

Effect of Electronic Filing (E-Filing) on Voluntary Tax Compliance in the Kinondoni Tax Region, Tanzania

Mathayo Humphrey Kibona¹
Maria L.J. Goyayi²

¹matteokibona@gmail.com

²marygoyayi@yahoo.com

^{1,2}Mzumbe University, Tanzania

<https://doi.org/10.51867/ajernet.6.1.60>

Submitted: 30th January 2025, Accepted: 22nd February 2025, Published: 10th March 2025

ABSTRACT

This study aimed to assess the effect of electronic filing (e-filing) on voluntary tax compliance in the Kinondoni Tax Region. Grounded in the Technology Acceptance Model (TAM) and the Theory of Planned Behavior (TPB), it employs a quantitative approach with a descriptive design. Focusing on individual taxpayers and SMEs registered for at least one year, the research identified 5,550 registered taxpayers in 2024, with 343 being active e-filing users. A sample of 185 users was calculated using Yamane's formula and simple random sampling was employed to obtain the participants. Primary data were collected via a structured questionnaire with a 5-point Likert scale. Data analysis utilized descriptive statistics and regression analysis. Study reveal that a significant portion of participants view the electronic filing system as accessible and user-friendly. Regression analysis demonstrates a strong positive relationship between electronic filing and voluntary tax compliance, with an R value of 0.880 and an R-squared value of 0.775, indicating that approximately 77.5% of the variance in voluntary tax compliance is explained by the electronic filing system. The standardized coefficient (Beta) of 0.880, along with a significant p-value ($p < 0.000$), underscores the system's effectiveness in enhancing voluntary tax compliance. The study concludes that enhancing the electronic filing experience led to increased voluntary compliance among taxpayers. It recommends ongoing training programs to boost digital literacy, further investment in user-friendly system design, and the development of targeted outreach strategies to maximize taxpayer engagement with electronic filing systems.

Keywords: Electronic Filing, Kinondoni Tax Region, Tanzania, Voluntary Tax Compliance

I. INTRODUCTION

Electronic filing (e-filing) systems have become essential tools for enhancing the efficiency of tax administration worldwide, offering significant advantages over traditional paper-based filing methods. Over recent decades, numerous countries have transitioned to e-filing to streamline tax processes, reduce administrative costs, and improve compliance rates (Ullah *et al.*, 2023). This shift has been particularly beneficial for tax authorities, as e-filing allows for quicker processing of returns, reducing the backlog of paperwork that often accompanies manual filing systems. As digital infrastructure continues to advance globally, the adoption of e-filing systems is expected to expand further, driven by the convenience and benefits they provide to both taxpayers and tax administrations (Purba *et al.*, 2020). E-filing simplifies the tax filing process by offering user-friendly interfaces that guide taxpayers through each step, minimizing errors that can occur with manual submissions. It significantly reduces the time required for taxpayers to complete their filings, allowing them to focus on their businesses and personal affairs (Mkirima, 2023). By making tax compliance easier and more accessible, e-filing systems play a critical role in fostering voluntary compliance, thereby supporting governments in their efforts to generate revenue and provide public services effectively (Mlowe, 2023).

Globally, the adoption of e-filing systems has been embraced by both developed and developing nations, reflecting the widespread recognition of its benefits. For example, in the United States, e-filing was introduced in the 1980s, and as of recent years, over 90% of individual tax returns are filed electronically (Hendriks & Maposa, 2020). This significant shift has streamlined the tax filing process, making it more convenient for taxpayers and allowing the Internal Revenue Service (IRS) to process returns more efficiently. Similarly, countries like Australia, Canada, and the United Kingdom have reported substantial increases in e-filing adoption rates, resulting in notable gains in compliance and reductions in processing times (Geringer, 2021). Even among emerging economies such as Brazil and India, e-filing systems are proving effective, with both nations experiencing a rise in taxpayer compliance and an expansion in their tax base (Bunn *et al.*, 2020). In India, e-filing has led to a dramatic increase in tax registrations and filings,

attributed to the system's user-friendly interface and robust support mechanisms (Amonkar *et al.*, 2024). These cases highlight the transformative potential of e-filing systems in improving compliance and optimizing tax administration worldwide, showcasing how technology bridge gaps in tax compliance and foster a culture of accountability among taxpayers.

In Africa, many countries have also embarked on the journey toward digitizing tax services to address issues of non-compliance and revenue leakage. Nations like Kenya, Uganda, and South Africa have made considerable strides in implementing e-filing systems (Mpofu, 2022). Kenya, for instance, introduced its iTax platform in 2013, which has since increased tax compliance by reducing filing times and enabling real-time monitoring of tax submissions (Mutuku, 2022). This initiative has not only simplified the filing process for taxpayers but has also enhanced the government's capacity to track compliance more effectively. In South Africa, the South African Revenue Service (SARS) has reported improvements in compliance and revenue collection due to the widespread use of its e-Filing system (Hendriks & Maposa, 2020). The SARS noted that e-filing has streamlined tax administration, reduced processing times, and improved overall taxpayer satisfaction. These developments underscore the recognition within African countries of digital tax systems' value, emphasizing the need for investment in technology, infrastructure, and taxpayer education to foster compliance and ensure sustainable revenue generation (Mpofu, 2022).

