

## **STRATEGIC FINANCIAL CONTROL STRATEGIES AND PERFORMANCE OF SELECTED TELECOMMUNICATION FIRMS IN KENYA**

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### **ABSTRACT**

**Purpose of the Study:** This study investigates the impact of strategic financial control strategies specifically revenue assurance and anti-money laundering (AML) practices on the performance of telecommunication firms in Kenya. These firms operate in a high-risk, innovation-driven environment where revenue leakages and financial crimes can significantly undermine profitability and trust.

**Short Introduction of Problem Statement:** Kenya's telecommunications industry has experienced rapid growth and digital transformation, particularly through mobile money platforms. However, these advancements have exposed firms to increasing risks, including fraud, cybercrime, and illicit financial transactions. Despite regulatory interventions, firms continue to suffer from revenue losses and reputational damage due to weak financial controls.

**Methodology:** The research employed a descriptive survey design with a quantitative approach. Data were collected from 154 management-level employees across Safaricom, Airtel Kenya, and Telkom Kenya using structured questionnaires. Stratified sampling was used to ensure proportional representation. The data was analyzed using SPSS Version 27, employing descriptive and inferential statistics including Pearson correlation and regression analysis.

**Results of the Study:** Findings revealed that both revenue assurance and AML practices have a statistically significant and positive effect on firm performance. Revenue assurance emerged as a stronger predictor, while AML practices enhanced regulatory compliance, operational transparency, and customer trust.

**Conclusion and Policy Recommendations:** Telecommunication firms should invest in AI-driven revenue tracking systems and automated AML frameworks. Regulators should enforce industry-wide compliance standards. Strengthening financial control strategies is imperative for resilience and competitive advantage.

**Keywords:** *Revenue assurance, anti-money laundering, strategic financial control, organizational performance, telecommunication, Kenya.*

## **1. INTRODUCTION**

The telecommunications industry in Kenya has witnessed exponential growth over the past two decades, primarily driven by technological innovation and mobile penetration. Firms such as Safaricom, Airtel Kenya, and Telkom Kenya have transformed the economic landscape by enabling connectivity, digitizing financial transactions, and expanding access to services like mobile money. As of 2023, the country recorded a mobile penetration rate of 130.5%, with Safaricom's M-Pesa leading globally in mobile money innovation (Communications Authority of Kenya [CAK], 2023). Despite these achievements, the industry faces increasing financial and operational risks stemming from revenue leakages, fraud, cyber threats, and regulatory uncertainties.

One of the most pressing concerns for telecom providers is revenue assurance. These firms derive income from diverse streams including voice, data, mobile money, and value-added services. However, issues like billing errors, fraudulent access, and system inefficiencies pose significant risks to revenue integrity. According to Alshurideh et al. (2022), robust revenue assurance systems, especially those powered by automation and AI, are essential for capturing and securing revenues accurately. They argue that minimizing leakage not only improves profitability but also enhances customer trust through accurate billing and service delivery. In Kenya, recurring losses due to poor revenue assurance have contributed to performance stagnation, as highlighted in Safaricom's 2023 financial report showing a continued decline in net earnings (Safaricom, 2023).

Another major financial control concern is anti-money laundering (AML) compliance. As telecom companies increasingly operate as financial intermediaries particularly through mobile wallets like M-Pesa and Airtel Money they are exposed to money laundering risks. The Financial Action Task Force (FATF, 2023) has flagged mobile money platforms in emerging markets as vulnerable to illicit transactions. In response, regulatory frameworks have mandated telecoms to implement robust AML practices such as Know Your Customer (KYC) protocols, suspicious activity reporting, and transaction monitoring systems. Mahmoud and Hinson (2018) emphasize that AML compliance not only safeguards firms from penalties but also builds consumer confidence, thus contributing to improved performance outcomes.

Kenya has not been immune to the global rise in telecom-related financial crimes. Reports by the Kenya National Bureau of Statistics (2023) indicate a 35% increase in cyber-enabled fraud incidents in 2023 alone. Fraud schemes such as SIM swap, identity theft, and Ponzi schemes targeting mobile users have become prevalent. These trends underscore the urgency of integrating financial control mechanisms within organizational strategies to safeguard revenues and reputation.

From a theoretical perspective, Transaction Cost Economics (TCE) offers a rationale for adopting internal revenue assurance measures, asserting that minimizing transaction costs related to fraud and inefficiency improves performance (Williamson, 1985). Additionally, Prospect Theory (Kahneman & Tversky, 1979) explains managerial reluctance to invest in costly AML systems despite their long-term benefits a tendency this study seeks to address by demonstrating performance returns on such investments.

Although some studies (e.g., Sharma & Patel, 2018; Ngugi, 2022) have explored financial controls in other industries, there is limited empirical research tailored to Kenya's telecommunications sector. Moreover, most prior studies rely heavily on financial metrics like ROI and ROA, failing to incorporate telecommunications-specific indicators such as Net Promoter Score (NPS) and market share. This study fills that gap by applying both financial and non-financial performance metrics. Ultimately, this research aims to demonstrate that strategic financial control strategies particularly revenue assurance and AML practices are not just regulatory necessities but performance enablers. In an era of digital disruption and financial crime, robust financial governance is a prerequisite for sustained competitiveness in the telecommunications industry.

