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Ware Adan Wario, Dr. Godfrey K. Makau, PhD and **Dr. Musangi Mutua, PhD**

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Ware Adan Wario

Corresponding Author, Jomo Kenyatta University of Agriculture and Technology

Dr. Godfrey K. Makau, PhD

Lecturer, Entrepreneurship and Procurement Department, School of Business and Entrepreneurship, Jomo Kenyatta University of Agriculture and Technology

Dr. Musangi Mutua, PhD

Lecturer, Entrepreneurship and Procurement Department, School of Business and Entrepreneurship, Jomo Kenyatta University of Agriculture and Technology

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Abstract:

***Purpose of the Study*:** The purpose of this study was to determine the influence of online tax compliance ICT strategic capability factors on digital tax administration strategy performance in Kenya, focusing on the Kenya Revenue Authority (KRA). The study examined how e-filing, e-payment systems, user-friendly platforms, third-party information monitoring, and human-factor management contribute to improved digital tax administration outcomes.

***Methodology*:** The study adopted a descriptive research design based on a positivist philosophy. A sample of 306 KRA staff was selected from a target population of 1,700 employees at Times Tower Headquarters. Data were collected using semi-structured questionnaires and analysed using SPSS Version 21 through descriptive statistics, factor analysis, ANOVA, and regression analysis.

***Findings*:** The findings revealed that online tax compliance ICT strategic capability factors significantly and positively influence digital tax administration strategy performance in Kenya. The study established that e-filing and e-payment facilitation, user-friendly compliance systems, third-party information monitoring, and strategic human-factor management contribute to enhanced digital tax administration outcomes. Regression results showed a significant relationship between ICT strategic capability and performance ($\beta = 0.326$, $p < 0.001$), with the model explaining 58.0% of the variation in digital tax administration strategy performance ($R^2 = 0.580$). Respondents reported strong implementation of ICT capabilities and positive perceptions regarding efficiency, equity, simplicity, flexibility, and effectiveness.

***Conclusion*:** The study concludes that ICT strategic capabilities are essential drivers of digital tax administration strategy performance at KRA. Sustained investment in digital infrastructure, taxpayer support systems, and human-factor management is necessary to strengthen compliance outcomes.

Keywords: *Online Tax Compliance, ICT Strategic Capability, Digital Tax Administration, Kenya Revenue Authority, E-Filing, E-Payment.*

1.0 INTRODUCTION

1.1 Background of the Study

The rapid expansion of digital technologies in public financial management has fundamentally altered how governments administer taxes and how taxpayers fulfil their obligations. Across the world, tax authorities are investing in information and communication technology (ICT) capabilities to modernise revenue collection, reduce compliance costs, and improve efficiency. According to the Organisation for Economic Co-operation and Development (OECD, 2021), electronic filing and payment systems have been adopted in over 90% of OECD member countries as part of broader digital transformation strategies in tax administration. These developments reflect a global consensus that ICT is no longer an optional supplement to tax administration but a central strategic capability.

In Africa, revenue authorities are increasingly adopting digital platforms to address systemic challenges such as tax evasion, low compliance rates, and administrative inefficiencies. The African Tax Administration Forum (ATAF, 2022) observes that digital tax administration tools—including e-filing portals, electronic fiscal devices (EFDs), and taxpayer service platforms—have contributed to measurable gains in tax revenue and compliance in countries such as Rwanda, Ghana, and South Africa. However, the adoption of these tools remains uneven, and their effectiveness is contingent on the quality of ICT strategic capabilities that revenue authorities develop and deploy.

In Kenya, the Kenya Revenue Authority (KRA) has undertaken significant digital reforms over the past decade. The introduction of the iTax system in 2014 represented a landmark shift toward integrated digital tax administration, enabling online registration, filing, and payment of taxes (KRA, 2020). Subsequent innovations, including the Electronic Tax Invoice Management System (eTIMS) and data analytics platforms for compliance monitoring, have reinforced KRA's ICT strategic posture. Despite these reforms, challenges persist in terms of taxpayer adoption, system reliability, and equitable access to digital services, particularly among small and medium enterprises (Muthuri et al., 2025).

