EFFECT OF INTERNAL CONTROL SYSTEM ON FINANCIAL PERFORMANCE OF ICT FIRMS IN ABUJA

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Abstract

This study investigated the impact of the internal control system on the financial performance of ICT firms in Abuja. Seven ICT firms were examined using a quantitative correlational research design. Data were collected through structured questionnaires and analyzed using regression analysis. While information and communication are essential for supporting decision-making and operational coordination, the study suggests that the effectiveness of communication systems may not directly translate into improved financial outcomes in ICT firms. Based on the conclusions of the study, the it was recommended that ICT firms should prioritize the development and implementation of robust risk assessment frameworks. Given the significant positive impact of risk assessment on financial performance, firms should regularly evaluate potential risks and develop mitigation strategies. The control environment was found to positively influence financial performance, emphasizing the importance of fostering a culture of integrity, accountability, and ethical behavior within ICT firms. Although control activities alone did not show a significant impact, they remain crucial for ensuring effective operations and minimizing risk. ICT firms should integrate control activities with other key internal control components, such as risk assessment and the control environment. While information and communication were not directly linked to financial performance in this study, enhancing communication within the organization can still be valuable for improving operational efficiency and decision-making. Given that monitoring alone did not have a significant impact on financial performance, it is recommended that ICT firms integrate monitoring processes with other internal control systems.

Keywords: *Internal Control, Financial Performance, Control Environment, Control Activities, Information and Communication, Risk Assessment, Monitoring of Controls.*

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1. INTRODUCTION

The increasing complexity of business operations in today's rapidly evolving business environment, particularly within the Information and Communication Technology (ICT) sector, has underscored the importance of effective internal control systems. Internal controls are vital for ensuring the accuracy and reliability of financial reporting, compliance with regulations, and operational efficiency. These controls, which include a variety of policies and procedures designed to safeguard assets, manage risks, and prevent errors or fraud, are especially crucial in ICT firms, which often handle sensitive data and complex financial transactions.

In the context of Abuja, the capital city of Nigeria, the ICT sector has been growing at a significant pace due to both governmental support and the increasing demand for technological services. However, despite the rapid expansion and opportunities in the sector, many ICT firms in Abuja face challenges related to financial mismanagement, inadequate financial reporting, and operational inefficiencies. This has led to concerns over their financial performance and long-term sustainability.

Internal control systems are perceived to have a direct impact on the financial performance of organizations by reducing the risk of fraud, errors, and inefficiencies, thereby improving decision-making and resource allocation. However, limited research has been conducted on the specific impact of these systems on the financial performance of ICT firms in Abuja. As a result, it is essential to explore how internal control mechanisms in this sector influence their financial outcomes.

Internal control systems (ICS) are critical mechanisms that organizations implement to ensure the accuracy, reliability, and integrity of financial and operational information. These systems are designed to safeguard assets, ensure compliance with laws and regulations, and enhance the operational efficiency of firms. For firms in the Information and Communication Technology (ICT) sector, which operates in a dynamic and competitive environment, robust internal control systems are essential for mitigating risks, ensuring transparency, and improving financial performance.

The financial performance of firms is often linked to the effectiveness of their internal control systems. Effective ICS can lead to better financial outcomes, as it reduces the risk of financial misreporting, fraud, and mismanagement of resources. In the context of ICT firms in Abuja, the growing reliance on technology and the increasing sophistication of cyber threats necessitate a strong internal control framework to manage financial data, protect intellectual property, and ensure the firm's long-term financial sustainability.

Recent studies have shown that the implementation of comprehensive internal controls positively affects the financial performance of firms. For instance, a study by Okoro, Oghojafor, and Olibe (2022) found that internal control systems enhance financial performance by improving operational efficiency and reducing the chances of financial fraud in Nigerian firms, including ICT companies. Additionally, Adewumi (2021) observed that the adoption of sound internal control practices in ICT firms boosts investor confidence, enhances accountability, and ensures better financial outcomes.

Furthermore, the rapid growth of ICT firms in Abuja, driven by advancements in technology and increased demand for digital services, has heightened the need for efficient internal controls. Despite the recognition of its importance, there remains a gap in research concerning the direct impact of internal control systems on the financial performance of ICT firms in Abuja. This research aims to fill this gap by examining how internal control systems influence the financial outcomes of ICT firms in the region.

The relevance of this study is also underscored by the increasing regulatory demands on firms operating in the ICT sector. The Nigerian government, through regulatory bodies like the Nigerian Communications Commission (NCC), has emphasized the need for transparency and accountability in the financial operations of ICT firms. As such, understanding the relationship between internal control systems and financial performance is crucial for both policy makers and ICT firms striving for sustainability and growth.

This study will contribute to the body of knowledge by providing empirical evidence on the role of internal control systems in enhancing the financial performance of ICT firms in Abuja, offering practical insights for managers and policymakers seeking to improve the financial health of ICT firms in Nigeria.

The effectiveness of internal control systems (ICS) in organizations has been a topic of considerable interest, especially in sectors where financial accountability and operational efficiency are paramount. In the context of Information and Communication Technology (ICT) firms, where rapid innovation and financial management challenges are prevalent, the role of ICS in enhancing financial performance remains critical. Internal control systems, which consist of policies, procedures, and organizational structures, are designed to safeguard assets, ensure the reliability of financial reporting, and promote operational efficiency. The central question of whether robust ICS contributes to improved financial performance in ICT firms is particularly significant in Abuja, Nigeria's political and administrative capital, where the ICT sector is rapidly expanding.

ICT firms in Abuja, as in other urban centers, are subjected to both local and international financial scrutiny, making sound internal control practices essential to maintain sustainability and profitability. Given the dynamism of the ICT sector, these firms often face the challenge of keeping pace with technological advancements, managing financial resources efficiently, and maintaining compliance with regulatory standards. This creates a scenario in which effective internal control systems may play a crucial role in mitigating risks, improving financial performance, and fostering growth.

Recent studies have highlighted the importance of ICS in the financial success of firms. For instance, a study by Agboola and Tella (2021) emphasized that strong internal control frameworks significantly reduce financial mismanagement and enhance organizational performance. Their research underscored the relevance of effective control systems in reducing the likelihood of financial fraud and improving financial accountability. Similarly, Akinmoladun et al. (2022) found that internal controls, when properly implemented, significantly influence the profitability and operational efficiency of firms, including those in the technology sector.

This study, therefore, aims to investigate the effect of internal control systems on the financial performance of ICT firms in Abuja. By examining the relationship between the strength of internal controls and key financial outcomes—such as profitability, liquidity, and cost management—this research seeks to provide valuable insights for ICT firms, regulators, and policymakers. Given the increasing role of ICT firms in the Nigerian economy, understanding the impact of ICS on financial performance could lead to better strategic decision-making and enhanced business sustainability. The findings of this study will also contribute to the literature on corporate governance, risk management, and financial performance in emerging markets.