In Tanzania, e-filing initiatives began to draw government attention around 2016, with formal endorsement occurring in 2018 through the establishment of the Judicature and Application of Laws (Electronic Filing) Rules (Charles & Mmassy, 2022). The Tanzania Revenue Authority (TRA) launched the electronic filing system as part of its broader modernization efforts aimed at enhancing taxpayer services and increasing voluntary compliance. While initial adoption rates were modest, the TRA has since implemented several initiatives to promote e-filing, including public awareness campaigns and providing training for taxpayers (Mlowe, 2023). These proactive measures have yielded positive outcomes, reflected in the increasing number of electronically filed returns in recent years, which indicates a growing acceptance of the system among taxpayers (Mbise & Baseka, 2022). Moreover, the e-filing system has significantly streamlined tax administration, reducing both the time and costs associated with tax filing processes while enhancing compliance monitoring capabilities for the TRA (Mkirima, 2023). Despite these advancements, challenges persist, such as limited digital literacy among taxpayers and uneven access to the necessary technological infrastructure. These barriers hinder the e-filing system's full potential to foster voluntary compliance, emphasizing the need for continued efforts to improve digital literacy and broaden access to technology, particularly in underserved areas (Mbise & Baseka, 2022). Addressing these challenges are crucial to ensuring that the e-filing initiative meets its goals and contributes effectively to Tanzania's tax revenue system.

Within the Kinondoni Tax Region, one of Tanzania's most economically active regions, the adoption of e-filing has the potential to significantly impact tax compliance rates. Given the area's high concentration of businesses and individual taxpayers, the successful implementation of e-filing could serve as a blueprint for other regions in the country. However, like other parts of Tanzania, Kinondoni faces challenges in promoting e-filing, including limited awareness of the system and a lack of digital infrastructure (Mbise & Baseka, 2022). Despite these obstacles, the Kinondoni Tax Region has seen a gradual increase in e-filing adoption, suggesting a positive trend towards improved compliance. Understanding the effect of e-filing system on voluntary tax compliance in Kinondoni is essential to optimizing the use of e-filing and enhancing the overall efficiency of the taxation system in Tanzania.

1.1 Statement of the Problem

The transition to electronic filing (e-filing) represents a pivotal advancement in tax administration, particularly in regions like Kinondoni, Tanzania, where voluntary tax compliance is critical for government revenue generation. However, despite the introduction of e-filing systems in Tanzania, studies reveals that voluntary tax compliance remains insufficient, raising concerns about the effectiveness of these digital platforms (Mbise & Baseka, 2022; Mlowe, 2023). According to Mlowe (2023), while e-filing has increased the number of filed returns, a significant proportion of taxpayers still demonstrate reluctance to comply with their tax obligations, resulting in a considerable revenue gap. This gap not only hampers the government's ability to fund public services but also undermines trust in the overall tax system. A study by Mbise and Baseka (2022) noted that, although e-filing systems have the potential to streamline processes and enhance compliance, localized socio-economic factors significantly influence taxpayer behaviors, indicating that a standardized approach is not effective in achieving compliance.

Research indicates that several factors affect the adoption of e-filing and subsequent compliance. A study by Mustapha *et al.* (2021) identified barriers such as digital literacy, access to technology, and trust in the e-filing system as critical determinants of compliance in Nigeria. These barriers manifest in varying degrees in Kinondoni, where socio-economic disparities affect access to digital resources. Furthermore, varying levels of education, access to internet services, and perceptions of the tax system profoundly affect taxpayer attitudes toward e-filing, potentially exacerbating existing compliance issues. Prior research in Kenya by Mutuku (2022) revealed that taxpayer awareness and education significantly impact compliance rates, underscoring the need for targeted outreach and support in Kinondoni to maximize the potential of e-filing. Without effective educational initiatives and community engagement,

the benefits of e-filing is not fully realized, leading to persistent compliance challenges that hinder the tax administration system's overall effectiveness (Mpofu, 2022).

This study aims to investigate the specific effects of e-filing on voluntary tax compliance within the Kinondoni tax region, emphasizing the unique socio-economic dynamics at play. While existing literature has explored the general benefits of e-filing, there is a notable lack of research focusing specifically on how local factors in Kinondoni influence taxpayer compliance. Understanding these dynamics is crucial; without addressing the underlying barriers to e-filing adoption, the full benefits of modernizing the tax system not be realized, and the revenue shortfall could persist (Mpofu, 2022). This study provides valuable insights into the relationship between e-filing and voluntary tax compliance, offering evidence-based recommendations to enhance the effectiveness of e-filing systems in Kinondoni and potentially informing broader tax administration strategies across Tanzania.

1.2 Research Objective

The objective of the study was to assess the effect of electronic filing (e-filing) on voluntary tax compliance in the Kinondoni tax region, Tanzania.

1.3 Research Hypothesis

H₀: E-filing has no significant effect on voluntary tax compliance.

H₁: E-filing has a significant effect on voluntary tax compliance.

