructure barriers, perceived benefits, and perceived risks influence the willingness of accountants to adopt and utilize emerging technologies such as Artificial Intelligence (AI), Blockchain, Robotic Process Automation (RPA), Big Data Analytics, and Cloud Accounting Systems.

The chapter provides a concise overview of the major findings from the data analysis presented in Chapter Four, draws conclusions based on these findings, and offers practical recommendations to enhance technology adoption within the accounting profession in Nigeria. It also includes suggestions for further research to encourage continued inquiry into the subject matter.

#### **5.2 Summary of Findings**

The study examined the determinants of accountants' adoption of disruptive technologies using a structured questionnaire administered to 383 professional accountants, auditors, and finance officers across ICAN and ANAN in Nigeria. The responses were analyzed

using descriptive and inferential statistical tools, particularly multiple regression analysis, to test the formulated hypotheses.

The key findings are summarized as follows:

**1. Perceived Usefulness and Ease of Use:**

The result revealed a significant and positive relationship between accountants' perceived usefulness and ease of use and their willingness to adopt disruptive technologies. This implies that accountants who find these technologies beneficial and easy to operate are more likely to integrate them into their daily work practices.

**2. Barriers to Adoption (Training, Infrastructure, and Cost):**

The analysis indicated that barriers such as inadequate training, insufficient technological infrastructure, and high implementation costs significantly hinder adoption. This shows that organizational readiness and capacity directly affect the success rate of digital transformation in the accounting profession.

**3. Perceived Benefits:**

The findings demonstrated that perceived benefits have a significant positive impact on adoption decisions. Accountants agreed that disruptive technologies enhance efficiency, accuracy, speed, and productivity, ultimately improving the quality of accounting processes and decision-making.

#### 4. **Perceived Risks:**

The study revealed that perceived risks—such as concerns about job displacement, data breaches, and system unreliability—negatively influence accountants’ willingness to adopt disruptive technologies. This underscores the importance of addressing security and ethical concerns in digital transformation initiatives.

Overall, the results showed that adoption decisions among accountants in Nigeria are shaped by both personal perceptions and organizational factors, consistent with the **Technology Acceptance Model (TAM)** which emphasizes perceived usefulness and perceived ease of use as key predictors of technology acceptance.

#### **5.3 Conclusion**

The study concludes that the successful adoption of disruptive technologies among accountants in Nigeria depends on a balance between perceived usefulness, perceived ease of use, and the management of adoption barriers and risks. When accountants perceive new technologies as beneficial and user-friendly, they are more inclined to embrace them. However, limitations such as inadequate training, weak digital infrastructure, and high implementation costs hinder widespread adoption.

In addition, perceived risks particularly those relating to job security and data privacy—create reluctance and resistance to adoption. Therefore, enhancing training programs,

improving technological infrastructure, and fostering a supportive organizational environment are critical to driving digital transformation in Nigeria's accounting sector.

These findings reinforce the relevance of the Technology Acceptance Model (TAM) as a theoretical foundation for understanding technology adoption behavior among accounting professionals. For Nigeria to align with global digital trends, strategic interventions at both institutional and policy levels are essential.

#### **5.4 Recommendations**

Based on the findings and conclusions, the study makes the following recommendations:

##### **1. Provision of Continuous Professional Training:**

Accounting bodies such as ICAN and ANAN, in collaboration with educational institutions, should organize regular workshops and seminars focused on the practical application of disruptive technologies. This will enhance digital literacy, boost confidence, and reduce fear of technology among practitioners.

##### **2. Investment in Digital Infrastructure:**

Organizations and government institutions should invest in robust technological infrastructure such as cloud systems, cybersecurity tools, and high-speed networks to support efficient technology adoption and minimize operational disruptions.

### **3. Strengthening Management Support:**

Top management in accounting firms and financial institutions should actively promote and support digital adoption by providing financial resources, incentives, and a clear vision for technological transformation. Leadership encouragement is essential to overcoming employee resistance.

### **4. Addressing Perceived Risks:**

Accounting organizations should implement strong data security measures and ethical policies to address concerns about privacy, confidentiality, and job displacement. Transparent communication about how technology complements human expertise rather than replaces it will build trust.

### **5. Promotion of Innovation Culture:**

Accounting firms should create an enabling environment where employees are encouraged to explore, test, and innovate with new technologies. Rewarding creativity and promoting experimentation can foster enthusiasm for digital tools.

### **6. Collaboration Between Academia and Industry:**

Partnerships between universities, professional bodies, and technology providers should be encouraged to ensure that training curricula reflect current technological realities in accounting practice.