Statement of the Problem

The effectiveness of internal control systems is a crucial determinant of the financial performance of organizations, especially in the rapidly growing and competitive Information and Communication Technology (ICT) sector. Internal control systems are designed to ensure accurate financial reporting, safeguard assets, and mitigate risks, thereby contributing to improved organizational performance. However, despite their importance, many ICT firms in Abuja, Nigeria, face challenges related to the implementation and efficiency of these control systems, which could hinder their financial stability and growth.

Recent studies have highlighted that poor internal control mechanisms are often linked to financial mismanagement, fraud, and inefficiencies within firms (Al-Dalahmeh & Dabbah, 2023; Umar & Ibrahim, 2022). Despite the recognized importance of internal control, the impact of these systems on the financial performance of ICT firms, particularly within the Abuja region, remains under-researched. Existing literature often focuses on large multinational firms or industries outside the ICT sector, leaving a gap in understanding how these controls specifically affect ICT firms operating in Abuja, Nigeria.

This study seeks to explore the effect of internal control systems on the financial performance of ICT firms in Abuja, addressing the gap in literature and providing empirical evidence on how effective internal controls can influence profitability, operational efficiency, and risk management. The findings could guide ICT firms in improving their internal control structures, thereby enhancing their financial outcomes and contributing to the overall stability of the sector.

The effectiveness of internal control systems (ICS) has been widely acknowledged as a critical factor influencing the financial performance of organizations across various sectors. In the context of Information and Communication Technology (ICT) firms, which operate in a highly dynamic and competitive environment, the significance of robust internal controls cannot be overemphasized.

However, despite the growing attention to the role of internal controls in ensuring financial integrity, risk management, and operational efficiency, limited empirical research has explored their direct impact on the financial performance of ICT firms in Abuja, Nigeria. This research aims to address this gap by examining how different elements of internal control systems—such as risk assessment, control activities, monitoring, and information systems—affect the financial performance of ICT firms in the region.

Given the rapid digitalization of businesses and the increasing complexity of financial transactions, ICT firms in Abuja face unique challenges in maintaining effective internal controls. Some of these challenges include inadequate control mechanisms, technological advancements that outpace control measures, and the increasing prevalence of cyber risks. As a result, ICT firms often experience financial irregularities, fraud, and inefficiencies, which undermine their performance. However, while the general relationship between internal control systems and organizational performance has been studied in other sectors (Agyei-Mensah, 2023; Abubakar et al., 2022), there is a need for more localized research focusing specifically on ICT firms in Abuja.

Therefore, this study intends to fill this gap by providing empirical evidence on how the implementation and effectiveness of internal control systems influence the financial performance of ICT firms in Abuja. This research is crucial for guiding managers and policymakers in the ICT industry towards adopting stronger internal control frameworks that can enhance financial outcomes, improve operational efficiency, and mitigate risks in a rapidly evolving technological landscape.

Research Questions

Based on the statement of the problem stated above, this study sought to answer the following research questions in view of the specific objectives

(i) What is the effect of control activities on financial performance of ICT firms in Abuja?
(ii) What is the effect of risk assessment on financial performance of ICT firms in Abuja?
(iii) What is the effect of control environment on financial performance of ICT firms in Abuja?
(iv) What is the effect of information and communication on financial performance of ICT firms in Abuja?
(v) What is the effect of monitoring on financial performance of ICT firms in Abuja?

Scope of the Study

The study related to current year information, the time period provides enough time for the researcher to acquire sufficient data about how financial performance has been done in the current year of seven (7) ICT firms in Abuja. In terms of capacity and the extent of coverage in this study, seven (7) ICT firms in Abuja will be covered.

2. LITERATURE REVIEW

Conceptual Review

Internal Control Systems (ICS)

The relationship between internal control systems (ICS) and the financial performance of Information and Communication Technology (ICT) firms has been a subject of growing interest in the academic and business fields. In particular, ICT firms operating in Abuja, Nigeria, are subject to both local regulations and global technological trends, which can affect their financial outcomes. Internal controls are essential in mitigating risks, ensuring accuracy in financial reporting, and promoting effective governance. This literature review explores the role of internal control systems in shaping the financial performance of ICT firms, focusing on studies within Abuja and the broader context.

Internal control systems (ICS) refer to the policies, procedures, and practices adopted by organizations to ensure the reliability of financial reporting, operational efficiency, compliance with laws and regulations, and the safeguarding of assets. The Committee of Sponsoring Organizations of the Treadway Commission (COSO) defines ICS as a process designed to provide reasonable assurance regarding the achievement of objectives in the categories of operations, reporting, and compliance (COSO, 2013). In the context of ICT firms, internal controls serve to mitigate financial risks, prevent fraud, and improve operational efficiency, directly influencing financial performance.

Internal control systems play a critical role in the financial performance of ICT firms, especially in high-risk sectors like technology and telecommunications. These firms often face unique challenges such as technological obsolescence, intellectual property protection, and cybersecurity risks. As such, the implementation of robust internal controls helps mitigate the inherent risks associated with these challenges and aligns organizational activities with strategic goals.

The specific context of Abuja presents its own set of challenges and opportunities for ICT firms. The ICT sector in Nigeria is growing rapidly, and firms in Abuja must navigate both local and international business dynamics. Several studies have highlighted the importance of a robust internal control environment in Nigeria, where firms face issues like financial misreporting, cyber threats, and a lack of adequate regulatory enforcement.

The relationship between internal controls and financial performance has been well-documented. Several studies suggest that effective internal controls contribute significantly to financial success by improving financial reporting, minimizing financial risk, and boosting operational performance.

Control Activities

The financial performance of firms, including those in the Information and Communication Technology (ICT) sector, is influenced by several factors. Control activities, which are part of internal control systems, are particularly significant in this context. Control activities are actions taken by management to ensure that financial reporting is accurate, operations are efficient, and compliance with laws and regulations is maintained. The ICT sector in Abuja, Nigeria, is growing rapidly, making it essential to understand how control activities can influence the financial performance of these firms.

Internal control systems are designed to safeguard assets, ensure accurate financial reporting, and promote operational efficiency. These systems consist of five components as defined by the Committee of Sponsoring Organizations of the Treadway Commission (COSO): control environment, risk assessment, control activities, information and communication, and monitoring activities.

Control activities, which include approvals, authorizations, verifications, reconciliations, and segregation of duties, play a vital role in ensuring the reliability of financial reporting and operational efficiency. For ICT firms, these controls are essential due to the nature of their operations, which often involve managing substantial amounts of digital data, intellectual property, and technology resources.

Risk Assessment

The Information and Communication Technology (ICT) sector is one of the fastest-growing industries globally, and it plays a critical role in economic development, particularly in developing countries like Nigeria. Firms in this sector face various risks, including financial, technological, operational, regulatory, and market risks. Risk assessment is a vital tool for identifying, analyzing, and mitigating these risks, thereby enabling firms to maintain financial stability and improve performance. This literature review examines existing studies on the effect of risk assessment on the financial performance of ICT firms, with a focus on the city of Abuja, Nigeria.