II. LITERATURE REVIEW

2.1 Theoretical Review

The study opted to use two theories that are crucial for explaining the variables in this research: the Technology Acceptance Model (TAM) and the Theory of Planned Behavior (TPB). TAM is employed to assess how perceived ease of use and perceived usefulness influence taxpayers' acceptance and adoption of e-filing systems. Meanwhile, the Theory of Planned Behavior helps to understand the impact of attitudes, subjective norms, and perceived behavioral control on taxpayers' intentions to comply voluntarily with tax obligations through e-filing.

2.1.1 Technology Acceptance Model

The Technology Acceptance Model (TAM), developed by Davis in 1989, is a widely recognized framework for understanding how users come to accept and use new technologies. The model posits that perceived ease of use and perceived usefulness are the primary factors influencing an individual's decision to adopt a technology (Davis *et al.* 2024). Specifically, when users believe that technology enhances their performance (perceived usefulness) and that it is easy to use (perceived ease of use), they are more likely to embrace it. TAM has been extensively applied across various fields, including information systems and education, and provides a solid foundation for evaluating user acceptance in different contexts (Malatji *et al.* 2020).

TAM is particularly relevant in this study as it helps to elucidate the factors that influence taxpayer acceptance of e-filing systems in the Kinondoni tax region. By focusing on how the perceived benefits and ease of use of e-filing systems affect voluntary compliance, the model allows for a nuanced understanding of taxpayer behavior and the dynamics influencing their engagement with digital tax services (Lah *et al.* 2020). However, TAM is not without its weaknesses. Critics argue that it oversimplifies the complexities of technology acceptance by not accounting for external variables, such as social influence and cultural context, which significantly impact user acceptance (Davis *et al.* 2024). Moreover, TAM primarily focuses on individual-level factors and overlook organizational influences that affect adoption of technology, making it essential to complement the model with other theories, such as the Theory of Planned Behavior, to provide a more comprehensive analysis.

2.1.2 Theory of Planned Behavior (TPB)

The Theory of Planned Behavior (TPB), developed by Ajzen in 1985, is a prominent psychological framework that seeks to explain human behavior through the interplay of individual attitudes, subjective norms, and perceived behavioral control (Ajzen, 2020). TPB posits that a person's intention to engage in a particular behavior is influenced by three key factors: their attitude toward the behavior (how they evaluate its outcomes), the subjective norms surrounding the behavior (social pressures to conform), and their perceived behavioral control (the extent to which they feel capable of performing the behavior) (Ajzen & Schmidt, 2020). This theory is particularly effective in predicting intentional behaviors, making it a valuable tool for understanding factors that shape compliance and engagement with various practices, including technology use.

TPB provides critical insights into the factors affecting voluntary tax compliance through e-filing in the Kinondoni tax region. By examining how taxpayers' attitudes towards e-filing, social influences from peers and institutions, and their perceived ability to navigate the e-filing system affect their intentions to comply, the model

helps uncover the complex motivations behind taxpayer behavior (Ajzen, 2020). Despite its strengths, TPB has limitations. One major critique is its reliance on self-reported intentions, which not always translate into actual behavior due to unforeseen circumstances or external influences (Kan & Fabrigar, 2020). Additionally, TPB does not account for emotional factors, such as anxiety or fear, which also play significant roles in influencing behavior (Ajzen & Schmidt, 2020). Therefore, while TPB offers a robust framework for understanding the determinants of voluntary compliance, integrating it with Technology Acceptance Model yield a more holistic understanding of the dynamics at play in the adoption of e-filing systems.

2.2 Empirical Review

Numerous studies have investigated the role of electronic filing (e-filing) systems in improving tax compliance, highlighting the significance of these digital platforms across various contexts. The following review discusses key research on this topic to provide a comprehensive understanding relevant to the Kinondoni Tax Region.

Purba *et al.* (2020) examined the influence of e-filing on personal tax compliance among individual taxpayers at KPP Pratama Jakarta Kramatjati, with a specific interest in the moderating role of internet knowledge. This study utilized convenience sampling and applied Moderated Regression Analysis (MRA) to analyze the data collected from taxpayers. Findings indicated that e-filing significantly enhances compliance, and that internet knowledge strengthens this effect by enabling taxpayers to navigate the digital platform more efficiently. The study highlights the importance of considering taxpayer knowledge when implementing e-filing systems. By fostering digital literacy, it enhance the compliance benefits of e-filing systems, as familiarity with internet tools allows taxpayers to take full advantage of the platform's features.

Mustapha *et al.* (2021) explored the impact of an integrated e-tax filing system on tax compliance behavior in Nigeria. The study employed a descriptive survey method, collecting data from 400 randomly selected respondents out of a target population of 5,000 e-filing users. The data were analyzed using SPSS to understand the effectiveness of the e-filing system. The study found that the integrated system improved compliance by simplifying filing and increasing efficiency, particularly through error reduction and ease of access. This research highlights the potential for coordinated e-filing systems to enhance tax compliance by streamlining processes and reducing non-compliance opportunities, underscoring the need for a seamless and intuitive system to maximize taxpayer engagement.