## **2. STATEMENT OF THE PROBLEM**

Kenya's telecommunications industry stands at the intersection of technological innovation and financial risk. While services such as mobile money have improved financial inclusion, they have also opened avenues for fraud, revenue loss, and illicit transactions. Despite regulatory efforts and technological advancements, firms continue to face persistent challenges in safeguarding their financial integrity and sustaining performance. This study addresses the urgent need to evaluate how strategic financial control strategies, specifically revenue assurance and anti-money laundering (AML) practices, influence the performance of telecom firms in Kenya.

Revenue leakage remains a major issue in the sector. According to Alshurideh et al. (2022), errors in billing systems, fraudulent usage, and unmonitored service delivery pipelines contribute significantly to lost revenues. Safaricom's 2023 annual report showed a 22.2% drop in net profit the third consecutive decline attributed in part to operational inefficiencies and revenue leaks. Similar patterns have been observed across other providers, highlighting a failure to fully institutionalize effective revenue assurance mechanisms. This undermines profitability, erodes shareholder confidence, and impairs market competitiveness.

Simultaneously, mobile money services while revolutionary have increased the exposure of telecommunication firms to financial crimes. The FATF (2023) warns that digital platforms are increasingly targeted for money laundering activities. In Kenya, telecoms play a dual role as service providers and quasi-financial institutions, which subjects them to stringent AML obligations. However, many firms lack the infrastructure, expertise, or incentive to implement robust compliance frameworks. This results in regulatory fines, reputational damage, and weakened customer trust. Mahmoud and Hinson (2018) argue that weak AML practices not only attract punitive sanctions but also hinder long-term performance by compromising system integrity.

Existing studies tend to treat these financial control practices as compliance checklists rather than strategic performance drivers. Moreover, there is limited empirical evidence from Kenya's telecommunications industry linking revenue assurance and AML directly to organizational performance outcomes, especially when measured through indicators like NPS and market share. Previous research including Njuguna (2019) and Noor (2019) focused on general financial risks in sectors like insurance and transport, which do not face the unique transactional

and digital vulnerabilities of telecoms. Therefore, this study sought to fill a conceptual and contextual gap by examining the performance implications of financial control strategies tailored to Kenya's dynamic telecommunications sector.

### **3. OBJECTIVES**

The general objective was to determine the effect of Strategic Financial Control strategies on the performance of telecommunication firms in Kenya. The specific objectives were;

1. To determine the influence of Revenue Assurance on performance of telecommunication firms in Kenya
2. To establish the influence of Anti-Money Laundering (AML) practices on performance of telecommunication firms in Kenya

### **4. THEORETICAL REVIEW/ FRAMEWORK**

This study was guided by Transaction Cost Economics (TCE) which was applicable to Revenue Assurance and Institutional Theory; applicable to Anti-Money Laundering practices. Transaction Cost Economics (TCE), originally developed by Coase (1937) and later expanded by Williamson (1985), focuses on the cost of conducting transactions within and between organizations. The central tenet of TCE is that firms exist to minimize the costs associated with economic exchanges specifically, the costs of monitoring, enforcing, and coordinating contracts and transactions. These costs are often heightened in complex, information-sensitive environments like telecommunications, where services are intangible, recurring, and frequently bundled.

In the context of this study, revenue assurance aligns closely with the principles of TCE. Revenue assurance encompasses the systems, tools, and protocols that telecom firms deploy to identify, measure, and mitigate leakages across the revenue chain. Such leakages may arise due to system errors, fraudulent activities, or inefficient billing processes. According to Alshurideh et al. (2022), telecom firms that lack robust revenue assurance mechanisms experience higher transaction costs in the form of disputes, audits, and revenue reconciliation efforts. Conversely, firms with effective internal controls can reduce these costs significantly by detecting anomalies early and ensuring accuracy across their financial operations. TCE provides a theoretical lens for understanding why organizations internalize certain control processes instead of outsourcing them or relying solely on market enforcement. For instance, a telecom firm may choose to develop in-house AI-driven billing validation systems instead of depending on third-party audit firms (Alshurideh et al., 2022). This decision is based on the perceived reduction in transaction costs such as error correction, revenue loss, and reputational damage.

Furthermore, TCE helps explain the strategic importance of embedding revenue assurance into the organizational structure. It suggests that firms derive performance advantages by minimizing not just financial leakages but also the administrative burdens and relational frictions associated with correcting them. In Kenya's telecom environment characterized by rapid product innovation and a high volume of micro-transactions such efficiencies are critical to achieving sustainable performance. As the study findings indicate, firms with advanced revenue assurance practices demonstrated stronger performance, validating the TCE

proposition that minimizing internal inefficiencies leads to greater profitability and competitiveness.