Risk assessment is the process through which firms identify, evaluate, and prioritize risks to minimize negative impacts. It involves qualitative and quantitative methods to predict the likelihood of risks and their potential consequences. In the context of ICT firms, risk assessment typically covers operational risks (such as system failures or cybersecurity breaches), market risks (such as changes in demand and competition), financial risks (like liquidity or credit risks), and regulatory risks (such as compliance with government policies).

In Nigeria's capital city, Abuja, ICT firms face an influx of competition and market uncertainty, which further emphasizes the importance of risk assessment. Proper identification of market trends and customer needs helps firms adjust their business models, potentially improving their financial outcomes.

Good corporate governance is crucial for the successful implementation of risk assessment strategies in ICT firms. A study by Ali et al. (2021) found that firms with strong corporate governance frameworks tend to have more effective risk management processes, leading to better financial outcomes. Governance structures that support risk committees, transparent reporting, and strategic oversight play a vital role in ensuring that risks are identified, evaluated, and mitigated in line with the firm's financial goals.

Control Environment

The control environment in an organization refers to the set of standards, processes, and structures that provide the foundation for internal control within an organization. It encompasses the attitudes, values, and behaviors that influence the overall functioning of control mechanisms within a firm. For Information and Communication Technology (ICT) firms, particularly those based in dynamic economies like Abuja, the control environment is crucial to both operational effectiveness and financial performance. A well-structured control environment can significantly impact the firm's ability to meet its financial objectives, while poor controls can lead to inefficiencies, fraud, and ultimately diminished financial performance.

A significant body of research highlights that the control environment plays a pivotal role in enhancing organizational performance, including financial performance. According to the

Committee of Sponsoring Organizations (COSO) of the Treadway Commission, the control environment is the foundation for all other components of internal control. The literature suggests that a robust control environment fosters the establishment of effective internal controls, risk management frameworks, and financial monitoring systems, which are essential for sustaining long-term financial health.

For instance, **Albrecht and Albrecht (2014)** argue that organizations with a strong control environment tend to have more accurate financial reporting, better decision-making capabilities, and improved operational efficiency, which ultimately enhances financial performance. The study reveals that control environments built on clear ethical standards, transparency, and sound corporate governance principles contribute to more consistent revenue generation and profit maximization.

The ICT sector faces unique challenges that can make the control environment more complex and critical. Firms in this sector often deal with rapidly changing technologies, high innovation rates, and substantial reliance on digital platforms and intellectual capital. This can introduce high levels of risk, including cybersecurity threats, data breaches, and intellectual property theft, all of which could affect financial performance.

A study by **Sivakumar and Suganthi (2020)** found that ICT firms in developing economies like Nigeria, where Abuja is located, often face challenges related to weak regulatory frameworks, inadequate infrastructure, and an unpredictable market environment. However, the study also found that those ICT firms with strong internal controls—such as rigorous monitoring of financial transactions, employee behavior, and strategic oversight—were better positioned to handle these challenges and showed stronger financial performance. Therefore, for ICT firms in Abuja, the effectiveness of the control environment is crucial in navigating these challenges to achieve superior financial outcomes.

Corporate governance is a central element of the control environment, and research indicates that good governance practices positively affect financial performance. Effective governance structures, which include a clear delineation of roles and responsibilities, transparent decision-making, and accountability, are crucial for minimizing financial risks and enhancing performance.

Raji and Adedeji (2017) examined the relationship between corporate governance and financial performance in Nigerian ICT firms. They concluded that a strong governance framework, which incorporates internal control mechanisms, ensures that financial resources are properly allocated and utilized, leading to improved financial results. Additionally, **Hassan et al. (2018)** found that ICT firms with strong governance practices experienced fewer financial misreporting issues, leading to better investor confidence and higher financial returns.

In the context of ICT firms, risk management and internal controls form an essential part of the control environment. The implementation of comprehensive risk management strategies, including identifying financial, operational, and strategic risks, is critical for safeguarding an organization's assets and ensuring sustainable financial performance.

Leadership plays a central role in shaping the control environment. A study by **Meyer (2021)** focused on Nigerian firms and emphasized that leadership commitment to ethical behavior, transparency, and compliance with regulations significantly impacts the strength of the control environment. In the ICT sector, where innovation and rapid growth are prevalent, leadership's commitment to fostering a strong control environment ensures that financial controls are respected across all levels of the firm.

Moreover, the organizational culture within ICT firms is often one that fosters a high degree of collaboration and innovation. However, if not properly managed, this culture can undermine internal controls. **Eze and Ijeoma (2020)** note that ICT firms that maintain a culture of accountability, where employees at all levels are held responsible for financial outcomes, tend to exhibit stronger financial performance. They also highlight the importance of leaders setting a tone of integrity, which directly influences the effectiveness of the firm's internal controls.

External factors, such as government regulations, economic conditions, and market dynamics, also influence the control environment in ICT firms. In Abuja, where ICT firms face both local and international competition, the regulatory framework can significantly affect how firms structure their internal controls. **Sulaimon and Adewumi (2022)** found that ICT firms operating in environments with weak regulatory frameworks often struggle to maintain effective internal controls, which leads to financial performance issues such as increased fraud and misreporting.

Conversely, **Ogunyemi (2021)** highlighted that government support for ICT infrastructure development and enforcement of strict financial regulations help improve the control environment in ICT firms, resulting in enhanced financial performance.

Information and Communication

The relationship between information and communication technology (ICT) and financial performance is a subject of increasing academic interest. ICT firms, which are central to technological development and business innovation, rely heavily on information and communication to drive strategic decision-making, enhance operational efficiency, and improve customer relationships. In the context of Abuja, Nigeria's capital city, ICT firms are positioned within a dynamic business environment, influenced by both local and global technological trends. This literature review explores existing research on how information and communication, through the strategic use of technology and effective communication practices, impact the financial performance of ICT firms in Abuja.

Information and communication technology (ICT) has been widely recognized as a key driver of business transformation. According to Brynjolfsson and Hitt (2000), the adoption of ICT leads to higher productivity, enhanced efficiency, and better decision-making, all of which can positively affect financial performance. For ICT firms, effective management of information can directly influence product development, customer engagement, and service delivery.

Effective communication within firms ensures that information flows seamlessly between departments, allowing for better coordination and faster response times. Researchers such as Lai and Chen (2014) argue that strategic communication enhances the adaptability of ICT firms, fostering innovation and improving overall performance. Communication within and outside the firm facilitates marketing, customer service, and corporate governance, all of which are critical to financial success.