Mkirima (2023) assessed the effectiveness of e-filing on tax compliance among wholesalers in the Arusha Tax Region. The study used a case study design and gathered data through structured questionnaires from a targeted sample of wholesale taxpayers. Quantitative data analysis was conducted using SPSS, revealing that factors such as system complexity, taxpayer awareness, and cost of usage significantly influence compliance. This research highlights that while e-filing was effective, usability and accessibility issues need to be addressed to enhance compliance rates. The findings underscore the need for user-friendly systems and taxpayer support to maximize e-filing effectiveness, especially among less digitally literate populations.

Sholih *et al.* (2023) analyzed the effect of e-filing on individual taxpayer compliance in Pekalongan City, incorporating the moderating role of accounting information systems proficiency. Data was collected from taxpayers through questionnaires and analyzed using the Partial Least Squares (PLS) method via SmartPLS software. The study concluded that while e-filing positively impacts compliance, the proficiency in accounting systems did not moderate this effect, suggesting that e-filing's user-friendly design bypass the need for specialized skills. This emphasizes that accessibility and usability of e-filing are critical to fostering compliance among a broader taxpayer base, as the system must be usable by all, regardless of accounting expertise.

Mlowe (2023) investigated the impact of digital tax systems on voluntary tax compliance in Tanzania's Manyara Tax Region, focusing on e-filing among other systems. Adopting a descriptive design and utilizing a quantitative approach, data was collected from SMEs via surveys and analyzed using SPSS. The study confirmed that e-filing encourages voluntary compliance by simplifying tax processes and reducing the burden on taxpayers. However, it also noted that many taxpayers still show a preference for traditional methods, indicating a need for enhanced user-friendliness and accessibility to improve compliance. This study reinforces that while digital systems have potential, they must be tailored to meet the diverse needs of taxpayers to maximize effectiveness in fostering compliance.

While there has been significant research on electronic filing systems' effects on tax compliance, specific impacts within Tanzania's Kinondoni Tax Region remain underexplored. Studies by Purba *et al.* (2020) and Mustapha *et al.* (2021) have investigated e-filing in countries like Indonesia and Nigeria, but they do not address local challenges such as low digital literacy and technology access issues prevalent in Kinondoni. Although Mkirima (2023) and Mlowe (2023) provide insights into the broader Tanzanian context, they overlook localized factors affecting e-filing adoption. This study fills this gap by examining the effect of e-filing on voluntary tax compliance in Kinondoni, offering insights for localized policy interventions to improve e-filing adoption and compliance.

III. METHODOLOGY

3.1 Research Philosophy

The study adopts a positivist philosophy, emphasizing objective measurement and observable phenomena to gather quantifiable data. This approach is suitable for examining relationships between e-filing system and voluntary tax compliance. Positivism supports the formulation and rigorous testing of hypotheses, ensuring findings are grounded in empirical evidence rather than subjective views. This positivist approach aligns with the study objectives by enabling the generation of measurable results and generalizable conclusions, thereby supporting reliable insights into how digital tools influence taxpayer behavior.

3.2 Research Approach and Design

This study employs a quantitative approach and a descriptive research design. Using structured questionnaires, numerical data collected to objectively measure variables related to e-filing system. The descriptive design provides a detailed snapshot of taxpayer attitudes and compliance behaviors, facilitating the identification of patterns without manipulating the variables. This approach supports hypothesis testing and enhances reliability and validity by using standardized instruments. By offering comprehensive insights into taxpayer experiences, the study aims to develop evidence-based recommendations for improving tax compliance strategies through digital tools.

3.3 Study Area and Population

The study centered on the Kinondoni tax region in Tanzania, a vibrant urban area characterized by a diverse economy and a significant presence of small and medium enterprises (SMEs). This region serves as an ideal setting for this study, given its mix of formal and informal businesses and the Tanzania Revenue Authority's initiatives to implement electronic tax filing. The research focuses on individual taxpayers and SMEs registered for at least one year and actively using e-filing system, with a total of 5,550 registered taxpayers identified in 2024, of which 343 were active users with at least 1 year of registration. This targeted approach allows for a comprehensive assessment of tax compliance dynamics, providing valuable insights for enhancing tax administration practices in similar urban regions across Tanzania.

3.4 Sample Size and Sampling Technique

The sample size for this study was determined using Yamane's formula, resulting in a calculated sample of 185 active e-filing system users from the Kinondoni tax region, based on a total population of 343 users and a 95% confidence interval. To ensure unbiased selection, a simple random sampling technique was employed, where each user was assigned a unique identification number from 1 to 343. A random number generator then selects 185 unique numbers corresponding to individual users, ensuring equal chances of selection and preventing systemic bias. This method enhances the reliability and validity of the findings, providing a representative sample that allows for generalizable insights into the broader population of digital tax users in the region.

3.5 Data Collection Methods and Analysis

This study emphasizes the use of primary quantitative data obtained directly from active TIN-registered e-filing system users in Kinondoni Tax Region. Data was collected through a structured questionnaire featuring a 5-point Likert scale, which assesses respondents' agreement with various statements about e-filing system and voluntary tax compliance. To maximize response rates, the questionnaires were distributed both physically at locations such as tax offices and business centers and electronically via email and social media platforms like WhatsApp. The data analysis employs descriptive statistics to summarize demographic information and response distributions, followed by regression analysis to investigate the relationships between e-filing system and voluntary tax compliance.