The concept of ICT strategic capability refers to the organisational capacity to deploy, integrate, and exploit ICT resources in ways that generate sustained competitive or institutional advantage (Barney, 2011). For a revenue authority such as KRA, ICT strategic capabilities encompass the ability to monitor compliance using third-party data, facilitate e-filing and e-payment, deploy user-friendly taxpayer platforms, and manage the human and strategic factors that determine whether digital tools produce the intended outcomes. These capabilities are central to the performance of digital tax administration strategies, which are evaluated along dimensions of efficiency, equity, simplicity, flexibility, effectiveness, and fairness (Belahouaoui & Attak, 2024).

Globally, evidence suggests that revenue authorities with well-developed ICT strategic capabilities demonstrate superior tax administration performance. Okunogbe and Pouliquen (2022) document that countries leveraging third-party data analytics for compliance monitoring have achieved significant reductions in tax gaps. Similarly, Wambua (2026) demonstrate that the deployment of user-friendly digital systems reduces taxpayer compliance costs and increases voluntary

compliance. In Kenya, however, empirical evidence on the specific ICT strategic capability factors that drive digital tax administration strategy performance remains limited, particularly at the organisational level of KRA.

This study therefore examines the influence of online tax compliance ICT strategic capability factors on digital tax administration strategy performance in Kenya, with a focus on KRA's Times Tower Headquarters. By investigating four strategic ICT capability dimensions—monitoring compliance through third-party information systems, facilitating compliance through user-friendly platforms, enabling e-filing and e-payment services, and managing strategic and human factors—the study contributes empirical evidence to inform policy and practice in Kenya's digital tax administration landscape.

1.2 Statement of the Problem

The Kenyan government has invested substantially in ICT-driven tax administration reforms to broaden the tax base, enhance compliance, and improve revenue collection. KRA's digital platforms, particularly the iTax system and eTIMS, represent significant institutional commitments to leveraging ICT in tax administration (KRA, 2021). Yet, despite these investments, tax compliance rates in Kenya remain below the expected thresholds, and the revenue authority continues to grapple with challenges related to taxpayer adoption of digital tools, system-related inefficiencies, and persistent gaps between tax potential and actual collection.

Several studies have examined aspects of digital tax administration in Kenya. Mwansa and Phiri (2025) investigated barriers to e-filing adoption among small taxpayers, while Kapkai et al. (2021) explored enforcement challenges in the digital tax environment. However, these studies do not provide a comprehensive analysis of the ICT strategic capability factors that collectively determine digital tax administration strategy performance at KRA. Specifically, there is limited empirical evidence linking the four identified ICT capability dimensions—third-party compliance monitoring, user-friendly system deployment, e-filing and e-payment facilitation, and strategic and human-factor management—to measurable performance outcomes of KRA's digital tax administration strategy.

Sari et al. (2026) highlight that the effectiveness of digital tax tools depends not only on their technical features but also on the strategic capabilities that revenue authorities develop to deploy and sustain these tools. Younus et al. (2025) further underscore that user-friendly systems and proactive taxpayer engagement are essential complements to the technical infrastructure of digital tax administration. In the absence of context-specific evidence, KRA and policymakers lack a sound empirical basis for prioritising investments in the ICT capabilities that most significantly drive digital tax administration performance. This study addresses this gap by examining the influence of online tax compliance ICT strategic capability factors on digital tax administration strategy performance in Kenya.

1.3 Purpose of the Study

The purpose of this study was to determine the influence of online tax compliance ICT strategic capability factors on digital tax administration strategy performance in Kenya, with a focus on Kenya Revenue Authority.

1.4 Research Question

What are the online tax compliance ICT strategic capability factors influencing digital tax administration strategy performance in Kenya, and in which ways do these factors exert their influence?

2.0 LITERATURE REVIEW

2.1 Theoretical Framework: Resource-Based Theory

The Resource-Based Theory (RBT) was developed through the efforts of economists and strategic management scholars seeking to understand the internal factors that account for sustained differences in firm performance. The seminal work of Barney (1991) established the foundational argument that a firm's unique collection of valuable, rare, inimitable, and non-substitutable (VRIN) resources constitutes the primary source of sustained competitive advantage. According to Jancenelle (2021), resources may be either tangible, such as ICT infrastructure, financial capital, plant, and equipment, or intangible, such as human capital, organisational culture, and institutional reputation. The capacity to identify, develop, and strategically deploy these resources distinguishes high-performing organisations from their peers.