Institutional Theory, as conceptualized by scholars such as DiMaggio and Powell (1983) and Scott (2008), explains how organizations conform to rules, norms, and expectations within their institutional environments in order to gain legitimacy, stability, and access to resources. It posits that organizational behavior is shaped not only by economic rationality but also by societal pressures, regulatory requirements, and industry standards. This theory provides a fitting framework for understanding the adoption of Anti-Money Laundering (AML) practices in the telecommunications sector. As telecom firms increasingly operate as quasi-financial institutions particularly through mobile money services they are subject to growing regulatory scrutiny. Regulatory bodies such as the Central Bank of Kenya and international entities like the Financial Action Task Force (FATF) have issued strict AML guidelines, including Know Your Customer (KYC) procedures, transaction monitoring, and suspicious activity reporting. Failure to comply can result in hefty fines, revocation of licenses, and reputational damage.

Institutional Theory suggests that telecom firms implement these AML controls not solely for internal efficiency but to align with institutional expectations and gain legitimacy in the eyes of regulators, customers, and investors. Mahmoud and Hinson (2018) observed that compliance in high-risk sectors is often driven by coercive pressures (regulations), mimetic pressures (industry benchmarking), and normative pressures (professional and ethical standards). These three forms of institutional isomorphism explain why Kenyan telecom firms, despite the resource-intensive nature of AML programs, continue to adopt and strengthen these practices. Moreover, the theory elucidates how AML practices evolve from being mere regulatory requirements to becoming embedded within organizational culture and governance structures. Over time, what begins as compliance becomes a standard of best practice, contributing to improved trust, operational transparency, and brand equity. The empirical findings of this study confirm that firms with strong AML systems report better performance outcomes not only in financial terms but also in customer satisfaction and market reputation.

Institutional Theory also explains variation in AML adoption across firms. For example, larger firms like Safaricom, with higher exposure and public scrutiny, face stronger coercive and normative pressures to lead in AML compliance. Smaller firms may follow suit due to mimetic pressures, attempting to mirror industry leaders. As regulatory frameworks tighten and public awareness grows, AML practices transition from optional to obligatory, and institutional alignment becomes a prerequisite for sustained success in the sector.

## **5. EMPIRICAL REVIEW**

### **Revenue assurance**

A methodological gap exists in the study by Sharma and Patel (2018), which employed a quantitative approach, utilizing financial data and revenue assurance metrics from a sample of telecommunication firms. While the study revealed a positive and statistically significant relationship between robust revenue assurance practices and enhanced organizational performance, it was limited by its exclusive reliance on financial metrics as the primary performance indicator. By focusing solely on financial stability and profitability, the study

overlooked other crucial dimensions of organizational effectiveness, such as customer satisfaction, operational efficiency, and market competitiveness. Additionally, the findings lacked generalizability due to regional variations and industry-specific contexts, highlighting the need for a broader approach that incorporates both financial and non-financial performance indicators.

Li and Wang (2020) attempted to address some of these limitations by adopting a mixed-methods approach, combining financial data analysis with qualitative interviews to assess the impact of revenue assurance on organizational performance. This study uncovered a nuanced relationship, emphasizing that the effectiveness of revenue assurance practices depended on their integration into the broader organizational strategy. However, a methodological gap arises due to the subjectivity of the qualitative component, where interpretation biases in interview responses may have affected the findings. Furthermore, while the study acknowledged the strategic alignment of revenue assurance, it did not extend its analysis to other critical risk management strategies such as anti-money laundering (AML) practices, business continuity frameworks, and risk transfer mechanisms, thereby presenting a conceptual gap in the examination of risk management as a holistic framework.

The methodological limitations in Chen et al.'s (2023) longitudinal study on revenue assurance practices and financial performance in telecommunications firms reveal significant research gaps. While the study compellingly demonstrates that firms adopting adaptive revenue assurance strategies achieve sustained financial improvements, its design fails to incorporate critical external variables such as macroeconomic fluctuations, evolving regulatory policies, and technological disruptions that may confound performance outcomes over time. Furthermore, the study's narrow focus on revenue assurance creates a conceptual void, as it does not examine how integrated risk management frameworks (e.g., fraud prevention, business continuity planning, and compliance controls) collectively influence organizational performance. Another notable limitation is its exclusive reliance on financial metrics, disregarding vital non-financial indicators including customer retention rates, service quality benchmarks, and market penetration that are equally critical in assessing telecommunications firm success.

Similarly, Ghazieh and Chebana's (2021) cross-continental study on risk management systems in European telecommunications firms exhibits contextual and conceptual gaps. Although their large-scale quantitative analysis (N=320 firms over 2005–2014) establishes a positive correlation between risk control systems and firm performance, its Eurocentric focus limits its applicability to Kenya's distinct regulatory, economic, and competitive environment. The study's emphasis on risk control variables rather than a holistic examination of proactive risk management strategies further restricts its theoretical contribution, as it does not elucidate the underlying mechanisms through which risk mitigation translates into performance gains. Given the divergent market dynamics between Europe and Kenya including disparities in regulatory stringency, financial risk exposure, and technological infrastructure there remains an imperative to contextualize such research within Kenya's telecommunications sector, tailoring risk management frameworks to address localized operational challenges.