3.6 Validity and Reliability of the study

The study validity was ensured through content, construct, and criterion validity, with experts reviewing the questionnaire to confirm comprehensive coverage of relevant indicators. Construct validity was supported by factor analysis that groups related items, while criterion validity assessed by correlating results with established measures from prior research. Reliability was measured using the Cronbach Alpha coefficient, aiming for a value of 0.70 or higher to ensure internal consistency among questionnaire items. Any items that contribute to inconsistencies were revised to enhance reliability, thereby strengthening the credibility of the study findings.

Table 1

Reliability Statistics

Variables	Cronbach's Alpha	N of Items
Voluntary Tax Compliance	.752	6
Electronic Filing System	.845	6

Table 1 shows that both variables in the study have strong internal consistency, as indicated by their Cronbach's Alpha values. Voluntary tax compliance has a Cronbach's Alpha of 0.752, while the electronic filing system has a higher value of 0.845. Both values exceed the acceptable threshold of 0.70, confirming that the items measuring these constructs reliably reflect their respective concepts and enhancing the overall validity of the study measurement instruments.

3.7 Ethical Consideration

This study emphasizes ethical considerations by ensuring the integrity and respect of all participants involved in the research. Informed consent was obtained, ensuring participants understand the study purpose, their role, and any potential risks. Confidentiality maintained through anonymized responses and secure data storage, and participants were informed of their right to withdraw at any time without consequences. The research adheres to ethical guidelines, with approval from an ethical review board, ensuring compliance with established standards.

IV. FINDINGS & DISCUSSION

4.1 Response Rate

This study targeted a sample of 185 respondents; however, a total of 173 participants completed the survey and their responses were utilized for the analysis of this study. The completed survey resulting in a response rate of approximately 93% which is high to support the study analysis. Therefore, findings and discussion of this study are based on the data collected from these respondents, providing valuable insights into the study variables. Table 2 illustrates the demographic characteristics of the participants involved in the study.

Table 2

Demographics Information of the Participants

Demographic information Categories		Frequency	Percent
Gender	Male	80	46.2
	Female	93	53.8
	Total	173	100.0
Age Group	18 - 25 years	25	14.5
	26 - 35 years	62	35.8
	36 - 45 years	56	32.4
	More than 45 years	30	17.3
	Total	173	100.0
Education Level	Primary level	10	5.8
	Secondary level	31	17.9
	Certificate level	34	19.7
	Diploma level	27	15.6
	Graduate level	46	26.6
	Post Graduate level	25	14.5
	Total	173	100.0
Years of experience in using e-filing system	Less than 3 years	58	33.5
	3 to 6 years	73	42.2
	More than 6 years	42	24.3
	Total	173	100.0
Level of Digital Literacy	Low	52	30.1
	Moderate	85	49.1
	High	36	20.8
	Total	173	100.0

Among the 173 respondents as shown in Table 2, females constitute 53.8% of the sample, while males make up 46.2%. This balanced gender distribution contributes to a broader understanding of tax compliance behaviors across genders in relation to the e-filing system. Age-wise, the largest segment of respondents, at 35.8%, falls within the 26-35 age range, followed closely by the 36-45 age group at 32.4%. Younger individuals between 18-25 comprise 14.5%, while those over 45 represent 17.3%. This pattern suggests that younger and middle-aged taxpayers are more engaged with e-filing, potentially due to greater adaptability to digital systems.

In terms of education, 26.6% of respondents hold a graduate degree, with another 19.7% possessing a certificate, and 17.9% having secondary education. Notably, 14.5% have postgraduate qualifications, while a smaller portion, 5.8%, have only completed primary education. This range of educational backgrounds offers diverse perspectives on e-filing and voluntary tax compliance, as higher education is often linked to digital tool proficiency.

Regarding e-filing experience, the majority have been using the system for 3 to 6 years (42.2%), followed by those with less than 3 years (33.5%), and over 6 years (24.3%). Digital literacy levels indicate that most respondents have moderate skills (49.1%), while 30.1% exhibit low literacy and 20.8% show high proficiency, pointing to opportunities for further education to enhance e-filing engagement and compliance.

4.2 Electronic Filing on Voluntary Tax Compliance

This section provides descriptive statistics that highlight key variables related to electronic filing and its impact on voluntary tax compliance. Statistics, which include frequency, percentage, mean, and standard deviation, help clarify the relationship between different aspects of the e-filing system and taxpayer compliance behaviors. Table 3 presents a detailed overview of respondents' experiences and perceptions of electronic filing, showcasing its influence on their voluntary compliance.