Studies have consistently shown a positive correlation between ICT adoption and improved financial performance. A seminal work by Porter and Heppelmann (2014) illustrates how firms leveraging advanced ICT solutions, such as big data analytics, cloud computing, and customer relationship management (CRM) tools, are able to gain a competitive edge in their respective markets. This is particularly significant for ICT firms, as their financial performance hinges on their ability to innovate and respond to market demands efficiently.

In Abuja, ICT firms benefit from various government initiatives aimed at promoting technology and innovation, including the National Information Technology Development Agency (NITDA) policies, which are designed to create a conducive environment for ICT adoption. These policies contribute to the financial success of firms by reducing operational costs, enhancing customer satisfaction, and facilitating market expansion.

The integration of advanced information systems (IS) into ICT operations is a critical factor influencing financial outcomes. Information systems, such as enterprise resource planning (ERP), data analytics, and automated customer management tools, streamline internal processes, leading to improved performance metrics. According to a study by Melville et al. (2004), organizations with sophisticated information systems are better positioned to make informed financial decisions, optimize resource allocation, and manage risks.

For ICT firms in Abuja, the implementation of these systems allows for more accurate financial reporting, real-time monitoring of performance, and better alignment of business goals with financial outcomes. As ICT firms in Abuja continue to adopt new technologies, the role of information systems becomes even more crucial in shaping their financial performance.

Effective communication with customers is another pivotal factor influencing the financial performance of ICT firms. Studies by Kumar and Shah (2004) highlight that clear and transparent communication with customers fosters trust and loyalty, leading to increased sales and repeat business. In the ICT sector, where service quality and technological expertise are paramount, communication also plays a significant role in managing customer expectations and addressing complaints.

In Abuja, ICT firms are increasingly utilizing digital platforms, including social media and online customer service portals, to interact with clients. These channels allow firms to reach a larger audience, enhance brand visibility, and gather valuable customer feedback, which can be leveraged to improve products and services. As a result, firms that effectively communicate with their customers tend to experience better revenue growth and financial outcomes.

Internal communication within ICT firms also contributes to financial performance by enhancing employee productivity. According to a study by Men (2014), when employees are kept informed about company goals, strategies, and expectations, they are more motivated and aligned with the organizational vision. This alignment leads to higher levels of engagement and performance, which ultimately translates into improved financial results.

In Abuja’s ICT firms, the implementation of internal communication tools, such as collaboration software and messaging platforms, allows employees to share knowledge, resolve issues quickly, and collaborate across departments. These improvements in communication can increase operational efficiency, reduce downtime, and lower costs, all of which contribute to better financial performance.

Despite the positive effects, there are challenges in the implementation and use of information and communication strategies in Abuja's ICT firms. One of the major obstacles is the lack of infrastructure, which can impede the adoption of advanced ICT solutions. In some areas of Abuja, unreliable internet connectivity and power outages can disrupt communication flows and impact the efficiency of information systems.

Moreover, there is a gap in the technical skills required to manage and utilize sophisticated ICT tools. As noted by studies on developing economies, the skill gap in information technology can hinder firms' ability to leverage ICT for strategic advantage (Ghobakhloo, 2018). For ICT firms in Abuja, investing in workforce training and infrastructure development is essential to overcoming these barriers and ensuring that information and communication contribute positively to financial performance.

Monitoring

The financial performance of firms in the Information and Communication Technology (ICT) sector has long been a subject of academic inquiry. One critical factor influencing the financial performance of such firms is the monitoring process, which encompasses various strategies for overseeing operations, financial practices, and overall business activities. In the context of ICT firms in Abuja, the capital of Nigeria, the impact of monitoring on financial outcomes is particularly relevant given the growing role of ICT in the country's economic development.

Monitoring in the context of firms refers to the processes through which organizations observe and evaluate their operational, financial, and strategic activities. This includes financial monitoring, performance appraisals, risk management, and strategic decision-making. In the ICT sector, monitoring may also involve the assessment of technological performance, market penetration, and innovation effectiveness (Vasudevan & Viswanathan, 2019). Financial monitoring ensures that a firm's financial health is regularly checked, which is crucial for long-term sustainability (Nguyen et al., 2017).

Monitoring is often a multi-dimensional activity, encompassing internal controls, external audits, and performance reviews, all of which are designed to optimize operational efficiency and profitability (Wang & Liu, 2020).

The relationship between monitoring and financial performance has been well-documented in literature. For ICT firms, financial performance is primarily assessed in terms of profitability, return on assets (ROA), return on equity (ROE), and market share growth. Monitoring affects these performance indicators by ensuring that resources are allocated efficiently, and financial management is precise and transparent.

A significant body of research suggests that firms with robust monitoring systems experience superior financial performance. In particular, firms that engage in continuous monitoring of financial practices, such as budgeting, cash flow management, and cost control, tend to have better profitability (Benson & Zohir, 2018). This is particularly relevant for ICT firms in Abuja, where the sector is rapidly evolving, and competition is increasing.

In the ICT industry, where capital investment in infrastructure, software development, and research and development (R&D) is substantial, monitoring of financial practices becomes crucial. According to a study by Qureshi et al. (2021), companies with rigorous financial monitoring systems were found to have higher ROE and market share compared to those with weak monitoring frameworks.

Financial Performance

The financial performance of Information and Communication Technology (ICT) firms has become an area of significant interest due to the rapid growth of the sector globally and particularly in developing economies like Nigeria. ICT firms in Abuja, the capital city of Nigeria, are pivotal in driving innovation, economic growth, and digital transformation in the country. Understanding the factors that influence the financial performance of these firms can provide valuable insights into how businesses can thrive in the dynamic ICT sector.

Nigeria's ICT sector has undergone considerable transformation in the last two decades. The liberalization of the telecommunications industry, increased internet penetration, and technological advancements have all contributed to the sector's growth (Olubiyi, 2019). ICT firms in Abuja play a crucial role in this evolution, with companies involved in software development, telecommunications, digital services, and IT consulting. The sector has become a major contributor to Nigeria's GDP and a key area of employment, particularly for young professionals (Ezeani et al., 2018).

Financial performance in ICT firms is typically influenced by a combination of internal and external factors. According to Sulaimon and Akinboade (2021), internal factors include management practices, technological innovation, and operational efficiency, while external factors involve market competition, regulatory policies, and macroeconomic conditions.

The financial performance of ICT firms is often assessed using traditional financial ratios such as Return on Assets (ROA), Return on Equity (ROE), Profit Margin, and Revenue Growth. These indicators give an insight into a firm's efficiency, profitability, and overall financial health. In a study on Nigerian firms, Ezeani et al. (2018) found that profitability ratios like

3. THEORETICAL REVIEW

Agency theory

Agency theory, first introduced by Jensen and Meckling (1976), explores the relationship between principals (owners or shareholders) and agents (managers or executives) in a business context. This theory is particularly relevant in understanding the dynamics within organizations, where there is a need for a mechanism to ensure that agents act in the best interest of the principals. Within the context of Information and Communication Technology (ICT) firms in Abuja, agency theory can be employed to understand how internal control systems (ICS) influence the financial performance of these organizations. Internal controls are processes that ensure the accuracy, reliability, and compliance of financial reporting, operational effectiveness, and risk management.

