

Effect of Technology on Monthly Rental Income Tax Compliance in Tharaka Nithi County, Kenya

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Abstract

Purpose: The study sought to establish the effects effect of technology on monthly rental income tax compliance in Tharaka Nithi county, Kenya

Methodology: This study was guided by theory of planned behavior is the main of the study, ability to pay theory, social influencetheory and the fiscal exchange theory. The study adopted explanatory research design and target a population was 1354 monthly rental income tax compliance in Tharaka Nithi County. A sample size of 310 was drawn from this population using Yamane's formula. Primary data was collected using a structured questionnaire.

Findings: The study findings showed that the correlation analysis showed that technology had a positive and significant correlation to monthly rental income tax compliance.

Unique contribution to theory, practice and policy: The study recommended that KRA should also invest in technological solutions to streamline tax-related processes and reduce the burden on property owners. Implement user-friendly platforms that facilitate easy submission of tax returns and payments.

Key words: Technology, Monthly Rental Income Tax Compliance

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I. INTRODUCTION

The efficient and effective collection of rental income taxes is a critical element of fiscal policy worldwide, contributing significantly to government revenue and public service provision (Bird & Zolt, 2021). However, rental income tax compliance often faces challenges, with various factors influencing taxpayers' willingness and ability to comply with tax regulations. This study focuses on exploring the role of peer communication as a moderator of factors influencing monthly rental income tax compliance on a global scale. The cost associated with tax compliance has long been recognized as a significant determinant of taxpayers' behavior (Boll & Langer, 2022). Tax compliance cost encompasses not only the monetary expenses incurred in preparing and filing tax returns but also the time and effort expended by taxpayers (Kirchler et al., 2021). Higher compliance costs are generally associated with lower tax compliance rates, as taxpayers may be more inclined to evade taxes when compliance is perceived as burdensome.

The technology has revolutionized tax administration and compliance globally (Gupta & Harinath, 2023). Tax authorities increasingly utilize digital platforms and electronic filing systems to streamline tax processes. Additionally, taxpayers can access information and services related to taxation through various digital channels. The adoption of technology in tax compliance can reduce the barriers to compliance, making it more convenient and less time-consuming for taxpayers. Taxpayer knowledge and awareness of tax regulations play a crucial role in tax compliance behavior (Baurer & Siebert, 2022). Educated taxpayers are more likely to understand their tax obligations, deductions, and incentives. Lack of knowledge, on the other hand, can lead to inadvertent non-compliance. Effective taxpayer education and awareness programs can enhance compliance rates by ensuring taxpayers are well-informed about their tax obligations.

In Eastern Africa, taxpayers may face various expenses related to tax compliance, such as fees for tax consultants or the time spent on record-keeping. Technological advancements have the potential to simplify tax compliance processes and reduce the burden on taxpayers. The adoption of digital platforms for tax filing and payment can enhance compliance (Alm et al., 2022). Eastern Africa has seen increasing efforts to modernize tax administration using technology.

Rental income tax compliance represents a critical component of revenue generation for governments worldwide, providing funds necessary for public services and infrastructure development (Bird, 2021). In Tharaka Nithi County, Kenya, as in many other regions, the efficient collection of rental income tax is essential for funding local government activities and promoting economic growth (KRA, 2021). However, achieving and sustaining high levels of monthly rental income tax compliance is an enduring challenge faced by tax authorities and policymakers. Several key factors have been identified as influencing rental income tax compliance, with notable attention given to tax compliance cost, technology adoption, and taxpayer knowledge. The cost associated with tax compliance, including the effort and resources required to meet tax obligations, can significantly impact taxpayers' willingness to comply. High compliance costs can discourage voluntary compliance and may lead to tax evasion or avoidance (Alhassan, 2022).

Statement of the Problem

Despite the Kenyan government's persistent efforts to implement various tax policies and reforms, challenges persisted, particularly in the domain of rental income taxation (Muchiri & Kanyi, 2023). Tharaka Nithi County, with its diverse economic activities, served as an instructive case study for comprehensively addressing these challenges.