Table 3

Electronic Filing on Voluntary Tax Compliance

Statements with 5-point Likert scale		Frequency	Percent	Mean \pm SD
The electronic filing system is easily accessible and available at any time.	Strong Disagree	4	2.3	3.57 \pm 1.090
	Disagree	26	15.0	
	Neutral	53	30.6	
	Agree	47	27.2	
	Strong Agree	43	24.9	
	Total	173	100.0	
The user interface of the electronic filing system is intuitive and user-friendly.	Strong Disagree	1	.6	3.38 \pm .924
	Disagree	37	21.4	
	Neutral	43	24.9	
	Agree	79	45.7	
	Strong Agree	13	7.5	
	Total	173	100.0	
The electronic filing system functions reliably with minimal errors or downtime.	Strong Disagree	5	2.9	3.32 \pm 1.061
	Disagree	36	20.8	
	Neutral	58	33.5	
	Agree	47	27.2	
	Strong Agree	27	15.6	
	Total	173	100.0	
The information provided through the electronic filing system is accurate and reliable.	Strong Disagree	3	1.7	3.21 \pm .966
	Disagree	51	29.5	
	Neutral	32	18.5	
	Agree	81	46.8	
	Strong Agree	6	3.5	
	Total	173	100.0	
The electronic filing system ensures a high level of security for user data.	Strong Disagree	23	13.3	3.30 \pm 1.321
	Disagree	27	15.6	
	Neutral	34	19.7	
	Agree	53	30.6	
	Strong Agree	36	20.8	
	Total	173	100.0	
The accuracy of the filings submitted through the electronic filing system is satisfactory.	Strong Disagree	9	5.2	3.21 \pm 1.032
	Disagree	44	25.4	
	Neutral	27	15.6	
	Agree	87	50.3	
	Strong Agree	6	3.5	
	Total	173	100.0	
Average mean score				3.3317 \pm 1.0657

The findings presented in Table 3 indicate a positive perception of the electronic filing system accessibility and user-friendliness among respondents, as evidenced by a mean score of 3.57 for the statement that the system is easily accessible and available at any time. Notably, 52.1% of respondents expressed agreement with this assertion, highlighting the importance of having a readily available platform for taxpayers. Similarly, the user interface was viewed favorably, with a mean score of 3.38, where 53.2% of participants indicated that it is intuitive and user-friendly. These findings align with existing literature that emphasizes the necessity of user-friendly interfaces in digital tax systems to promote voluntary compliance (Mkirima, 2023; Sholih *et al.* 2023). When taxpayers find the systems

accessible and easy to navigate, they are more likely to engage with them, which ultimately enhances compliance rates.

Conversely, concerns regarding the reliability and accuracy of the electronic filing system emerged from the findings. The statement regarding minimal errors or downtime received a mean score of 3.32, suggesting that while some respondents are satisfied, a substantial number still harbor doubts about the system reliability. This uncertainty hinders taxpayer confidence and engagement, as previous research indicates that trust in the system is crucial for encouraging compliance (Mlowe, 2023; Purba *et al.* 2020). Moreover, the mean scores for the accuracy of information provided and the overall satisfaction with filing accuracy were both 3.21, reflecting apprehension among users regarding the trustworthiness of the data submitted. This is particularly concerning, as system reliability and data accuracy are fundamental to building taxpayer confidence and ensuring successful digital engagement.

4.3 Voluntary Tax Compliance

Table 4 provides an overview of voluntary tax compliance, focusing on taxpayers' willingness to meet their tax obligations without enforcement. It highlights the significance of self-assessment and adherence to tax laws.

Table 4

Voluntary Tax Compliance

Statements with 5-point Likert scale		Frequency	Percent	Mean \pm SD
Tax filings are submitted on time using the available systems.	Strong Disagree	3	1.7	3.35 \pm 0.956
	Disagree	37	21.4	
	Neutral	43	24.9	
	Agree	77	44.5	
	Strong Agree	13	7.5	
	Total	173	100.0	
Reports submitted to the tax authority are consistently accurate.	Strong Disagree	3	1.7	3.27 \pm 0.953
	Disagree	45	26.0	
	Neutral	34	19.7	
	Agree	84	48.6	
	Strong Agree	7	4.0	
	Total	173	100.0	
Payments to the tax authority are made consistently and punctually.	Strong Disagree	5	2.9	3.65 \pm 1.114
	Disagree	24	13.9	
	Neutral	46	26.6	
	Agree	50	28.9	
	Strong Agree	48	27.7	
	Total	173	100.0	
Users possess a clear understanding of their tax obligations.	Strong Disagree	3	1.7	3.37 \pm 0.953
	Disagree	39	22.5	
	Neutral	32	18.5	
	Agree	89	51.4	
	Strong Agree	10	5.8	
	Total	173	100.0	
Overall satisfaction with the tax processes and systems is high.	Strong Disagree	3	1.7	3.18 \pm 0.902
	Disagree	48	27.7	
	Neutral	36	20.8	
	Agree	86	49.7	
	Strong Agree	0	0.0	
	Total	173	100.0	
Trust in the integrity of the tax system is significant.	Strong Disagree	4	2.3	3.23 \pm 0.922
	Disagree	46	26.6	
	Neutral	30	17.3	
	Agree	93	53.8	
	Strong Agree	0	0.0	
	Total	173	100.0	
Average mean score				3.342 \pm 0.967

The findings in Table 4 indicate a moderate level of voluntary tax compliance among respondents, with an overall average mean score of 3.342 \pm 0.967. The highest compliance was observed in tax payments being made consistently and punctually (3.65), where 28.9% agreed and 27.7% strongly agreed, suggesting that over half (56.6%) of taxpayers prioritize timely payments. However, trust in the integrity of the tax system received a lower mean score

of 3.23, with 26.6% disagreeing and no respondents strongly agreeing, reflecting concerns about transparency and fairness. Similarly, overall satisfaction with tax processes had the lowest mean score (3.18), where 27.7% disagreed, and no one strongly agreed. These findings align with studies by Mkirima, (2023) found that when taxpayers perceive tax authorities as fair and competent, voluntary compliance improves.