### Anti-Money Laundering

Muriithi's (2013) research provides an empirical examination of the financial implications of anti-money laundering (AML) regulatory compliance within Kenya's banking sector. The study adopted a descriptive survey methodology, incorporating both primary and secondary data sources, with a sample comprising 31 commercial banks that responded to structured questionnaires. Data processing was executed using the Statistical Package for Social Sciences (SPSS), with results presented through descriptive statistics in tabular formats. Key findings revealed that AML compliance exerted substantial operational cost pressures, attributable to enhanced transaction monitoring protocols, elevated reporting obligations, and the administrative burden of regulatory adherence. Furthermore, the study identified that employee training initiatives aimed at improving suspicious transaction recognition capabilities contributed to escalated operational expenditures, which subsequently exerted downward pressure on overall institutional profitability. While these insights offer valuable contributions to the discourse on regulatory compliance economics, the study's exclusive focus on commercial banking institutions establishes a significant contextual limitation. This limitation becomes particularly salient when considering the telecommunications sector, where AML frameworks assume critical importance due to the proliferation of mobile money platforms and digital financial services, yet remain substantially under-researched in comparative contexts.

Expanding upon this line of inquiry, Mohamud (2017) conducted a longitudinal investigation into AML risk management efficacy across Kenya's commercial banking landscape. The research employed a descriptive analytical framework, incorporating a 12-year dataset (2005-2016) encompassing all licensed banking institutions. Methodologically, the study utilized multiple regression techniques to examine variable relationships, supplemented by multicollinearity diagnostics to ensure analytical robustness. The correlation analysis yielded a statistically significant positive association between suspicious transaction volume and financial performance ( $r=0.150$ ,  $p=0.042$ ), though subsequent regression modeling produced counterintuitive inverse relationships. Most notably, the research established a negative correlation between AML implementation costs and profitability metrics ( $r=-0.305$ ;  $p=0.035$ ), suggesting that compliance expenditures may function as a drag on financial performance. Despite these contributions, the study's confinement to the banking sector represents a notable research gap, particularly given the parallel AML compliance challenges faced by telecommunications providers in Kenya's rapidly evolving digital payments ecosystem.

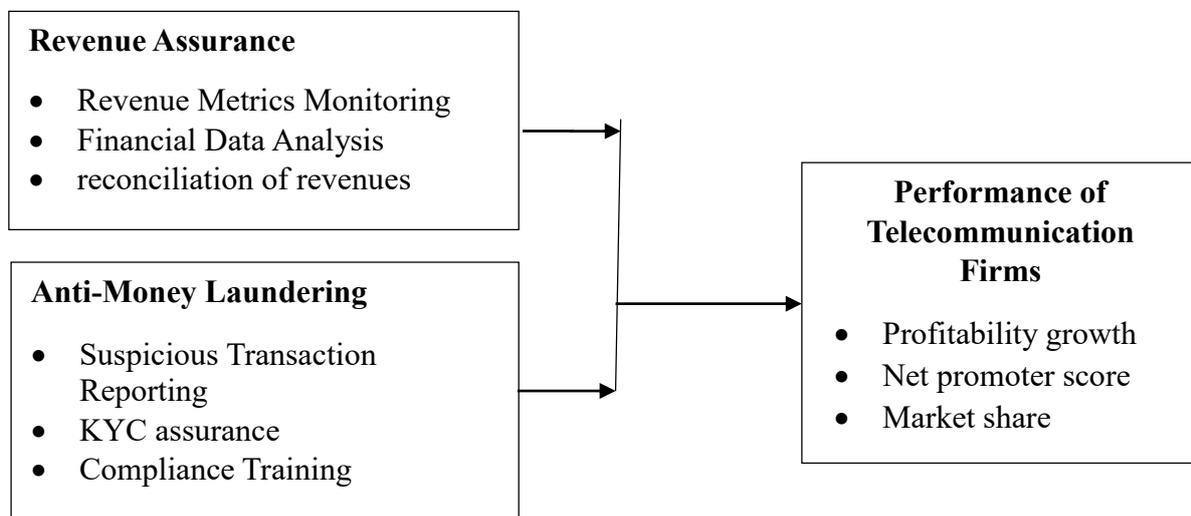
Transitioning to international contexts, Nunes et al. (2014) applied rational choice theory to examine money laundering motivations within China's financial system. Through an innovative methodological approach combining in-depth interviews with documentary analysis of judicial proceedings, the research uncovered that economic incentives constituted the primary driver of money laundering behaviors across both individual and corporate entities. While these findings provide valuable insights into offender decision-making processes, the study's exclusive focus on Chinese regulatory environments creates significant transferability constraints. The unique characteristics of Kenya's financial oversight mechanisms, economic conditions, and law enforcement capabilities suggest that direct application of these findings

would be methodologically unsound, thereby underscoring the need for context-specific research within East African markets.