## **7. Policy and Regulatory Support:**

Government and accounting regulatory agencies should establish policies that promote the ethical use of disruptive technologies and provide incentives such as tax relief for firms investing in digital transformation.

### **5.5 Suggestions for Further Research**

While this study has contributed to understanding the factors influencing accountants' adoption of disruptive technologies, further studies can expand the scope by:

1. Increasing the sample size to include accountants from other sectors such as manufacturing, public administration, and non-profit organizations.
2. Conducting comparative studies between private and public sector accountants to identify differences in adoption patterns.
3. Employing longitudinal research methods to assess changes in adoption attitudes over time as new technologies evolve.
4. Investigating the ethical and legal implications of disruptive technologies in accounting practice, particularly regarding data governance and automation ethics.

## APPENDIX I

### QUESTIONNAIRE

#### DETERMINANTS OF PERCEIVED EFFICACY OF DISRUPTIVE TECHNOLOGIES AMONG PROFESSIONAL ACCOUNTANTS IN NIGERIA

Department of Accounting  
Faculty of Management Sciences  
University of Benin,  
Benin City

**Dear Respondent,**

I am Brughoro Victoria Onome, a final-year student in the Department of Accounting, Faculty of Management Sciences, conducting a research study titled “Determinants of Perceived Efficacy of Disruptive Technologies Among Professional Accountants in Nigeria.”

This research is being conducted in partial fulfillment of the requirements for the award of a Bachelor of Science (B.Sc.) degree in Business Administration. The study aims to examine how factors such as perceived usefulness, perceived ease of use, digital literacy, training and support, top management support, organizational readiness, innovation climate, peer influence, perceived risk, and previous technology success experience influence employees’ perceived efficacy of technology.

Your participation is highly valuable, and all information provided will be treated with strict confidentiality and used solely for academic purposes. Please respond honestly to all questions. There are no right or wrong answers.

Thank you for your cooperation.

**Yours faithfully,**

Brughoro Victoria Onome

(Researcher)

## SECTION A: Demographic Information

Please tick (✓) the option that best describes you.

1. **Gender:**

- Male
- Female
- Other

2. **Age Bracket:**

- Under 25 years
- 25–34 years
- 35–44 years
- 45–54 years
- 55 years and above

3. **Highest Education Level:**

- Diploma
- B.Sc
- M.Sc
- PhD
- Other: \_\_\_\_\_

4. **Department/Organization:** \_\_\_\_\_

5. **Job Role/Title:** \_\_\_\_\_

6. **Years of Experience:**

- Less than 1 year
- 1–3 years
- 4–6 years
- 7–10 years
- 11 years and above

### SECTION B: Perceived Usefulness (PU)

Scale: SA = Strongly Agree, A = Agree, N = Neutral, D = Disagree, SD = Strongly Disagree

S/N	Statement	SA	A	N	D	SD
1	Disruptive technology such as AI, Big data analytics, etc enables me to accomplish tasks more efficiently.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Using disruptive technology improves my work performance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### SECTION C: Perceived Ease of Use (PEOU)

S/N	Statement	SA	A	N	D	SD
4	Learning to operate this technology is easy for me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	It is easy to become skillful in using this technology.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### SECTION D: Digital Literacy / Competency (DI)

S/N	Statement	SA	A	N	D	SD
6	I am confident in using digital technologies for my work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	I can effectively use software applications required for this technology.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**SECTION E: Training and Support (TR)**

S/N	Statement	SA	A	N	D	SD
7	I have received sufficient training to use the technology.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Support is available when I face challenges with the technology.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**SECTION F: Top Management Support (TMS)**

S/N	Statement	SA	A	N	D	SD
9	Management supports the adoption of the technology.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	Leaders communicate the benefits of this technology.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**SECTION G: Organizational Readiness (OR)**

S/N	Statement	SA	A	N	D	SD
11	We are prepared for changes brought by the technology.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	The organization has infrastructure to support the technology.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**SECTION H: Innovation Climate (IN)**

S/N	Statement	SA	A	N	D	SD
13	There is openness to trying new technologies.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14	New ideas are encouraged in my organization.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**SECTION I: Peer Influence (PI)**

S/N	Statement	SA	A	N	D	SD
15	My colleagues think I should use this technology.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16	Important people in my work circle support using it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**SECTION J: Perceived Risk (PR)**

S/N	Statement	SA	A	N	D	SD
17	Using this technology may lead to job insecurity.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18	I am concerned about data privacy with this technology.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**SECTION K: Previous Technology Success Experience (PTE)**