Agency theory revolves around the premise that the relationship between principals and agents can lead to agency problems due to differing objectives, risk preferences, and information asymmetry. Principals, who are typically the owners or shareholders, expect agents (managers) to maximize the firm's value. However, agents may have their own interests, which could conflict with the principals' goals. This misalignment of interests can result in inefficiencies, such as managers making decisions that benefit themselves rather than the shareholders, potentially harming the firm's financial performance.

The theory suggests that effective governance mechanisms, such as internal controls, are crucial in minimizing agency costs, which are incurred when agents act in ways that do not align with the interests of the principals. These governance mechanisms serve to align the interests of agents and principals, enhance transparency, and ensure that organizational objectives are met.

In the context of ICT firms in Abuja, internal control systems encompass policies, procedures, and practices designed to safeguard assets, ensure the integrity of financial reporting, and promote operational efficiency. ICS can be categorized into preventive, detective, and corrective controls, all of which play a role in the organizational structure, decision-making processes, and overall performance of a firm.

In Abuja, where the ICT industry is growing rapidly, these controls are particularly important due to the rapid technological changes and evolving regulatory environment. Effective internal controls in ICT firms can reduce financial mismanagement, fraud, and operational inefficiencies, thereby improving their financial performance.

Agency theory posits that the relationship between principals and agents is characterized by information asymmetry—agents usually have more information about the firm's operations than the principals. In such a scenario, internal control systems become essential in mitigating agency problems by ensuring that agents act in the best interest of the principals.

Financial performance in ICT firms is largely driven by the ability to generate revenue, control costs, and make sound financial decisions. Agency theory implies that poor internal controls can lead to financial mismanagement, lower profitability, and reduced shareholder value.

Resource-Based Theory

The Resource-Based Theory (RBT) offers a lens through which organizations can understand how internal resources, capabilities, and competencies contribute to sustainable competitive advantages and improved performance. This theoretical framework has gained prominence in strategic management, organizational behavior, and finance research due to its emphasis on leveraging unique resources to outperform competitors. For Information and Communication Technology (ICT) firms, particularly in regions like Abuja, Nigeria, RBT can help explain how effective internal control systems (ICS) can influence their financial performance. The relevance of RBT in this context is linked to the fact that ICT firms often deal with significant amounts of data, technology, and financial transactions, which require robust internal controls to manage and protect these valuable resources.

At its core, Resource-Based Theory posits that a firm's competitive advantage stems from its unique bundle of internal resources and capabilities. Resources can be categorized as tangible (e.g., financial capital, technology) or intangible (e.g., brand reputation, organizational knowledge). To achieve superior performance, firms must possess resources that are valuable, rare, inimitable, and non-substitutable (VRIN). RBT emphasizes that firms should not solely rely on external market conditions but also leverage their internal resources for sustained success.

Internal control systems (ICS), as integral parts of an organization's resources, help safeguard these assets, ensuring that they are used effectively and efficiently to enhance financial performance. A strong ICS framework encompasses procedures, policies, and actions designed to prevent fraud, ensure compliance with regulations, and maintain the integrity of financial reporting.

In the context of ICT firms, internal control systems are vital for managing risks associated with technology infrastructure, financial transactions, data integrity, and cybersecurity. Given that ICT firms operate in dynamic and competitive environments, characterized by rapid technological advancements and shifting regulatory landscapes, ICS can provide a structured approach to mitigate these risks. Internal controls also ensure the efficient use of resources, preventing wastage or misallocation, which directly impacts financial performance.

For ICT firms in Abuja, the role of ICS becomes even more significant due to the increasing complexity of the business environment. ICT firms in Abuja face challenges such as unstable power supply, inadequate infrastructure, regulatory uncertainty, and the need for consistent cybersecurity. Effective internal controls can ensure that these challenges are addressed proactively, leading to better decision-making and optimal use of resources.

RBT suggests that an organization's ability to leverage its resources effectively is a key determinant of financial performance.

While RBT provides a powerful theoretical framework for understanding the impact of internal controls on financial performance, it is essential to consider the unique context of ICT firms in Abuja. Factors such as the local regulatory environment, the availability of skilled labor, and access to technological infrastructure play a crucial role in shaping how internal controls are implemented and their effectiveness in boosting financial performance.

For example, ICT firms in Abuja might face challenges related to inconsistent electricity supply, limited broadband infrastructure, and fluctuations in government policies. These external challenges may necessitate stronger internal controls to mitigate operational risks. Additionally, the growing reliance on cloud computing, big data, and artificial intelligence in Abuja's ICT sector requires firms to adopt internal controls that safeguard digital resources while ensuring compliance with global standards.

EMPIRICAL REVIEW

Studies such as those by **Ariyo & Adebayo (2022)** and **Mubarak & Mansur (2020)** revealed that companies with strong internal controls, particularly those that involve multi-tiered governance structures, have superior financial outcomes. Governance ensures that decision-making processes are transparent, thus improving operational efficiency, and enhancing profitability.

Smith & Jackson (2018) found that ICT firms' reliance on proprietary technology and intellectual property (IP) meant that the strength of their ICS in managing these assets was directly linked to financial outcomes, including revenue growth and cost efficiency. These controls are critical for securing and exploiting IP and handling large-scale data processes.

Studies such as **Dhanapal & Subramanian (2019)** and **Tayebwa (2021)** found that effective ICS, especially those related to budgeting, procurement, and project management, can lead to improved cost control in ICT firms, thereby boosting profitability. The ability to track and manage project expenses within the constraints of internal controls often leads to more efficient operations and higher margins.

Meena et al. (2017) and **Rao et al. (2020)** highlighted that firms with comprehensive internal audit functions and risk management systems experienced fewer financial losses from fraud and data breaches, directly improving financial stability and long-term performance.

Madhusree & Vishal (2019) and **Zhang & Hu (2020)**, illustrated the importance of well-structured internal controls in preventing fraud. In their work, they found that firms with strict internal control mechanisms, including segregation of duties, monitoring, and audit processes, were able to prevent financial losses, thereby improving their financial performance.

Chung et al. (2021) observed that firms with robust internal controls in their CSR efforts not only improved their public image but also saw long-term financial benefits due to consumer trust and loyalty. Proper controls ensure that resources are allocated effectively towards CSR programs, which can enhance the reputation and market position of the firm.

Nordin & Ali (2018) and **Singh & Rajesh (2020)**, found a direct relationship between the quality of financial reporting and financial performance. Strong internal controls over financial reporting help ensure accurate and timely disclosures, which in turn influence investors' confidence and can lead to higher stock prices and market capitalization.

Khan et al. (2022) found that firms that employed automated financial reporting tools and integrated systems for internal controls (e.g., ERP systems) showed improvements in efficiency, reduced manual errors, and better financial performance.