Diversifying sectoral focus, Noor (2019) examined financial risk exposures within Mombasa County’s transport sector, incorporating money laundering as a component risk factor. The study’s methodological framework employed triangulation techniques, combining questionnaire data from senior management with documentary analysis of institutional records from the Kenya Transporters Association, county transport departments, and regulatory authorities. Analytical outcomes demonstrated positive correlations between composite financial risks (encompassing credit, liquidity, market, and foreign exchange exposures) and performance indicators (ROI/ROA). However, the study’s narrow conceptualization of money laundering as merely one element within financial risk spectrum, rather than examining AML as part of an integrated risk management paradigm, constrains its theoretical contribution. Furthermore, the transport sector focus creates contextual limitations regarding applicability to telecommunications firms, which face unique AML challenges stemming from their dual roles as financial service intermediaries and technology providers.

**6. CONCEPTUAL FRAMEWORK**

A conceptual framework is very important in research, as it helps in making the conceptual distinction and organizing ideas. In this study, the independent variables included revenue assurance practices and Anti-Money laundering practice while the dependent variable is organization performance. The relationship is depicted in the figure 1 below.



**Figure 1: Conceptual framework**

**7. RESEARCH METHODOLOGY**

This study employed a descriptive survey research design, a quantitative approach widely recognized for its effectiveness in collecting and analyzing data across large populations. The design is appropriate for assessing perceptions, behaviors, and organizational practices, particularly when the objective is to explore relationships between variables in real-world settings without manipulating any conditions. According to Morgan (2014), descriptive surveys enable the collection of standardized data that supports statistical comparison and hypothesis

testing. In this study, the approach facilitated the examination of how revenue assurance and anti-money laundering (AML) strategies influence the performance of telecommunication firms in Kenya.

Descriptive research is especially relevant where the aim is to investigate the prevalence and effects of certain practices in this case, financial control mechanisms within complex organizational environments. Orodho (2012) highlights that such designs are useful for documenting and explaining existing conditions or behaviors as they naturally occur. The methodology allowed the researcher to gather quantifiable evidence from managerial-level employees across selected firms, enabling an evidence-based evaluation of strategic financial controls and their impact on performance indicators such as profitability, compliance, and customer trust.

The study targeted three major telecommunications providers in Kenya: Safaricom, Airtel Kenya, and Telkom Kenya. These firms were selected through purposive sampling due to their dominance in the sector and their representation of diverse operational models. Together, they cover the vast majority of market share, customer base, and infrastructure investment in the Kenyan telecommunications industry, making them ideal for generating insights applicable to the sector as a whole.

The unit of analysis in the study was the organization that is, each of the three selected telecommunication firms. However, the unit of observation comprised individual managerial staff within these organizations. Managers were chosen because of their involvement in strategic decision-making and their familiarity with revenue assurance and AML practices. Their roles provided them with the necessary insight into how these financial controls are implemented and how they relate to organizational performance outcomes. According to the Communications Authority of Kenya (CAK, 2019), these firms collectively employ over 1,200 management-level personnel, forming a comprehensive base for data collection.

To determine the appropriate sample size from this target population, the researcher used Nassiuma's (2000) formula, which accounts for population variability and sampling precision. Based on this method, a sample of 190 respondents was drawn from the total management population of 1,200, using a coefficient of variation of 0.3 and a margin of error of 0.02. To ensure proportionate representation, stratified sampling was employed, grouping participants according to the firms they work for. This technique, as explained by Kothari (2012), enhances the reliability and validity of the findings by capturing diversity within the population and ensuring that all subgroups are appropriately represented.

Data collection was conducted using semi-structured questionnaires, which combined closed-ended Likert scale items with a few open-ended questions. The closed-ended items were rated on a five-point scale, ranging from "strongly disagree" to "strongly agree," to quantify respondents' perceptions of revenue assurance and AML practices and their impact on organizational performance. The open-ended components provided qualitative depth, enabling respondents to elaborate on their answers or share additional perspectives. This mixed format ensured that both standardized data and richer narrative insights could be collected efficiently.

Before deploying the questionnaires for the main study, a pilot test was conducted with a subset of 19 respondents drawn from smaller telecommunications companies that were not included in the primary research. This represented 10% of the intended sample size, as recommended by Saunders et al. (2018). The pilot study helped assess the clarity, reliability, and validity of the instrument, ensuring that the final version would yield consistent and relevant data.

Validity was assessed through multiple lenses, including content, construct, face, and criterion validity. Content validity was established through literature review and expert evaluation to ensure that the questionnaire comprehensively addressed the study variables. Construct validity was achieved by aligning questionnaire items with established theoretical definitions of revenue assurance, AML, and organizational performance. Face validity was evaluated during the pilot phase to confirm that the questions were clear and relevant to respondents. Criterion validity involved comparing questionnaire results with existing organizational performance metrics and industry benchmarks from CAK.