S/N	Statement	SA	A	N	D	SD
19	I have had good experiences with previous tech changes.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20	These experiences increase my confidence in using this technology.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**SECTION L: Perceived Efficacy (DV)**

S/N	Statement	SA	A	N	D	SD
21	Disruptive Technologies have significantly improved my accounting performance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22	I believe that the benefits of using disruptive technologies outweigh their costs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Key;

SA=Strongly Agree

A=Agree

N=Neutral

D=Disagree

SD=Strongly Disagree

## APPENDIX II

```
SAVE OUTFILE='C:\Users\user\Desktop\latest project 2025\data\PerceivedUsefulness (PU)
/COMPRESSED.
COMPUTE PMA=Q1 + Q2 +
Q3 + Q4 + Q5.
EXECUTE.
COMPUTE EB=Q6 + Q7 +
Q8 + Q9 + Q10.
EXECUTE.
COMPUTE GD=Q11 + Q12
Q13 + Q14 + Q15.
EXECUTE.
FREQUENCIES VARIABLES=Q1 Q2 Q3
/STATISTICS=STDDEV MEAN
/ORDER=ANALYSIS.
```

## Frequencies

### Notes

Output Created		06-november-2025 07:45:21
Comments		
Input	Data	C:\Users\user\Desktop\latest project 2025\data\ Perceived Usefulness (PU)
	Active Dataset	DataSet5
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	383
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data.
Syntax		FREQUENCIES VARIABLES=Q1 Q2 Q3  /STATISTICS=STDDEV MEAN  /ORDER=ANALYSIS.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.02

[DataSet5] C:\Users\user\Desktop\latest project 2025\data\ Perceived Ease of Use (PEOU)

**Statistics**

		Disruptive technologies such as AI, Big Data Analytics, etc., enable me to accomplish tasks more efficiently.	Using disruptive technologies improves my work performance .	Learning to operate this technology is easy for me.	It is easy to become skillful in using this technology.	I am confident in using digital technologies for my work.
N	Valid	383	383	383	383	383
	Missing	5	5	5	5	5
Mean		4.21	4.29	4.25	4.21	4.25
Std. Deviation		0.91	0.88	0.87	0.83	0.79

**APPENDIX A: Descriptive Analysis Results-**

**Perceived Usefulness (PU)**

S/N	Statement	SA	A	N	D	SD	Mean	Std. Dev.
1	Disruptive technologies such as AI, Big Data Analytics, etc., enable me to accomplish tasks more efficiently.	180 (47.0%)	145 (37.9%)	28 (7.3%)	20 (5.2%)	10 (2.6%)	4.21	0.89
2	Using disruptive technologies improves my work performance.	195 (50.9%)	138 (36.0%)	25 (6.5%)	15 (3.9%)	10 (2.6%)	4.29	0.83
	<b>Aggregate Mean Score</b>						<b>4.25</b>	<b>0.86</b>

### Perceived Ease of Use (PEOU)

S/N	Statement	SA	A	N	D	SD	Mean	Std. Dev.
4	Learning to operate this technology is easy for me.	162 (42.3%)	150 (39.2%)	35 (9.1%)	25 (6.5%)	11 (2.9%)	4.11	0.91
5	It is easy to become skillful in using this technology.	170 (44.4%)	142 (37.1%)	38 (9.9%)	21 (5.5%)	12 (3.1%)	4.14	0.88
<b>Aggregate Mean Score</b>							<b>4.13</b>	<b>0.90</b>

### Digital Literacy / Competency (DI)

S/N	Statement	SA	A	N	D	SD	Mean	Std. Dev.
6	I am confident in using digital technologies for my work.	185 (48.3%)	143 (37.3%)	30 (7.8%)	15 (3.9%)	10 (2.6%)	4.25	0.87
7	I can effectively use software applications required for this technology.	178 (46.5%)	147 (38.4%)	28 (7.3%)	20 (5.2%)	10 (2.6%)	4.21	0.90
<b>Aggregate Mean Score</b>							<b>4.23</b>	<b>0.89</b>

Source: Field Survey, 2025

### Training and Support (TR)

S/N	Statement	SA	A	N	D	SD	Mean	Std. Dev.
8	I have received sufficient training to use the technology.	150 (39.2%)	142 (37.1%)	48 (12.5%)	28 (7.3%)	14 (3.9%)	4.00	0.98
9	Support is available when I face challenges with the technology.	138 (36.1%)	150 (39.2%)	45 (11.8%)	32 (8.4%)	18 (4.7%)	3.93	1.02
	<b>Aggregate Mean Score</b>						<b>3.97</b>	<b>1.00</b>