Vasquez & Ordóñez (2021) demonstrated that firms with a strong internal audit function, which monitors adherence to ICS, tend to have higher financial performance due to better identification of inefficiencies, fraud, and risks.

Ogundipe et al. (2019) found that ICT firms adhering to international internal control standards often demonstrate stronger financial health compared to firms with weak compliance structures. These standards help in streamlining operations, reducing risks, and ultimately improving profitability.

4. METHODOLOGY

Research Design

This study adopted a quantitative research design using a correlational research approach. The research will analyze the relationship between internal control systems and the financial performance of ICT firms. It will seek to establish whether the strength and implementation of internal controls significantly affect financial performance indicators.

Population for the Study

The population for this study will comprise all ICT firms operating within Abuja. This includes small, medium, and large-scale enterprises within the information and communication technology sector. A list of registered ICT firms will be obtained from the relevant regulatory bodies such as the Nigerian Communications Commission (NCC) and the Abuja Chamber of Commerce.

Sample Size and Sampling Technique

The sample size of 40 with a target sample of 7 ICT firms will be selected using stratified random sampling technique to ensure firms of different sizes and sub-sectors are adequately represented. Using the Yamane's formula, the sample size is calculated as:

$$N = \frac{N}{1+N \times e^2}$$

Where:

n = Sample size
N = Population size (total number of people or units in the population)
e = Desired margin of error (expressed as a decimal)

$$N = \frac{350}{1+350 \times 0.05^2}$$

$$N = \frac{350}{1+350 \times 0.0025}$$

$$N = \frac{350}{8.775}$$

N = 39.8 approximately 40

Source and Method of Data Collection

For the purpose of this study, the researcher made use of the primary source of data. The primary data were sourced through the structured questionnaire, which was used to obtain information from respondents. The primary data were sourced using the 5-Scale Likert questionnaire showing: 5=Strongly Agree, 4=Agree,3= Undecided,2= Disagree and 1= Strongly Disagree.

In carrying out this study, the primary source of data was the main source of data collection through the use of structured questionnaire. The collected information from the respondents will be used to estimate the research model. The questionnaire consists of close-ended questions i.e. respondents are only required to supply short answers by ticking the correct answers to the questions.

Instrument for Data Collection

A 5- scale Likert questionnaire was employed in the collection of primary data for this study. The questionnaire was planned with the use of 5-point Likert scale ranging from strongly agree to strongly disagree i.e.; strongly agree – 5, agree -4, undecided-3, disagree -2, and strongly disagree – 1. In the course of administering the questionnaire, the purpose of the research was appropriately explained to the respondents and it was guaranteed that their opinions would remain confidential. The questionnaire was structured in a clear and precise manner to pave way for desired responses in achieving the objectives of the research. The questionnaire was divided into two parts. Part one focused on introductory letter, while, part two focused on the subject matter of the research. The responses got from the questionnaire was processed and analyzed to address the research questions.

Reliability and Validity of Instrument

Validity is the extent at which the survey measures the right elements that need to be measured. For the primary data of this study, the questionnaire will be thoroughly examined by the supervisor of this research before administration to demonstrate the validity of the research instrument (questionnaire). The researcher used the Cronbach's Alpha to measure the co-efficient of the internal consistency and thereby, reliability of the instrument. To check the reliability of results, this study used the Cronbach's Alpha Methodology, which is based on internal consistency.

Administration of Instrument

This study made use of the primary data. Thereby, there will be need for administration of instrument using the subject-completed instrument (questionnaire).

Method of Data Analysis

Descriptive Statistics: This will use measures such as mean, median, mode, and standard deviation to summarize the data on internal controls and financial performance.

Correlation Analysis: Using the the correlation analysis, the research will conduct a Pearson correlation test to assess the strength and direction of the relationship between internal control system variables and financial performance metrics.

Regression Analysis: The researcher will perform multiple linear regression analysis to determine how internal control practices (independent variables) influence financial performance (dependent variable). This will allow you to test the hypothesis and quantify the relationship between the variables.

Model Specification

The study model is based on the effect of internal control systems on financial performance of ICT firms in Abuja. The proxies of independent variables for this study are control activities, risk assessment, control environment, information and communication and monitoring. The proxy of dependent variable is financial performance. The multiple regression model was used to examine the relationship between the variables. The model specification for this study will be as follows; In functional form;

Financial Performance = β0+ β1(control activities) + β2(risk assessment) + β3(control environment) + β4(information and communication) + β5(monitoring) +ε.

In econometric form;

$$FinP = \beta_0 + \beta_1(CAC) + \beta_2(RIS) + \beta_3(CEN) + \beta_4(ICO) + \beta_5(MON) + \varepsilon \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ (1)$$

Where;
FinP – Financial Performance
CAC- Control Activities
RIS- Risk Assessment
CEN- Control Environment
ICO – Information and Communication
MON - Monitoring

β0- Intercept

β1, **β2 and β3** are the coefficients of the independent variables

ε= An error term of the model.

Test of Significance

If p-value $\leq \alpha$ (usually $\alpha=0.05$), reject the null hypothesis and conclude that internal control systems significantly affects financial performance.

If p-value $>\alpha$, fail to reject the null hypothesis and conclude that internal control systems does not significantly affect financial performance.

5. DATA PRESENTATION, ANALYSIS AND INTERPRETATION

DATA ANALYSIS

Descriptive Analysis

The descriptive statistics presented in Table 1.1 provide an overview of the key variables analyzed in the study, offering insights into the financial performance of ICT firms in Abuja and the internal control system. The first variable, Financial Performance (FP), has a mean of 2.9450, which indicates a relatively high level of financial performance among the firms. The standard deviation of 0.5782 shows moderate variability in the financial performance scores, with a variance of 0.334.

Control Activities (CA) exhibit a mean of 2.8167, suggesting that control activities are relatively strong within these firms. The standard deviation of 0.6998 and a variance of 0.490 imply some variation in the extent to which control activities are applied across the firms. Risk Assessment (RA) has a mean of 2.6667, which is slightly lower than the other variables, indicating that risk assessment may not be as rigorously implemented in the firms. A standard deviation of 0.7844 and variance of 0.615 reflect a wider spread in the responses, indicating a more varied approach to risk assessment practices.

The Control Environment (CE) has a mean of 2.7916, showing that the control environment is moderately established in the firms. The higher standard deviation (0.8563) and variance (0.733) suggest significant diversity in how firms maintain their control environment, with some firms likely demonstrating more structured environments than others. Information and

Communication (IC) shows a mean of 2.8833, indicating that communication processes within the firms are reasonably well-implemented, though not uniform. The standard deviation of 0.7644 and variance of 0.584 further reflect variability in the level of information and communication systems across the firms.

Finally, Monitoring (M) has the highest mean of 2.9500, signaling that monitoring practices are strong within the firms. However, with a standard deviation of 0.6295 and variance of 0.396, there is still some variability in how monitoring systems are applied across the sample.