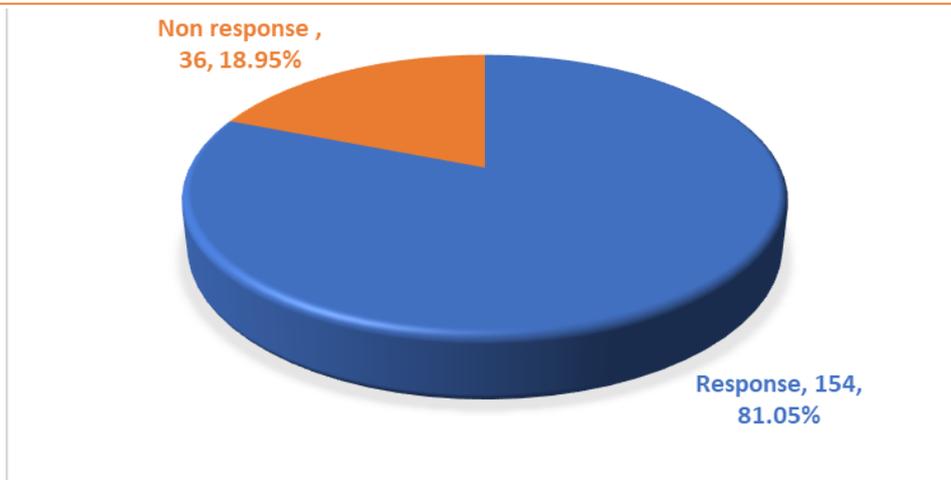
Reliability was measured using Cronbach's Alpha, a statistical test for internal consistency. A threshold of 0.70 was used, with any items falling below this value revised or eliminated to ensure the instrument's dependability. This method of reliability testing is widely accepted in quantitative studies involving multiple-item scales (Tavakol & Dennick, 2011).

Data analysis was performed using SPSS Version 27. Descriptive statistics such as means, standard deviations, and frequency distributions were used to summarize the data. To examine relationships between variables, Pearson's correlation and multiple regression analysis were applied. These methods enabled the researcher to determine the strength and direction of associations between revenue assurance, AML practices, and firm performance. A significance level of 0.05 was adopted to test the statistical validity of the results. Ethical approval was obtained from the appropriate university research ethics board, and permission to conduct the study was secured from all participating firms. Informed consent was obtained from all respondents, with assurances of confidentiality, anonymity, and voluntary participation. Data were securely stored and used solely for academic purposes.

## **8. RESULTS AND DISCUSSIONS**

### **Response Rate**

The researcher distributed 190 questionnaires to target respondents across Safaricom, Airtel Kenya, and Telkom Kenya. Out of these, 154 were successfully completed and returned, resulting in a response rate of 81.05%, as illustrated in Figure 1 below. This high response rate reflects strong engagement from the selected participants and enhances the reliability of the findings. According to Mohajan (2020), a response rate exceeding 70% is considered significantly sufficient for conducting statistical analysis, ensuring that the data collected is both valid and representative of the study population.



**Figure 1: Response Rate**

**Descriptive statistics for Revenue Assurance**

The descriptive analysis of revenue assurance among Kenyan telecommunication is shown in table 1 below;

**Table 2: Descriptive statistics for revenue assurance**

Statement	Mean	SD
Our organization monitors all forms of financial services usage and reconciles with expected or normalized usage	4.43	.64
Our organization examines the services contracted and supplied to ensure consistency	4.48	.63
We ensure the management of business assets and related costs are aligned with performance goals	4.37	.88
Our organization has strategies to optimize timely and cost-effective management of receivables to enhance cash flow	4.06	1.05
We have developed robust strategies to ensure network integrity and minimize revenue leakage	4.08	1.04
We perform reconciliation of various streams, ensuring all revenue channels are tracked and verified	4.28	.80

The descriptive statistics reveal strong implementation of revenue assurance practices among Kenyan telecommunication firms, with all surveyed items scoring mean values above 4.0 on a Likert scale, indicating widespread adoption. The highest-rated practice was ensuring consistency between contracted and supplied services (mean = 4.48, SD = 0.63), demonstrating near-universal recognition of its importance in safeguarding revenue flows. Close behind were monitoring and reconciling financial service usage (mean = 4.43, SD = 0.64) and aligning asset management with performance goals (mean = 4.37, SD = 0.88), both showing strong consensus on their critical role in organizational risk management.

Revenue stream reconciliation also scored highly (mean = 4.28, SD = 0.80), reflecting sector-wide efforts to track and verify diverse income channels. Slightly lower but still robust scores were observed for receivables management (mean = 4.06, SD = 1.05) and network integrity

strategies (mean = 4.08, SD = 1.04), where greater variability in responses suggests differences in implementation maturity across firms. The higher standard deviations for these items indicate that while most companies prioritize them, some exhibit less consistency, potentially due to varying technological capabilities or strategic focus.