Proponents of RBT argue that an organisation's internal resource base, rather than external market positioning, is the primary driver of long-term performance Oria et al. (2021) affirm that RBT provides a robust lens for examining how organisations leverage unique internal capabilities to sustain performance advantages over time. In the context of digital tax administration, RBT offers a compelling theoretical basis for understanding how KRA's ICT strategic capabilities—encompassing e-filing systems, compliance monitoring tools, user-friendly platforms, and human factor management strategies—constitute internal resources that drive the performance of KRA's digital tax administration strategy.

Bruno et al. (2024) extend the RBT framework by emphasising the role of dynamic capabilities in enabling organisations to continuously reconfigure their resource base in response to environmental changes. For a revenue authority operating in a rapidly evolving digital economy, the ability to update and align ICT capabilities with changing taxpayer behaviour and technological landscapes is critical. This study applies RBT to explain how KRA's deployment and exploitation of its ICT strategic capabilities—specifically the four capability dimensions identified in this study—generate sustained improvements in digital tax administration strategy performance. The theory is particularly relevant because it positions ICT capabilities not merely as operational tools but as strategic resources whose value, rarity, and non-substitutability determine KRA's competitive advantage in revenue mobilisation.

2.2 Empirical Review

2.2.1 Online Tax Compliance ICT Strategic Capability Factors

Online tax compliance ICT strategic capability refers to the organised set of digital tools, systems, and management competencies that a revenue authority deploys to facilitate, monitor, and enhance taxpayer compliance through digital means. In the Kenyan context, Kiprono et al. (2023) identify persistent tax enforcement challenges that underscore the importance of ICT-driven compliance strategies. Four main ICT strategic capability dimensions are examined in this study.

Monitoring Compliance Through Access to Third-Party Information: The use of third-party data represents one of the most powerful ICT capabilities available to modern revenue authorities. Abd et al. (2025) demonstrate that digital technologies generate large volumes of transactional data from third parties, including banks, employers, and digital payment platforms, which tax authorities can harness to monitor taxpayer compliance and detect evasion. Advanced data analytics tools enable automated cross-referencing of VAT returns, income declarations, and third-party financial reports, thereby reducing information asymmetries between taxpayers and the revenue authority. KRA's adoption of such tools through the iTax system and the integration of mobile money and banking data represents a critical strategic ICT capability that has measurably improved compliance monitoring outcomes.

Facilitating Compliance Through User-Friendly Systems: Hesami et al. (2024) argue that a fundamental application of ICT in taxation is to improve the taxpayer experience by reducing the complexity and cost of meeting compliance obligations. Revenue authorities that adopt a service orientation towards taxpayers—providing accessible, intuitive digital platforms—are more likely to achieve higher voluntary compliance rates. The Claude (2024) observes that tax authorities are progressively deploying taxpayer-facing digital services, including comprehensive online guidance, transaction histories, SMS and email reminders, and mobile applications. In Kenya, KRA's iTax portal and associated mobile platforms represent significant investments in user-friendly compliance facilitation. However, Umbet et al. (2025) caution that impersonal digital systems may reduce the social accountability of taxpayers if not complemented by robust engagement and education strategies.

Facilitating E-Filing and E-Payment Tax Services**:** KRA (2025) characterises electronic filing and payment as the most widely adopted form of digital tax administration, enabling taxpayers to fulfil their obligations remotely, reducing travel and queuing costs, and limiting opportunities for corrupt interactions with tax officials. E-filing systems allow taxpayers to submit returns, attach supporting documents, track filing history, and access refunds through web and mobile portals. E-payment platforms, including mobile money, credit card gateways, and electronic fund transfers, provide seamless mechanisms for tax remittance. In Kenya, the rollout of iTax e-filing and the integration of mobile money platforms have significantly reduced compliance transaction costs (KRA, 2025). Alm (2021) notes that the effectiveness of e-filing and e-payment systems is, however, contingent on reliable digital infrastructure and consistent taxpayer education.