Table 1.1 Descriptive Statistics of Variables

	N	Sum	Mean	Std. Dev	Variance
FP	40	117.80	2.9450	0.5782	0.334
CA	40	112.67	2.8167	0.6998	0.490
RA	40	106.67	2.6667	0.7844	0.615
CE	40	111.67	2.7916	0.8563	0.733
IC	40	115.33	2.8833	0.7644	0.584
M	40	118.00	2.9500	0.6295	0.396

Source: Researcher's Computation using SPSS (v.23), FP: Financial Performance; CA: Control Activities; RA: Risk Assessment: CE: Control Environment; IC: Information and Communication; M: Monitoring

Correlation matrix

The correlation matrix presented in Table 1.2 shows the relationships between the variables under consideration in the study, offering valuable insights into how different elements of the internal control system interact with financial performance in ICT firms in Abuja.

A significant positive correlation exists between Financial Performance (FP) and Risk Assessment (RA), with a correlation coefficient of 0.475**. This indicates that as firms improve their risk assessment processes, their financial performance tends to increase as well. The **significance** of this relationship suggests that risk management is an important factor in enhancing financial outcomes. Financial Performance (FP) also shows a moderate positive correlation with Control Environment (CE) (0.325**), implying that a more robust control environment contributes to better financial performance.

Control Activities (CA) has a weak positive correlation with Financial Performance (FP) (0.173), suggesting a relatively small relationship between the two. However, there is a stronger correlation between Control Activities (CA) and the Control Environment (CE) (0.648**), highlighting that effective control activities are integral to a sound control environment. This relationship underscores the importance of well-established control mechanisms in maintaining a structured and efficient operational environment.

Interestingly, Information and Communication (IC) shows no significant correlation with Financial Performance (FP) (0.105), indicating that the communication systems within the firms may not have a strong impact on their financial outcomes. It also has a weak and negative correlation with the Control Environment (CE) (-0.251), which suggests that in some cases, inadequate communication may be linked to a less effective control environment.

Monitoring (M) displays a weak positive correlation with Financial Performance (FP) (0.119), suggesting that monitoring practices have only a minimal direct effect on financial performance. However, Monitoring (M) has a stronger and positive correlation with the Control Environment (CE) (0.350*), indicating that monitoring is an important element in reinforcing the control environment.

Table 1.2 Correlation matrix of variables)

	FP	CA	RA	CE	IC	M
FP	1					
CA	0.173	1				
RA	0.475**	0.223	1			
CE	0.325**	0.648**	0.161	1		
IC	0.105	0.034	0.076	-0.251	1	
M	0.119	0.244	-0.127	0.350*	-0.202	1

Source: Researcher's Computation using SPSS (v.23), FP: Financial Performance; CA: Control Activities; RA: Risk Assessment: CE: Control Environment; IC: Information and Communication; M: Monitoring

Panel Regression Analysis

The regression results provided in Table 1.3 present the relationships between the independent variables (Control Activities, Risk Assessment, Control Environment, Information and Communication, and Monitoring) and the dependent variable, Financial Performance (FP), in ICT firms in Abuja. The model aims to explain the extent to which the internal control system influences the financial performance of these firms. The constant term, which represents the baseline value of financial performance when all independent variables are zero, has a coefficient of 1.555, but the p-value is 0.129, which is greater than the typical significance level of 0.05. This suggests that the constant term is not statistically significant.

Control Activities (CA) has a coefficient of -1.222, with a p-value of 0.230. Since the p-value is greater than 0.05, the effect of Control Activities on financial performance is not statistically significant in this model. This implies that, although there is a positive relationship between these two variables in the correlation matrix, Control Activities do not have a significant independent effect on financial performance. Risk Assessment (RA), with a coefficient of 3.184 and a p-value of 0.003, is statistically significant at the 0.05 level. This suggests that improvements in risk assessment processes positively influence the financial performance of the ICT firms in the study. The positive coefficient further implies that as risk assessment increases, financial performance is likely to improve.

Also, Control Environment (CE) has a coefficient of 2.039, and its p-value is 0.049, which is just below the 0.05 significance threshold. This result shows that the control environment has a positive and statistically significant impact on financial performance, suggesting that firms with a stronger control environment are likely to perform better financially. Information and Communication (IC) has a coefficient of 1.380, but the p-value of 0.177 indicates that it is not statistically significant at the 0.05 level. Therefore, although there is some positive correlation between information and communication and financial performance, this relationship does not hold when other variables are considered in the regression model.

In addition, monitoring (M) has a coefficient of 0.881, with a p-value of 0.384, indicating that monitoring does not have a statistically significant effect on financial performance. The result suggests that monitoring practices, in isolation, may not significantly impact the financial outcomes of the ICT firms.

The R-squared value of 0.349 means that approximately 34.9% of the variation in financial performance is explained by the model, which indicates a moderate fit. The adjusted R-squared value of 0.253 suggests that when adjusting for the number of variables in the model, about 25.3% of the variation in financial performance can be explained. This indicates that other factors outside of the internal control system could also be influencing the financial performance of the firms. The F-statistics value of 3.648, with a p-value of 0.009, indicates that the overall model is statistically significant, meaning that the set of independent variables as a whole is significantly related to financial performance. Lastly, the Durbin-Watson statistic of

1.638 suggests that there may be some positive autocorrelation in the residuals, but the value is not too high (close to 2), so the issue of autocorrelation is not a major concern in this analysis.

Table 1.3 Regression result for the study model

Dependent Variable	FP	P-value
Constant	1.555	0.129
CA	-1.222	0.230
RA	3.184	0.003
CE	2.039	0.049
IC	1.380	0.177
M	0.881	0.384
R-square	0.349	-
Adjusted R-square	0.253	-
F-statistics	3.648	0.009
Durbin-Watson statistics	1.638	-
Number of observation	40	-

Source: Researcher's Computation using SPSS (v.23), FP: Financial Performance; CA: Control Activities; RA: Risk Assessment: CE: Control Environment; IC: Information and Communication; M: Monitoring

Hypotheses Testing

Table 1.4 Table of Hypotheses

The hypothesis was tested using the panel regression model in Table 4.4.

Variables	FP	Decision
CA	Reject	Not Significant
RA	Accept	Significant
CE	Accept	Significant
IC	Reject	Not Significant
M	Reject	Not Significant

Source: Researcher's Computation using SPSS (v.23), FP: Financial Performance; CA: Control Activities; RA: Risk Assessment: CE: Control Environment; IC: Information and Communication; M: Monitoring

H_{O1}: There is no significant effect of control activities on financial performance of ICT firms in Abuja.

Decision Rule

From the Table 1.4 above, it was observed that the probability value for control activities yielded 0.230. Since the p-value (0.230) is greater than 0.05, we are compelled to accept the null hypothesis (Ho). This therefore entails that control activities have no significant effect on financial performance of ICT firms in Abuja.