Moreover, tax filings being submitted on time received a mean score of 3.35, with 44.5% agreeing, while reports submitted to tax authorities being accurate scored 3.27, with 48.6% agreeing. This suggests that while taxpayers generally comply, a considerable proportion remain neutral (24.9% for timely filings and 19.7% for accurate reports), indicating a need for further improvements. Understanding tax obligations scored 3.37, with 51.4% agreeing, showing relatively higher awareness. However, the presence of 22.5% who disagreed suggests that tax education efforts could still be strengthened. These findings align with Purba *et al.*, (2020), which states that simplifying tax procedures and enhancing education increase voluntary compliance. Addressing these concerns through transparency, improved taxpayer services, and education could enhance compliance levels, ultimately improving revenue collection and tax administration efficiency.

4.4 Relationship between Electronic Filing On Voluntary Tax Compliance

The study employing regression analysis, to determine the extent to which electronic filing affects voluntary tax compliance. The following findings, illustrated in Table 5, present the results of this regression analysis, highlighting the relationship between electronic filing and voluntary tax compliance.

Table 5

Regression Model on the Effect of Electronic Filing on Voluntary Tax Compliance

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	.982	.100		9.814	.000	.785	1.180
	E - Filing	.708	.029	.880	24.251	.000	.650	.766

The regression analysis results presented in the coefficients table demonstrate a significant relationship between the electronic filing system and voluntary tax compliance among taxpayers in the Kinondoni tax region. The unstandardized coefficient for the electronic filing system (B = 0.708) indicates that for every unit increase in the effectiveness or quality of the electronic filing system, voluntary tax compliance increases by 0.708 units. This finding is statistically significant, as reflected in the t-value of 24.251 and a p-value of 0.000, which suggests that the electronic filing system is a strong predictor of voluntary tax compliance. The standardized coefficient (Beta = 0.880) further supports this conclusion, indicating that the electronic filing system has a robust positive influence on taxpayer compliance behavior. The confidence interval for B, ranging from 0.650 to 0.766, confirms that this relationship is not only statistically significant but also reliable within a specific range.

These findings align with previous studies that emphasize the positive impact of digital tax administration systems on compliance behavior. For instance, research conducted by Mustapha *et al.* (2021) and Sholih *et al.* (2023) supports the notion that enhanced accessibility and usability of electronic tax systems lead to higher compliance rates. The results highlight the importance of electronic filing systems in simplifying the tax process, which ultimately encourages taxpayers to comply voluntarily. Additionally, the strong correlation found in this study suggests that policy efforts aimed at improving the functionality and user experience of electronic filing systems could significantly enhance voluntary compliance, corroborating the work of Sholih *et al.* (2023), who advocate for continuous improvements in digital tax infrastructure to bolster taxpayer engagement and compliance.

Table 6

Analysis of Variance Output

Model Summary						
Model		R	R Square	Adjusted R Square	Std. Error of the Estimate	
1		.880	.775	.773	.3084310	
ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	55.945	1	55.945	588.092	.000 ^b
	Residual	16.267	171	.095		
	Total	72.212	172			

The model summary and ANOVA results in Table 6 provide a comprehensive overview of the relationship between the electronic filing system and voluntary tax compliance. The R value of 0.880 indicates a strong positive correlation between the two variables, suggesting that a significant portion of the variance in voluntary tax compliance is explained by the effectiveness of the electronic filing system. The R^2 value of 0.775 signifies that approximately 77.5% of the variance in voluntary tax compliance is accounted for by the electronic filing system, reflecting a robust model fit. The adjusted R^2 value of 0.773 further confirms this, indicating that even after accounting for the number of predictors in the model, the electronic filing system remains a significant predictor of compliance behavior. The standard error of the estimate, at 0.3084310, suggests a relatively small amount of error, enhancing the model predictive reliability.

The ANOVA results substantiate the strength of the model, with an F-statistic of 588.092 and a p-value of 0.000, indicating that the regression model is statistically significant. This means that the electronic filing system significantly contributes to explaining the variance in voluntary tax compliance when compared to a model without predictors. The significant results align with previous research, conducted by Purba *et al.* (2020) and Mustapha *et al.* (2021), which demonstrate that improved digital tax systems are associated with higher levels of compliance. This reinforces the notion that investing in the enhancement of electronic filing systems lead to substantial improvements in taxpayer compliance behavior, ultimately fostering a more effective and efficient tax administration system.

V. CONCLUSIONS & RECOMMENDATIONS

5.1 Conclusion

This study concludes that the implementation of electronic filing systems significantly enhances voluntary tax compliance in the Kinondoni tax region. The findings underscore the importance of accessibility, user-friendliness, and reliability of digital tax tools in fostering taxpayer engagement and improving compliance rates. By providing a clear understanding of how electronic filing impacts taxpayer behavior, this research offers valuable insights for policymakers and tax authorities, emphasizing the need for continuous improvements in digital tax systems to further enhance compliance and streamline tax administration processes.