Management of Strategic and Human Factors**:** Bassey et al. (2022) identifies the strategic and human dimensions as the most critical and frequently overlooked aspects of digital tax administration. Technology is effective only to the extent that both taxpayers and tax officials adopt and use it as intended. Barriers to adoption include limited digital literacy, high

implementation costs, inadequate training, and resistance to change. Longo and Kenya (2025) reviewed evidence from seven studies across Kenya and Tanzania and found that lack of training was the most commonly cited challenge to the adoption of electronic fiscal devices (EFDs). Nshimirimana and Twesigye (2022) documented in Rwanda that smaller taxpayers experience disproportionate difficulties with digital tax tools due to their complexity and associated costs. Susano et al. (2023) recommend that revenue authorities develop comprehensive digital tax administration strategies that include structured communication protocols, training needs assessments, capacity building programmes, and explicit resource deployment plans to address human factor challenges and drive adoption.

2.2.2 Digital Tax Administration Strategy Performance

Digital tax administration strategy performance refers to the degree to which a revenue authority's ICT-enabled tax administration strategy achieves its intended objectives of revenue mobilisation, compliance facilitation, and administrative efficiency. Juan et al. (2025) affirms that the general principles of taxation articulated by Adam Smith—neutrality, economy, equity, simplicity, and flexibility—provide the normative framework for evaluating the performance of both conventional and digital tax systems.

Efficiency and economy are assessed by examining whether the administrative and compliance costs of the digital tax system are proportionate to the revenue it generates. Maharani (2025) argues that a well-designed digital tax system should reduce compliance burdens for taxpayers while lowering collection costs for the revenue authority. Equity is evaluated in terms of whether the digital tax system treats all taxpayers fairly and consistently, regardless of the sector or size of their transactions. Certainty and simplicity are assessed by the degree to which the system's rules and procedures are clear, predictable, and accessible to all categories of taxpayers. Flexibility measures the system's capacity to adapt to changes in the business and technological environment. Effectiveness and fairness assess whether the system achieves its revenue mobilisation objectives without creating perverse incentives or discriminatory outcomes.

Saptono et al. (2024) underscores that complexity in tax policy design remains a significant weakness across African tax systems, deterring compliance and creating opportunities for evasion. Saptono et al. (2024) further contends that administrative complexity and the associated compliance burdens are significant drivers of corruption in African revenue administration. These insights highlight the importance of measuring KRA's digital tax administration strategy performance not only in terms of technical functionality but also against the broader principles of equity, simplicity, and effectiveness that determine its legitimacy and long-term sustainability.

2.3 Conceptual Framework

A conceptual framework is a structured representation of the key variables in a study and the presumed relationships among them. He (2025) describe a conceptual framework as a visual or written product that articulates the main concepts to be investigated and the theoretical logic linking them. In this study, the independent variable is online tax compliance ICT strategic capability, operationalised through four dimensions: monitoring compliance through third-party information systems, facilitating compliance through user-friendly platforms, enabling e-filing and

e-payment services, and managing strategic and human factors. The dependent variable is digital tax administration strategy performance, measured through six dimensions: efficiency and economy, equity, simplicity, flexibility, effectiveness, and fairness. The conceptual framework posits that improvements in each of the four ICT strategic capability dimensions will generate corresponding improvements in digital tax administration strategy performance, mediated by the institutional capacity of KRA to deploy and sustain these capabilities.