Notably the income tax performance for the year 2021/2022 improved, with a 30.8% growth as compared to collection of the previous period 2020/2021. Against a target collection of KSH 603.870 billion the revenue authority was able to collect KSH 618.312 Billion (KRA, 2022). However despite the growth in performance of the Income tax one of its key component residential rental income tax seems to be worrying. In the auditor general report 2022, the residential rental income tax collected for the 2021/2022 indicates a shortfall between the actual vis-à-vis the forecasted collection with the actual set as 513.83Million while the forecasted amount stood at 884.332Million, which depicted a deficit in collection of KSHS 370.502Million. Several studies on tax and tax compliance have been conducted in general; nevertheless, the conclusions of the studies have been conflicting. Therefore, this study aimed to address the identified gap by investigating effect of taxpayer knowledge on monthly rental income tax compliance in Tharaka Nithi County, Kenya

Objectives

To determine the effect of taxpayer knowledge on monthly rental income tax compliance in Tharaka Nithi County, Kenya.

II. LITERATURE REVIEW

2.0 Theoretical Review

The study adopted the Unified Theory of Acceptance and Use of Technology (UTAUT), which is a well-established theoretical framework that offers insights into the factors influencing the acceptance and utilization of technology in various contexts. Developed by Venkatesh et al. (2003), this framework has been refined and expanded upon by subsequent researchers. In the context of the study on "Peer Communication as a Moderator of Factors Influencing Monthly Rental Income Tax Compliance in Tharaka Nithi, Kenya," comprehending the UTAUT framework can provide valuable insights, particularly when examining the influence of technology adoption as an independent variable.

UTAUT posits that the acceptance and usage of technology are influenced by several fundamental constructs: Performance Expectancy: This concept assesses the extent to which individuals believe that using technology will enhance their performance in a specific task or role. In our study, property owners in Tharaka Nithi County may consider how the adoption of technology, such as electronic filing systems, can improve their ability to comply with monthly rental income tax reporting. Additionally, effort Expectancy: Effort expectancy measures how easy individuals perceive technology to be in terms of usability. Property owners may be more inclined to adopt technology if they find it user-friendly and requiring minimal effort to use.

Another construct is social influence, which examines the impact of the opinions and behaviors of others on an individual's decision to adopt technology. In the research, peer communication could play a significant role in shaping property owners' attitudes toward technology adoption. Positive peer experiences with technology may encourage its adoption. Facilitating Conditions is another construct which evaluates the availability of resources and support necessary for technology use. Factors like internet access, training, and technical support can influence whether property owners in Tharaka Nithi County opt to adopt technology for tax compliance.

Behavioral intention represents an individual's intent to use technology. It serves as a precursor to actual technology usage. Understanding property owners' behavioral intentions can provide insights into their readiness to embrace technology for tax compliance. Use Behavior: This indicates the actual use of technology for a specific task. In the study, it corresponds to property owners' real-world adoption and use of technology for monthly rental income tax compliance. Incorporating the UTAUT framework into the study offers a structured approach to analyzing the role of technology in tax compliance. It helps us understand how property owners' perceptions and

intentions regarding technology usage. Additionally, it provides a comprehensive framework to examine the interplay between technology and monthly rental income tax compliance behaviors.

2.1 Empirical Review

Rental income tax is the tax levied on rental income from residential buildings. Berhane and Yesuf (2013) reported that property owners are mandated to declare all the income they derive from renting out property. Introduced in January 2016, it requires a 10% tax on the gross rent. According to the Finance Act 2015, the 10% tax must be paid by any resident persons, that's individuals or entities that have earned income from the use of their residential property in the country.

Monthly rental income (MRI) tax compliance remained a persistent challenge in Kenya, including Tharaka Nithi County. To address this issue, researchers explored the combined effects of technology and peer communication as potential solutions. This review delved into this intersection, utilizing information sharing and feedback as metrics for peer communication, and filed tax returns, e-filing, and e-payment as metrics for technology.