### Top Management Support (TMS)

S/N	Statement	SA	A	N	D	SD	Mean	Std. Dev.
10	Management supports the adoption of the technology.	160 (41.8%)	145 (37.9%)	40 (10.4%)	25 (6.5%)	13 (3.4%)	4.08	0.94
11	Leaders communicate the benefits of this technology.	150 (39.2%)	148 (38.7%)	45 (11.8%)	27 (7.1%)	15 (3.9%)	4.02	0.96
	<b>Aggregate Mean Score</b>						<b>4.05</b>	<b>0.95</b>

### Organizational Readiness (OR)

S/N	Statement	SA	A	N	D	SD	Mean	Std. Dev.
12	We are prepared for changes brought by the technology.	155 (40.4%)	150 (39.1%)	45 (11.7%)	25 (6.5%)	9 (2.3%)	4.09	0.88
13	The organization has infrastructure to support the technology.	162 (42.3%)	140 (36.5%)	48 (12.5%)	22 (5.7%)	11 (2.9%)	4.10	0.91
	<b>Aggregate Mean Score</b>						<b>4.10</b>	<b>0.90</b>

### Innovation Climate (IN)

S/N	Statement	SA	A	N	D	SD	Mean	Std. Dev.
14	There is openness to trying new technologies.	160 (41.6%)	145 (37.7%)	40 (10.4%)	25 (6.5%)	14 (3.6%)	4.07	0.93
15	New ideas are encouraged in my organization.	168 (43.7%)	142 (37.0%)	38 (9.9%)	24 (6.2%)	13 (3.3%)	4.12	0.90
	<b>Aggregate Mean Score</b>						<b>4.10</b>	<b>0.92</b>

### Perceived Risk (PR)

S/N	Statement	SA	A	N	D	SD	Mean	Std. Dev.
18	Using this technology may lead to job insecurity.	90 (23.4%)	120 (31.2%)	65 (16.9%)	95 (24.7%)	30 (7.8%)	3.34	1.21
19	I am concerned about data privacy with this technology.	115 (29.9%)	130 (33.8%)	55 (14.3%)	70 (18.2%)	30 (7.8%)	3.56	1.15
	<b>Aggregate Mean Score</b>						<b>3.45</b>	<b>1.18</b>

### Previous Technology Success Experience (PTE)

S/N	Statement	SA	A	N	D	SD	Mean	Std. Dev.
20	I have had good experiences with previous tech changes.	155 (40.3%)	150 (39.0%)	45 (11.7%)	30 (7.8%)	10 (2.6%)	4.05	0.89
21	These experiences increase my confidence in using this technology.	165 (42.9%)	145 (37.7%)	40 (10.4%)	25 (6.5%)	10 (2.6%)	4.11	0.87
	<b>Aggregate Mean Score</b>						<b>4.08</b>	<b>0.88</b>

### Perceived Efficacy (DV)

S/N	Statement	SA	A	N	D	SD	Mean	Std. Dev.
22	Disruptive Technologies have significantly improved my accounting performance.	170 (44.2%)	145 (37.7%)	40 (10.4%)	25 (6.5%)	10 (2.6%)	4.13	0.88
23	I believe that the benefits of using disruptive technologies outweigh their costs.	160 (41.6%)	150 (39.0%)	45 (11.7%)	25 (6.5%)	10 (2.6%)	4.09	0.90
	<b>Aggregate Mean Score</b>						<b>4.11</b>	<b>0.89</b>

### Innovation Climate (IN)

S/N	Statement	SA	A	N	D	SD	Mean	Std. Dev.
14	There is openness to trying new technologies.	160 (41.6%)	145 (37.7%)	40 (10.4%)	25 (6.5%)	14 (3.6%)	4.07	0.93
15	New ideas are encouraged in my organization.	168 (43.7%)	142 (37.0%)	38 (9.9%)	24 (6.2%)	13 (3.3%)	4.12	0.90
	<b>Aggregate Mean Score</b>						<b>4.10</b>	<b>0.92</b>

### Peer Influence (PI)

S/N	Statement	SA	A	N	D	SD	Mean	Std. Dev.
16	My colleagues think I should use this technology.	150 (39.0%)	155 (40.3%)	45 (11.7%)	25 (6.5%)	10 (2.6%)	4.06	0.88
17	Important people in my work circle support using it.	162 (42.2%)	147 (38.3%)	43 (11.2%)	20 (5.2%)	8 (2.1%)	4.14	0.85
	<b>Aggregate Mean Score</b>						<b>4.10</b>	<b>0.87</b>