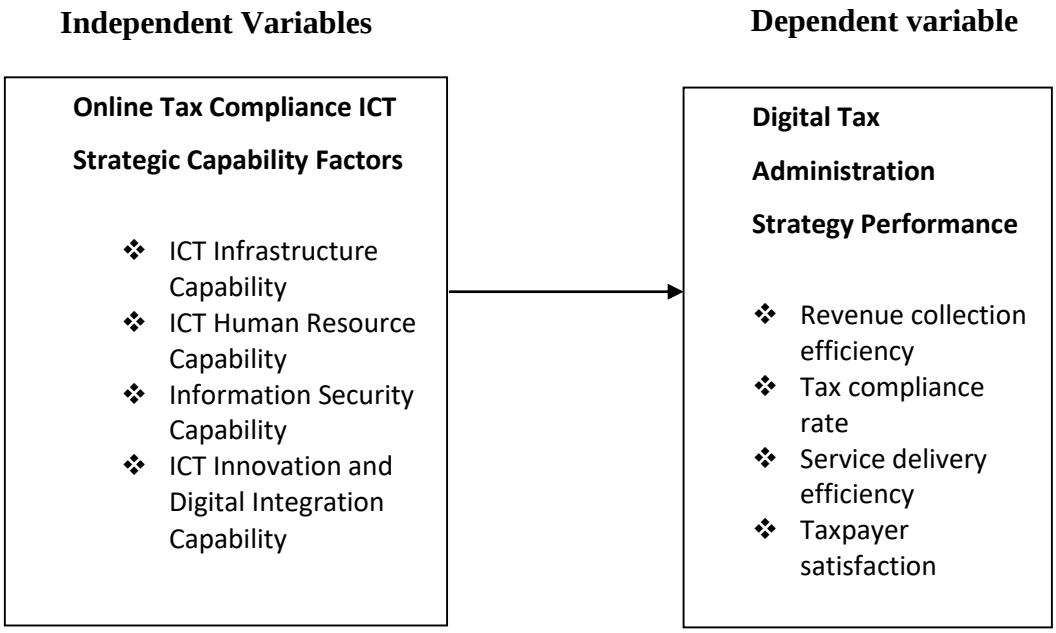

Figure 1: Conceptual Framework

3.0 RESEARCH METHODOLOGY

This study adopted a descriptive research design grounded in the positivist research philosophy to examine the influence of online tax compliance ICT strategic capability factors on digital tax administration strategy performance in Kenya. The target population comprised Kenya Revenue Authority (KRA) staff involved in digital tax administration at Times Tower Headquarters. A sampling frame of 1,700 employees drawn from the Customs Services, Domestic Taxes, and Investigations and Enforcement departments was used. A sample of 306 respondents was selected through purposive sampling to ensure the participation of officers with direct experience in digital tax administration and ICT-enabled compliance systems. Primary data were collected using semi-structured questionnaires containing both closed-ended and open-ended items, while secondary data were obtained from KRA records and published reports. Data collection was conducted following the receipt of all necessary research authorisations and institutional approvals. The study operationalised online tax compliance ICT strategic capability through indicators such as user-friendly compliance systems, e-filing and e-payment services, and compliance monitoring using third-party information. Digital tax administration strategy performance was measured using efficiency, equity, simplicity, convenience, effectiveness, and fairness indicators. Data were analysed using SPSS Version 21 through descriptive statistics, content analysis, factor analysis, ANOVA, and multiple linear regression to determine the influence of online tax compliance ICT strategic capability factors on digital tax administration strategy performance in Kenya.

4.0 RESEARCH FINDINGS AND DISCUSSION

4.1 Response Rate

Of the 275 questionnaires distributed during fieldwork, 257 were duly completed and returned, representing a response rate of 93%. According to Mugenda and Mugenda (2013), a response rate of 70% or above is considered excellent, indicating a high level of participant engagement and reliability of the data collected. The achieved response rate of 93% therefore provides a robust and representative data set for analysis.

Table 4.1: Response Rate

Questionnaires	Frequency	Percent
Responded	257	93.0%
Un-responded	18	7.0%
Total	275	100.0%

4.2 Descriptive Analysis of Online Tax Compliance ICT Strategic Capability Factors

Respondents were asked to evaluate KRA's implementation of four ICT strategic capability dimensions related to online tax compliance. The results, summarised in Table 4.2, indicate generally positive assessments across all four dimensions.

A majority of respondents (80.3%) affirmed that KRA consistently employs various measures to facilitate e-filing and e-payment tax services, thereby enhancing online tax compliance among taxpayers, with only 3.1% expressing disagreement (M = 3.827, SD = 0.717). This finding is consistent with the OECD (2021) framework, which identifies e-filing and e-payment systems as the most transformative ICT capability in modern tax administration, owing to their capacity to reduce transaction costs and improve compliance transparency. Furthermore, 79.8% of respondents reported that KRA has effective systems and management strategies that address strategic and human-factor challenges, improving online tax compliance, while a small proportion (3.1%) held a contrary view (M = 3.761, SD = 0.676). This result affirms the emphasis placed by Abd et al. (2025) and Belahouaoui and Attak (2024) on human-factor management as a critical complement to technical ICT investments in revenue administration.