Recent studies consistently supported the positive impact of technology on tax compliance. Cho and Michelson (2020) and Alm et al. (2020) found a strong correlation between e-filing adoption and increased compliance rates. This convenience factor reduced filing burdens and errors, leading to more timely submissions (Aduda, 2023). Similarly, research by Chen et al. (2020) and Hahn et al. (2020) highlighted the benefits of e-payment. The ease and efficiency of electronic payments contributed to higher compliance rates by lowering barriers and encouraging timely fulfillment of tax obligations (Njoroge & Ogutu, 2023). However, it was crucial to avoid generalizations. While filed tax returns generally increased with technology adoption, accurate reporting didn't always follow. Sahlström (2020) found that pre-filled tax forms, while convenient, could lead to less understanding of the tax system, potentially impacting accurate reporting (Thuo & Mwangi, 2023).

Slemrod et al. (2020) found that social sharing platforms facilitated information sharing and feedback around tax filing processes, particularly among young taxpayers, increasing self-filing rates and reducing reliance on professional assistance (Kiptum & Kiprop, 2023). Similarly, Choi et al. (2020) showed that online forums where taxpayers anonymously shared experiences and answered questions contributed to improved compliance by fostering a sense of community and accountability (Chepkwony & Kirwa, 2023). It was important to remember that the effectiveness of peer communication hinged on its nature. Negative or misleading information shared within peer networks could hinder compliance efforts. Therefore, fostering constructive information sharing and feedback was crucial for maximizing the positive impact of this factor (Owuor & Onyango, 2023).

Studies by Lo and Shu (2020) and Bae and Cho (2020) found that the combination of e-filing platforms and online forums led to higher compliance rates compared to using either tool alone. This synergy likely stemmed from the complementary nature of these factors. Technology provided efficient platforms for tax fulfillment, while peer communication offered support, knowledge sharing, and social pressure, encouraging accurate and timely filings (Kigotho & Muchai, 2023).

This review emphasizes the potential of technology to enhance MRI tax compliance in Tharaka Nithi County. However, effective implementation required careful consideration of the local context, information quality within peer networks, and the optimal design of technology-based solutions. Future research should explore these aspects within these platforms to maximize their collective impact on MRI tax compliance in Tharaka Nithi County and beyond.

2.2 Conceptual Framework

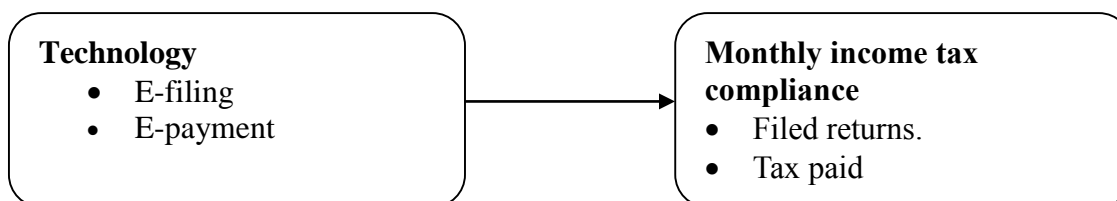


Figure 1 Conceptual Framework

III. RESEARCH METHODOLOGY

The study adopted an explanatory research design. The study adopted explanatory research design and target a population was 1354 monthly rental income tax compliance in Tharaka Nithi County. A sample size of 310 was drawn from this population using Yamane's formula. Primary data was collected using a structured

questionnaire. Data was collected using a structured questionnaire. The data collected were cleaned and coded, quantified and analyzed quantitatively. Quantitative data were analyzed using SPSS 24 where descriptive and inferential statistics were used to capture the data in order to understand the pattern and nature of relationships. Results were presented using tables.