Overall, the findings demonstrate a strong institutional commitment to revenue assurance, with firms actively employing monitoring, reconciliation, and cost alignment to minimize leakage and enhance financial stability. However, the variability in certain areas highlights opportunities for further standardization, particularly in receivables management and network integrity. These results align with existing literature, such as Sharma and Patel (2018), who linked rigorous revenue assurance to improved financial performance, and Li and Wang (2020), who emphasized its strategic integration. The study underscores how Kenyan telecom firms embed these practices into core operations to bolster competitiveness in a dynamic industry.

**Descriptive statistics for AML practices**

The descriptive statistics for AML are presented in table 2 below;

**Table 2: Descriptive Statistics for AML**

<b>Statement</b>	<b>Mean</b>	<b>SD</b>
We have a KYC assurance system where we identify and verify all our clients to comply with regulatory standards	4.52	.75
Our systems effectively monitor all transactions with clients and raise an alarm for suspicious activities	4.25	.97
The systems and employees regularly update a watch list for suspicious clients and transactions	4.29	1.12
We conduct thorough verification of clients before registration with money services to ensure legitimacy	4.25	.95
We have a suspicious activity reporting system that encourages employees to report red flags promptly	4.41	.85

The descriptive statistics demonstrate robust implementation of anti-money laundering (AML) practices across Kenyan telecommunications firms, with all surveyed items scoring mean values between 4.25 and 4.52, reflecting widespread adoption. The highest-rated practice was the existence of a Know Your Customer (KYC) assurance system (mean = 4.52, SD = 0.75), underscoring the sector's strong emphasis on client identification and verification as foundational compliance measures. This aligns with regulatory requirements and reflects the industry's proactive stance against identity fraud.

Closely following was the presence of a suspicious activity reporting system (mean = 4.41, SD = 0.85), indicating a well-established culture of internal surveillance where employees are encouraged to report anomalies. Transaction monitoring and client verification before registration both scored means of 4.25 (SD = 0.97 and 0.95, respectively), showing that firms actively track financial activities and validate user legitimacy to prevent misuse of services. The regular updating of watchlists for suspicious clients (mean = 4.29, SD = 1.12) further

highlights systematic efforts to maintain vigilance, though the slightly higher standard deviation suggests some variability in implementation rigor across firms.

Overall, the findings reveal a sector-wide commitment to AML compliance, with firms integrating advanced monitoring, reporting, and verification systems to mitigate financial crime risks. These practices not only fulfill regulatory obligations but also enhance operational integrity in Kenya's rapidly evolving digital financial landscape. The results align with existing literature, such as Mohamud (2017), who noted the benefits of transaction monitoring in financial performance, and Hayble-Gomes (2016), who emphasized the importance of technological modernization in AML frameworks. While compliance costs remain a consideration, the telecom sector appears to leverage scalable digital solutions to maintain efficiency. The study thus positions AML not just as a regulatory necessity but as a strategic enabler of trust and stability in the convergence of telecommunications and financial services.

### Correlation of Study Variables

Correlation analysis is a statistical technique used to determine the strength and direction of the linear relationship between two variables (Mugenda & Mugenda, 2003). It helps identify whether an increase or decrease in one variable corresponds with an increase or decrease in another. In this study, Pearson's correlation coefficient ( $r$ ) was employed to assess the degree of linear association between each risk management strategies (independent variables) and the performance of telecommunication firms (dependent variable). Pearson correlation values range from -1 to +1, where values closer to +1 indicate a strong positive relationship, values closer to -1 indicate a strong negative relationship, and values near 0 imply no linear relationship (Kothari, 2014). The results are shown on table 3 below;

**Table 3: Correlation Analysis**

		<b>Revenue Assurance</b>	<b>Anti-money laundering</b>	<b>Performance of Telecommunication Firms</b>
Revenue Assurance	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	154		
Anti-money laundering	Pearson Correlation	.523**	1	
	Sig. (2-tailed)	.000		
	N	154	154	
Performance of Telecommunication Firms	Pearson Correlation	.287**	.396**	1
	Sig. (2-tailed)	.000	.000	
	N	154	154	154

The findings show a positive significant correlation between Revenue Assurance and Performance of Telecommunication Firms, with a Pearson correlation coefficient of  $r = .287$ , and a  $p$ -value  $< 0.05$ . This indicates that enhanced revenue assurance practices, such as monitoring revenue streams and reconciling financial records, are associated with improved firm performance. Similarly, Anti-Money Laundering (AML) practices demonstrated a positive

significant correlation with performance ( $r = .396, p < 0.05$ ), suggesting that the implementation of compliance mechanisms such as KYC processes and suspicious activity monitoring contributes to improved customer trust and operational reliability, which are reflected in better performance outcomes.

**Regression analysis**

The results of the regression analysis between the two independent variables Revenue Assurance and Anti-Money Laundering (AML) practices and the dependent variable, Performance of Telecommunication Firms, are presented across three tables: the model summary, ANOVA, and regression coefficients. These tables provide a comprehensive statistical interpretation of the predictive power, model significance, and the individual contributions of each predictor to firm performance.