Approximately 74.8% of respondents confirmed that KRA regularly promotes compliance by deploying user-friendly systems (M = 3.843, SD = 0.736), supporting the argument of Das et al. (2022) that taxpayer-centred digital interfaces are a significant driver of voluntary compliance. Additionally, 67.6% agreed that KRA uses various ICT systems to monitor compliance through access to third-party information, contributing to enhanced online tax compliance (M = 3.890, SD = 0.750). This result validates Bruno et al. (2024) finding that third-party data analytics substantially improve compliance monitoring effectiveness. The aggregate mean score for the online tax compliance ICT strategic capability construct was 3.830 (SD = 0.720), indicating strong overall agreement among KRA staff that the authority has successfully implemented the key ICT strategic capabilities associated with online tax compliance.

Table 4.2: Online Tax Compliance ICT Strategic Capability Factors

Statements	Disagree	Moderately Agree	Agree	Mean	Std. Dev.
ICT systems deployed for Monitoring Compliance Through Third-Party Information enhancing online tax compliance.	11.6%	20.9%	67.6%	3.890	0.750
KRA facilitating Compliance Through User-friendly Systems enhancing online tax compliance.	5.4%	19.8%	74.8%	3.843	0.736
KRA facilitating E-Filing and E-Payment Tax Services enhancing online tax compliance.	3.1%	16.7%	80.3%	3.827	0.717
Systems and management strategies addressing strategic and human factors enhancing online tax compliance.	3.1%	17.1%	79.8%	3.761	0.676
Aggregate				3.830	0.720

4.3 Descriptive Analysis of Digital Tax Administration Strategy Performance

Respondents were asked to assess the performance of Kenya's digital tax administration strategy across six dimensions. The results, presented in Table 4.3, reveal strong and broadly consistent positive perceptions of the strategy's performance. The highest level of agreement was recorded for the dimension of robustness, with 78.9% of respondents affirming that Kenya has a functional and robust digital tax administration strategy in place (M = 3.980, SD = 0.661). This finding reflects the cumulative institutional investment KRA has made in building and sustaining digital tax infrastructure, as documented by KRA (2021). Economy received the second highest mean score, with 50.9% agreeing and 43.4% moderately agreeing that the digital tax administration strategy is economical for all online tax remittances (M = 3.978, SD = 0.640), consistent with Claude (2024) argument that effective digital tax systems reduce compliance burdens for both the authority and taxpayers.

Equity in digital tax remittances was affirmed by 50.4% of respondents, with 39.9% moderately agreeing (M = 3.948, SD = 0.607), reflecting the strategy's relatively equitable design, though the 9.6% disagreement rate suggests remaining disparities in access and treatment across taxpayer categories. Ease of use was positively perceived, with 53.9% agreeing that the system is simple for users and 43.0% moderately agreeing (M = 3.818, SD = 0.640), supporting the view of Mpofu (2021) that simplicity is a fundamental prerequisite for tax compliance in digital environments. Flexibility received comparatively lower agreement, with 43.4% agreeing and 37.3% moderately agreeing (M = 3.857, SD = 0.646), while 19.3% expressed disagreement—the highest disagreement rate across all dimensions—suggesting that the system's adaptability to diverse taxpayer needs and changing regulatory contexts remains an area for improvement. Effectiveness was broadly acknowledged, with 51.3% agreeing and 40.8% moderately agreeing (M = 3.818, SD = 0.640). The aggregate mean for digital tax administration strategy performance was 3.820 (SD = 0.639), reflecting high overall satisfaction with the strategy's performance, particularly regarding robustness, economy, and equity.

Table 4.3: Digital Tax Administration Strategy Performance

Statement	Disagree	Moderately Agree	Agree	Mean	Std. Dev.
Kenya has a robust and working digital tax administration strategy.	3.9%	17.1%	78.9%	3.980	0.661
Digital tax administration strategy implementation is economical for online tax remittances.	5.7%	43.4%	50.9%	3.978	0.640
Digital tax administration strategy ensures equity for all online tax remittances.	9.6%	39.9%	50.4%	3.948	0.607
Digital tax administration strategy ensures simplicity for online tax remittances.	3.1%	43.0%	53.9%	3.818	0.640

Digital tax administration strategy is flexible for online tax remittances.	19.3%	37.3%	43.4%	3.857	0.646
Digital tax administration strategy ensures effectiveness for all online tax remittances.	7.9%	40.8%	51.3%	3.818	0.640
Aggregate				3.820	0.639

4.4 Inferential Statistics

Inferential statistics were employed to test the hypothesised relationships between online tax compliance ICT strategic capability factors and digital tax administration strategy performance, and to draw conclusions applicable to the broader population of KRA staff involved in digital tax administration.