5.2 Recommendations

Tax authorities should focus on improving user experience by creating intuitive electronic filing interfaces and gathering taxpayer feedback for continuous enhancement, which boosts satisfaction and compliance. Ensuring accessibility for all taxpayers, especially those with limited digital literacy, is key; this is supported through training, resources, and in-person assistance. Strengthening system security with features like two-factor authentication reassures taxpayers of their data safety, fostering trust and adoption. Additionally, outreach programs that highlight e-filing benefits and the use of data analytics to track taxpayer behavior are essential for identifying support areas and improving system reliability. These measures, along with regular updates, promote voluntary compliance and build public trust. Future research should examine the long-term impacts of e-filing on compliance across diverse demographics, such as SMEs versus individual taxpayers.

REFERENCES

- Ajzen, I. (2020). The theory of planned behavior: Frequently asked questions. *Human behavior and emerging technologies*, 2(4), 314-324.
- Ajzen, I., & Schmidt, P. (2020). Changing behavior using the theory of planned behavior. *The handbook of behavior change*, 17-31.
- Amonkar, V, Melo, R. F. E., Haldankar, G., & Sawant, S. (2024). Exploring the Growth of E-Filing of Income Tax Returns in India: An In-Depth Examination of Growth and Comparative Analysis. *Studies in Business and Economics*, 19(2), 23-36.
- Bunn, D., Asen, E., & Enache, C. (2020). Digital taxation around the world. *Tax foundation*, 20(1), 1-45.
- Charles, S., & Mmassy, T. (2022). Enhancing the Quality of Judicial Service Delivery through E-Filing System: The Case of Rukwa District Courts in Tanzania. *The UONGOZI Journal of Management and Development Dynamics*, 32(1), 64-86.
- Davis, F. D., Granić, A., & Marangunić, N. (2024). *The technology acceptance model: 30 years of TAM*. Springer International Publishing AG.
- Geringer, S. (2021). National digital taxes—Lessons from Europe. *South African Journal of Accounting Research*, 35(1), 1-19.
- Hendriks, C. J., & Maposa, H. (2020). Tax compliance and electronic filing. *Administratio Publica*, 28(1), 1-24.
- Kan, M. P., & Fabrigar, L. R. (2020). Theory of planned behavior. In *Encyclopedia of personality and individual differences* (pp. 5476-5483). Cham: Springer International Publishing.



- Lah, U., Lewis, J. R., & Šumak, B. (2020). Perceived usability and the modified technology acceptance model. *International Journal of Human–Computer Interaction*, 36(13), 1216-1230.
- Malatji, W. R., Eck, R. V., & Zuva, T. (2020). Understanding the usage, modifications, limitations and criticisms of technology acceptance model (TAM). *Advances in Science, Technology and Engineering Systems Journal*, 5(6), 113-117.
- Mbise, K. S., & Baseka, L. (2022). The Impact of Digital Systems on Tax Compliance Among SMEs. *The Journal of Informatics*, 2(1), 69-82.
- Mkirima, R. (2023). *Assessment Of the Effectiveness Of E-Filing System on Tax Compliance Among Wholesalers of Arusha Tax Region* (Doctoral dissertation, Institute of Accountancy Arusha (IAA)).
- Mlowe, E. (2023). *Tax Systems on Voluntary Tax Compliance in Tanzania* (Doctoral dissertation, Institute of Accountancy Arusha (IAA)).
- Mpofu, F. Y. (2022). Taxation of the digital economy and direct digital service taxes: Opportunities, challenges, and implications for African countries. *Economies*, 10(9), 219.
- Mustapha, B., Rildwan, O. B., Sadiq, R., Moronke, L. A., Ahmad, H., & Rahmon, T. A. (2021). Integrated e-tax filing management system on tax compliance behaviour in Nigeria. *Academy of Accounting and Financial Studies Journal*, 25, 1-15.
- Mutuku, E. (2022). *Effect of Itax System on Vat Compliance Among Small and Medium Enterprises in Eldoret Town* (Doctoral dissertation, KESRA/JKUAT-Unpublished research project).
- Purba, H., Sarpingah, S., & Nugroho, L. (2020). The effect of implementing e-filing systems on personal tax compliance with internet knowledge as moderated variables (Case study on personal taxpayers at KPP Pratama Jakarta Kramatjati). *International Journal of Commerce and Finance*, 6(1), 166-180.
- Sholih, M. W., Ubaidillah, M., Prayogo, I., & Setyaningrum, P. A. (2023). Effectiveness of Using E-Filing on Improving Individual Taxpayer Compliance with Mastery of Accounting Information Systems as A Moderating Variable. *JRB-Jurnal Riset Bisnis*, 7(1), 24-40.
- Ullah, H. A., Sair, S. A., & Nisar, S. (2023). Study of E-Filing Acceptance among Taxpayers: Evidence from Emerging Economy. *Contemporary Issues in Social Sciences and Management Practices*, 2(4), 148-159.