IV. RESULTS AND DISCUSSIONS

4.1 Descriptive analysis

Table 1: Descriptive statistics Technology

	N	Mean	Std. Deviation	Skewness	Kurtosis
I always use e-Filling every time I report tax	241	4.21	.917	-1.242	.887
I will always use e-Filling to report tax because it has features that help me work	241	4.17	.953	-1.191	.596
I always remit the taxes due through I-tax	241	4.19	.919	-1.192	.755
I always remit the taxes due at the Tax Service office	241	4.21	.909	-1.271	1.018

Table 1 shows descriptive statistics for technology I always use e-Filling every time I report tax. The high mean score of 4.21 indicates that the majority of respondents strongly agree that they always use e-Filling when reporting taxes. The standard deviation of 0.917 suggests that there is consistency among respondents in their use of this technology for tax reporting. I will always use e-Filling to report tax because it has features that help me work. With a mean score of 4.17, respondents generally agree that they will always use e-Filling due to its helpful features. The standard deviation of 0.953 suggests some variability in responses, indicating that opinions on the usefulness of features may differ among participants. I always remit the taxes due through I-tax. Respondents exhibit a high agreement (mean of 4.19) in always remitting taxes due through I-tax. The standard deviation 0.919 is relatively low, indicating consistency in this behaviour. I always remit the taxes due at the Tax Service office. Similar to the first and third statements, respondents strongly agree (mean of 4.11) that they always remit taxes at the Tax Service office. The standard deviation is low, the standard deviation of 0.909 indicating consistency.

Table 2: Descriptive statistics Monthly rental income tax compliance

	N	Mean	Std. Deviation	Skewness	Kurtosis
I always file tax returns on time	241	4.50	.585	-.699	-.479
I always remit right amount of taxes on time	241	3.95	.862	-.014	-1.401
I am registered for Monthly Rental Tax	241	4.47	.619	-.731	-.440

The descriptive statistics presented in Table 2 provide insights into the rental income tax compliance I always file tax returns on time: Mean (4.50): The high mean suggests that, on average, respondents strongly agree that they always file tax returns on time. This indicates a high level of punctuality in meeting tax filing deadlines. Std. Deviation (.585): I always remit the right amount of taxes on time: Mean (3.95): The mean suggests that, on average, respondents agree that they remit the right amount of taxes on time. However, the mean is slightly lower compared to the previous variable, indicating a somewhat lower level of agreement with this statement. Std. Deviation (.862): I am registered for Monthly Rental Tax: Mean (4.47): The high mean indicates that respondents, on average, strongly agree that they are registered for Monthly Rental Tax. This suggests a high level of compliance with the registration requirement for this specific tax. Std. Deviation (.619):

4.2 Regression Analysis

The study conducted a multiple linear regression analysis.

Table 3: Coefficient of determination

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.493 ^a	.243	.239	.36096

An R Square of 0.243 indicates that technology have a joint significant impact to the monthly rental income tax markets 24.3%.

Table 4. Correlations

	Monthly Rental Income	Technology
Monthly Rental Income	1	0.493**
Technology	0.493**	1

Correlation is significant at the 0.05 level (2-tailed).

Source: Research data (2024)

A correlation coefficient enables the researcher to quantify the strength of the linear relationship between two ranked or numerical variables. Pearson correlation analysis was done to determine the relationship between study variables. A correlation coefficient value (r) in the range of 0.1 to 0.29 is considered weak, 0.3 to 0.49 is considered moderate while 0.5 to 1.0 is considered strong extracts from O'Brien, 2007. Table 4 indicate that technology is positively correlated with monthly rental income tax compliance (r= 0.493).