4.4.1 Model Summary

Table 4.4 presents the model summary for the regression analysis. The correlation coefficient (R = 0.672) indicates a strong positive relationship between online tax compliance ICT strategic capability factors and digital tax administration strategy performance. The coefficient of determination ($R^2 = 0.580$) reveals that 58.0% of the variance in digital tax administration strategy performance is explained by the online tax compliance ICT strategic capability factors. The adjusted R^2 of 0.532 accounts for the number of predictors in the model and confirms a good model fit. The standard error of the estimate (0.60320) indicates relatively low deviation of the observed values from the predicted values.

Table 4.4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of Estimate
1	.672a	.580	.532	.60320
a. Predictors: (Constant), Online Tax Compliance ICT Strategic Capability				

4.4.2 ANOVA

The ANOVA results presented in Table 4.5 confirm that the overall regression model is statistically significant ($F = 81.350$, $p < 0.001$). This result demonstrates that the online tax compliance ICT strategic capability factors collectively exert a significant effect on digital tax administration strategy performance, and that the model has strong explanatory and predictive power. The finding is consistent with the Resource-Based Theory's proposition that the deployment of unique and valuable ICT resources produces sustained performance advantages.

Table 4.5: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	29.580	1	29.580	81.350	.000b
Residual	91.740	255	0.364		
Total	121.320	256			
a. Dependent Variable: Digital Tax Administration Strategy Performance *b. Predictors: (Constant), Online Tax Compliance ICT Strategic Capability*					

4.4.3 Regression Coefficients

Table 4.6 presents the beta coefficients for the regression analysis. The unstandardised coefficient for online tax compliance ICT strategic capability (B = 0.326, p < 0.001) indicates that a one-unit increase in ICT strategic capability is associated with a 0.326-unit increase in digital tax administration strategy performance, holding other factors constant. The corresponding t-value (t = 5.344) confirms that this effect is statistically significant at the 0.001 level. These results establish that online tax compliance ICT strategic capability factors are a significant and positive predictor of digital tax administration strategy performance in Kenya.

Table 4.6: Regression Coefficients

Model	B	Std. Error	Beta	t	Sig.
(Constant)	0.521	0.143		3.643	0.000
Online Tax Compliance ICT Strategic Capability	0.326	0.061	0.182	5.344	0.000
a. Dependent Variable: Digital Tax Administration Strategy Performance					

The regression equation is expressed as: Performance = 0.521 + 0.326 (Online Tax Compliance ICT Strategic Capability). This equation implies that even in the absence of ICT strategic capability investments, a baseline level of digital tax administration performance (0.521) is maintained, but that each incremental improvement in ICT strategic capability generates a corresponding 0.326-unit improvement in performance. These results are consistent with the findings of Kiprono et al. (2023), who document that revenue authorities with stronger digital compliance capabilities achieve measurably better tax administration outcomes. They also align with the conceptual arguments of Maharani (2025) and Muthuri et al. (2025), who emphasise that the combined effect of user-friendly systems, e-filing facilitation, third-party monitoring, and human-factor management strategies determines the aggregate performance of digital tax administration in developing country contexts.

5.0 SUMMARY OF THE STUDY

The study examined the influence of online tax compliance ICT strategic capability factors on digital tax administration strategy performance at Kenya Revenue Authority. The analysis revealed strong levels of agreement among KRA staff regarding the authority's implementation of four key ICT strategic capability dimensions: monitoring compliance through third-party information (M = 3.890), facilitating user-friendly compliance systems (M = 3.843), enabling e-filing and e-payment services (M = 3.827), and managing strategic and human factors (M = 3.761). The aggregate mean for the ICT strategic capability construct was 3.830 (SD = 0.720), indicating that respondents broadly affirm the effectiveness of KRA's ICT capabilities in enhancing online tax compliance.