HO2: There is no significant effect of risk assessment on financial performance of ICT firms in Abuja**.**

Decision Rule

From the Table 1.4 above, it was observed that the probability value for risk assessment yielded 0.003. Since the p-value (0.003) is lesser than 0.05, we are compelled to reject the null hypothesis (Ho). This therefore entails that risk assessment have significant effect on financial performance of ICT firms in Abuja.

H03: There is no significant effect of control environment on financial performance of ICT firms in Abuja**.**

Decision Rule

From the Table 1.4 above, it was observed that the probability value for control environment yielded 0.049. Since the p-value (0.049) is lesser than 0.05, we are compelled to reject the null hypothesis (Ho). This therefore entails that control environment have significant effect on financial performance of ICT firms in Abuja.

Ho4: There is no significant effect of information and communication on financial performance of ICT firms in Abuja.

Decision Rule

From the Table 1.4 above, it was observed that the probability value for information and communication yielded 0.177. Since the p-value (0.177) is greater than 0.05, we are compelled to accept the null hypothesis (Ho). This therefore entails that information and communication have no significant effect on financial performance of ICT firms in Abuja.

Ho5: There is no significant effect of monitoring on financial performance of ICT firms in Abuja.

Decision Rule

From the Table 1.4 above, it was observed that the probability value for control activities yielded 0.384. Since the p-value (0.384) is greater than 0.05, we are compelled to accept the null hypothesis (Ho). This therefore entails that monitoring have no significant effect on financial performance of ICT firms in Abuja.

6. SUMMARY, CONCLUSION AND RECOMMENDATIONS

Summary of Findings

Based on the results of the hypotheses, the following is a summary of findings:

1. The study found that control activities did not have a statistically significant effect on financial performance, as indicated by a p-value of 0.230 in the regression analysis. While control activities are crucial for ensuring organizational processes are managed effectively, the results suggest that other factors beyond control activities may have a stronger influence on financial performance in ICT firms in Abuja. This aligns with the findings of previous research, which suggests that while control activities contribute to operational efficiency, they may not directly impact financial performance unless integrated with other elements of internal control.
2. The regression analysis revealed that risk assessment had a statistically significant positive effect on financial performance, with a p-value of 0.003. This indicates that effective risk management practices play an important role in enhancing the financial outcomes of ICT firms. The result supports previous studies, which emphasize that identifying and mitigating risks can prevent potential financial losses, thus improving overall firm performance.
3. The control environment was found to have a significant positive effect on financial performance, with a p-value of 0.049. A strong control environment promotes ethical behavior, accountability, and adherence to internal policies, which can positively influence financial performance. This finding is consistent with prior research, which indicates that a positive control environment fosters trust and transparency, contributing to improved organizational outcomes.

4. The results showed that information and communication did not have a statistically significant effect on financial performance, with a p-value of 0.177. While information and communication are essential for supporting decision-making and operational coordination, the study suggests that the effectiveness of communication systems may not directly translate into improved financial outcomes in ICT firms. This finding is in contrast to some studies that argue that effective communication is crucial for organizational success, though it may require integration with other factors to influence financial performance.
5. The regression results indicated that monitoring did not have a statistically significant effect on financial performance, with a p-value of 0.384. Despite the importance of monitoring in detecting and correcting deviations from expected performance, the results suggest that monitoring alone is not sufficient to directly improve financial performance. This outcome aligns with literature suggesting that monitoring, while essential for maintaining control, requires complementary internal control measures to be effective in influencing financial success.

Conclusion

This study aimed to assess the impact of internal control systems on the financial performance of ICT firms in Abuja, focusing on five key components: control activities, risk assessment, control environment, information and communication, and monitoring. Each of these objectives was explored, and the findings have important implications for the internal control practices within the ICT sector. The second objective, which focused on the effect of risk assessment on financial performance, demonstrated that risk assessment has a significant positive impact on financial performance. Effective risk management is crucial for identifying and addressing potential threats to the firm's financial health. These findings underline the importance of proactive risk assessment in fostering better financial outcomes for ICT firms, aligning with existing literature that emphasizes the critical role of risk management in achieving organizational success.

In terms of the third objective, analyzing the effect of the control environment on financial performance, the study found a positive significant effect. A strong control environment, characterized by ethical standards, accountability, and a commitment to internal policies, was found to positively influence financial performance. This supports the argument that the control environment sets the tone for the entire organization and can create an environment conducive to financial success. For the fourth objective, the study assessed the effect of information and communication on financial performance, finding no statistically significant effect. While information and communication are fundamental to organizational decision-making and coordination, their direct influence on financial performance in ICT firms was not evident in this study. This highlights the complexity of the relationship between communication systems and financial outcomes, suggesting that effective communication alone is not sufficient to directly impact financial performance.

Finally, the fifth objective, examining the effect of monitoring on financial performance, found that monitoring did not have a significant effect on financial performance. Despite the importance of monitoring for ensuring the effectiveness of internal controls, its isolated impact on financial outcomes was not significant. This suggests that monitoring needs to be integrated with other internal control elements to contribute meaningfully to the financial performance of ICT firms.

Recommendations

Based on the conclusions of the study, the following recommendations are proposed for ICT firms in Abuja to improve their financial performance through enhanced internal control systems:

1. ICT firms should prioritize the development and implementation of robust risk assessment frameworks. Given the significant positive impact of risk assessment on financial performance, firms should regularly evaluate potential risks and develop mitigation strategies.

2. The control environment was found to positively influence financial performance, emphasizing the importance of fostering a culture of integrity, accountability, and ethical behavior within ICT firms.

3. Although control activities alone did not show a significant impact, they remain crucial for ensuring effective operations and minimizing risk. ICT firms should integrate control activities with other key internal control components, such as risk assessment and the control environment.

4. While information and communication were not directly linked to financial performance in this study, enhancing communication within the organization can still be valuable for improving operational efficiency and decision-making.

5. Given that monitoring alone did not have a significant impact on financial performance, it is recommended that ICT firms integrate monitoring processes with other internal control systems.

Contribution to Knowledge

1. This study contributes to the understanding of how different internal control components—such as control activities, risk assessment, control environment, information and communication, and monitoring—impact the financial performance of ICT firms in Abuja.

2. The study provides practical implications for ICT firms, emphasizing the importance of strengthening risk management practices and building a strong control environment.

3. The study also contributes to the literature by identifying that certain internal control components, such as control activities, information and communication, and monitoring, did not significantly affect financial performance in the context of ICT firms in Abuja.

Suggestions for Further Studies

1. Future studies could investigate how different internal control components interact with each other and their combined impact on financial performance.

2. Since this study focused primarily on internal control components, further research could explore external factors that may influence the financial performance of ICT firms.

3. A longitudinal study could be conducted to track the long-term effects of internal control systems on the financial performance of ICT firms.

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