Starting with the model summary (Table 4), the regression analysis produced a multiple correlation coefficient (R) of 0.711, indicating a strong positive relationship between the combination of revenue assurance and AML practices and the performance of telecommunication firms. The R-squared value is 0.506, which means that approximately 50.6% of the variation in performance among the telecommunication firms can be explained by the two predictors. The adjusted R-squared, which accounts for the number of predictors and sample size, is 0.499. This still reflects a relatively strong explanatory power, confirming that nearly half of the changes in organizational performance can be attributed to strategic financial control strategies.

**Table 4: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.711 <sup>a</sup>	.506	.499	3.62018

a. Predictors: (Constant), Revenue assurance, AML

The ANOVA table (Table 5) further confirms the model's statistical significance. The F-statistic is 77.241 with a p-value of .000, indicating that the regression model is statistically significant at the 0.05 level. In other words, the combined influence of revenue assurance and AML practices on performance is not due to chance. The large F-value suggests that the model explains a substantial amount of variation in firm performance.

**Table 5: ANOVA**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2024.605	2	1012.302	77.241	.000 <sup>b</sup>
	Residual	1978.960	151	13.106		
	Total	4003.565	153			

a. Dependent Variable: Performance of Telecommunication Firms  
 b. Predictors: (Constant), Revenue assurance, AML

The regression coefficients table (Table 6) provides insight into the individual contribution and significance of each predictor variable.

**Table 6: Regression Coefficients**

Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Coefficients Beta		
1	(Constant)	4.432	2.114		2.096	.000
	Revenue Assurance	.852	.057	.672	14.912	.000
	AML	.328	.047	.314	6.968	.000

a. Dependent Variable: Performance of Telecommunication Firms

The constant value (intercept) is 4.432, meaning that when both predictors are zero, the model predicts a baseline performance score of approximately 4.43. More importantly, the unstandardized coefficient for Revenue Assurance is 0.852, with a very low standard error (0.057) and a high t-value (14.912). The corresponding p-value (.000) confirms that revenue assurance is a statistically significant predictor of firm performance. The standardized beta coefficient of 0.672 indicates that revenue assurance has the greatest relative influence on performance compared to AML. This suggests that improvements in revenue assurance practices such as reducing billing errors, preventing revenue leakages, and enhancing billing transparency lead to substantial gains in firm performance.

The AML variable also shows a significant positive effect, with an unstandardized coefficient of 0.328, a t-value of 6.968, and a p-value of .000. Although the coefficient is lower than that of revenue assurance, it is still statistically significant, indicating that AML practices contribute meaningfully to organizational performance. The standardized beta for AML is 0.314, reflecting a moderate effect. This means that enhancements in AML practices such as more stringent KYC procedures, transaction monitoring, and suspicious activity reporting support compliance, reduce regulatory risk, and foster customer trust, all of which contribute positively to performance.

## 9. CONCLUSIONS

The first objective of the study sought to examine the effect of Revenue Assurance on the performance of telecommunication firms in Kenya. The findings revealed that revenue assurance had a strong and statistically significant influence on firm performance. Correlation analysis confirmed a positive significant relationship between revenue assurance and performance. Further, regression analysis revealed that revenue assurance had the highest standardized beta coefficient indicating it was the most impactful predictor of performance. These findings suggest that when firms apply systematic revenue assurance mechanisms, they are better positioned to improve profitability, efficiency, and customer satisfaction. The second objective of the study sought to assess the effect of Anti-Money Laundering (AML) practices on the performance of telecommunication firms in Kenya. The study found that AML practices significantly contributed to organizational performance. Pearson correlation showed a positive significant relationship between AML practices and firm performance. The regression coefficient further confirmed that AML practices exerted a meaningful influence on

performance outcomes. These findings support the notion that robust AML systems help reduce reputational risk, enhance compliance efficiency, and improve customer loyalty all of which contribute to performance growth.

## 10. RECOMMENDATIONS

To begin with, telecommunication firms should prioritize the strengthening of their revenue assurance frameworks. The study revealed that revenue assurance had the highest positive influence on firm performance, indicating that it is a critical determinant of financial stability. Companies should invest in advanced digital tools and real-time monitoring systems to track and reconcile all revenue streams especially those from complex services like mobile money, voice, data, and digital content. Further, firms should ensure the continuous alignment of asset utilization with revenue goals, eliminate system inefficiencies, and institutionalize periodic audits. These steps will minimize revenue leakage, enhance profitability, and ensure long-term sustainability. Moreover, firms should intensify their focus on Anti-Money Laundering (AML) compliance, particularly as they continue to operate in financial service spaces through mobile payments, airtime credit, and digital wallets. The results showed that AML practices significantly contribute to improved performance by reducing regulatory risks and building consumer trust. Telecommunication companies should therefore ensure that their Know Your Customer (KYC) procedures are up-to-date, automated, and linked to national identity systems. Transaction monitoring systems should be designed to flag unusual behavior in real-time, while employee training on AML reporting protocols should be routine and comprehensive. Importantly, companies must foster a strong ethical culture that promotes accountability and regulatory compliance across all departments.

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