The performance of KRA's digital tax administration strategy was assessed positively across all six dimensions, with the aggregate mean of 3.820 (SD = 0.639) reflecting high overall satisfaction. Robustness and economy received the highest performance ratings, while flexibility received comparatively lower—though still positive—assessments. The regression analysis confirms that online tax compliance ICT strategic capability factors significantly and positively influence digital tax administration strategy performance ($B = 0.326$, $p < 0.001$), with the model explaining 58.0% of the variance in performance ($R^2 = 0.580$). These results are supported by the Resource-Based Theory, which posits that an organisation's unique ICT resources and capabilities are fundamental drivers of sustained performance advantage. The findings reinforce the empirical arguments of Mwansa and Phiri (2025), Nshimirimana and Twesigye (2022), and Okunogbe and Santoro (2022) regarding the centrality of ICT strategic capabilities in modern tax administration.

6.0 CONCLUSION

The study concludes that online tax compliance ICT strategic capability factors are significant and positive determinants of digital tax administration strategy performance at Kenya Revenue Authority. The strong association between the four ICT capability dimensions and KRA's performance outcomes across efficiency, equity, simplicity, flexibility, and effectiveness confirms that ICT is not merely an operational tool but a core strategic resource that underpins the authority's revenue mobilisation mission. KRA's sustained investments in e-filing and e-payment platforms, user-friendly taxpayer interfaces, third-party data analytics, and human-factor management strategies have produced measurable improvements in digital tax administration performance. However, the comparatively lower ratings for flexibility suggest that KRA's digital systems may not yet be sufficiently adaptive to the diverse needs of all taxpayer categories, particularly small and medium enterprises and informal sector operators. Similarly, the 9.6% disagreement rate on equity indicates that not all taxpayers experience the digital tax system as uniformly fair, pointing to disparities in access and treatment that require continued policy attention. These findings underscore the need for KRA to move beyond technical ICT investments and develop comprehensive, inclusive digital tax administration strategies that address the structural and human dimensions of compliance. The study's conclusions are consistent with the Resource-Based Theory's emphasis on the deployment of unique, valuable, and non-substitutable resources as the foundation of sustained organisational performance.

7.0 RECOMMENDATIONS

Based on the research findings, the following recommendations are proposed for KRA and relevant policymakers. KRA should intensify its investment in ICT infrastructure upgrades to improve the reliability, speed, and accessibility of its digital tax administration platforms, particularly for taxpayers in rural and peri-urban areas. Ensuring consistent system availability and ease of access will address the flexibility gap identified in this study and promote more equitable compliance outcomes across all taxpayer categories. KRA should develop and institutionalise structured taxpayer capacity-building programmes that address the digital literacy deficits and awareness gaps identified by Oria et al. (2021) and Saptono et al. (2024). These programmes should be tailored to the specific needs of small and medium enterprises and first-time digital system users, incorporating practical training, multilingual support materials, and peer-learning platforms. KRA should strengthen its human-factor management frameworks by developing formal protocols for assessing and addressing staff and taxpayer resistance to digital system adoption. This includes regular training needs assessments, change management programmes, and ICT-specific performance monitoring mechanisms for tax administration officers. Sari et al. (2026) recommend that revenue authorities proactively engage with taxpayer frustrations and adapt their digital tools accordingly. Policymakers should provide dedicated funding and regulatory frameworks that incentivise taxpayers—particularly smaller businesses—to adopt digital compliance tools, including subsidies for EFD acquisition and internet connectivity. Reducing the financial barriers to digital tax compliance will reinforce the equity and flexibility dimensions of KRA's digital tax administration strategy and promote broader adoption.

8.0 AREAS FOR FURTHER RESEARCH

Future research should investigate the moderating role of taxpayer digital literacy and ICT infrastructure quality on the relationship between ICT strategic capabilities and digital tax administration performance. Longitudinal studies tracking the evolution of KRA's digital tax administration performance over time would provide valuable insights into the sustainability and long-term impact of ICT investments. Comparative studies examining ICT strategic capability factors across different revenue authorities in East Africa would contribute to the development of region-specific policy frameworks for digital tax administration. Additionally, qualitative research exploring the lived experiences of taxpayers in interacting with KRA's digital platforms would generate complementary insights to the quantitative findings of this study.

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