Table 5: ANOVA compliance

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	121.460	1	121.460	312.236	0.000
Residual	93.125	239	0.389		
Total	214.585	240			

a. Dependent Variable: Monthly Rental income tax compliance

b. Predictors: (Constant), technology

From the analysis, the model was statistically significant given that the p-value was 0.000 which was less than 0.05

The linear regression model was;

Table 6: Coefficients

Model		Standardized Coefficients		Unstandardized	t	Sig.
		B	Std. Error	Coefficients Beta		
1	(Constant)	3.616	0.305		11.856	0.000
	Technology	0.147	0.051	0.152	2.882	0.003

a. Dependent Variable: Monthly rental income tax compliance

$$Y = \beta_0 + \beta_1 X_1 + \epsilon$$

Where; **Y**= Monthly rental income tax compliance (Dependent variable);

X₁= Technology; **β₁** = beta coefficient;

ε = Error term

0.147 = Coefficient of X1

V. CONCLUSIONS AND RECOMMENDATIONS

The study's main objective was to examine the effect of technology on monthly rental income tax compliance in Tharaka Nithi County, Kenya. The study found that there is a positive and significant correlation between technology and monthly rental income tax compliance, this suggests a positive relationship, indicating that as technology adoption increases, so does the adherence to monthly rental income tax compliance. The p-value, which is less than the conventional significance threshold of 0.05, adds a layer of robustness to the findings. this implies that the observed correlation is unlikely to be a result of random chance. The coefficient analysis showed that taxpayer knowledge has a positive and significant effect on monthly rental income tax compliance. The findings underscore the potential benefits of incorporating technology into tax-related processes and highlight an avenue for policymakers and businesses to explore in their efforts to enhance tax compliance. The study found a positive and significant correlation between technology adoption and monthly rental income tax compliance. This highlights the potential benefits of incorporating technology into tax-related processes. Policymakers and businesses should consider leveraging technology to streamline and enhance tax compliance in the rental income sector.

This study recommends that the Kenya Revenue invest in advanced technological solutions to streamline tax-related processes, thus reducing the administrative burden on property owners. Developing and implementing user-friendly platforms that facilitate the easy submission of tax returns and payments is crucial. These platforms should be intuitive and accessible to encourage widespread use among taxpayers. Additionally, it is important to enhance taxpayer education on the benefits of technology in tax compliance. Increasing awareness and knowledge about these technological tools can significantly improve compliance rates. Furthermore, regularly updating and improving these technological tools is essential to keep pace with advancements and changing user needs. This ensures that the systems remain efficient and effective in facilitating tax compliance.

By adopting these recommendations, the KRA can significantly enhance tax compliance rates, ultimately leading to increased revenue collection and a more efficient tax system.

REFERENCES

- [1]. Alm, J., Beebe, J., Kirsch, M. S., Marian, O., & Soled, J. A. (2019). Modern technologies and the evolution of tax compliance. *Va. Tax Rev*, 39, 287.
- [2]. Baurer, Sebastian, and Jan Loeprick. 2022. The Cost and Benefits of Tax Treaties with Investment Hubs: Findings from Sub-Saharan Africa. *IMF Working Papers No 18:227*, p. 1. Washington, DC: International Monetary Fund
- [3]. Bird, R., & Davis-Nozemack, K. (2018). Tax avoidance as a sustainability problem. *Journal of Business Ethics*, 151, 1009-1025
- [4]. Chen, S., Dulleck, U., & Torgler, B. (2021). The impact of income inequality on effective tax rates: Evidence across OECD countries. *Journal of Comparative Economics*, 49(1), 39-58.
- [5]. Kirchler E, Kogler C, Muehlbacher S(2021). Cooperative Tax Compliance: From Deterrence to Deference. *Current Directions in Psychological Science*
- [6]. KRA (2019). 2018/19 annual revenue performance report. Nairobi: Kenya Revenue Authority.
- [7]. KRA (2022). Report Of The 3rd Tax Round Table Held On 2nd May, 2018 At Intercontinental Hotel Nairobi, By KRA
- [8]. OECD, O. (2021). The OECD principles of corporate governance. *Contaduría Administración*, (216).
- [9]. Owour, S. O., & Iyafekhe, C. (2023). Empirical assessment of tax aggressiveness of listed firms in Nigeria. *International Accounting and Taxation Research Group*, 2(3), 13–29.
- [10]. Wenzel, M. (2008). The impact of outcome orientation and justice concerns on tax compliance: The role of taxpayers' identity. *Journal of Applied Psychology*, 93(6), 1335-1347.