

**ELECTRONIC TAX ADOPTION AND TAX COMPLIANCE  
AMONGSMALLANDMEDIUM ENTERPRISES: A CASE STUDY OF FORT  
PORTAL CENTRALFORTPORTAL MUNICIPALITY KABAROLE DISTRICT  
UGANDA**

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**UGANDA CHRISTIAN  
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## DECLARATION

I Ninsiima Azoora Collins declare that the contents of this research project is my own original work and have not been presented by any previous researcher at any university or other institution .

Signed.....  
Ninsiima Azoora Collins

Date.....

**APPROVAL**

This research report has been submitted for examination with my approval .

Signature.....*Allen*.....

Date.....*14/04/2026*.....

Mrs. Kagume Allen

## **DEDICATION.**

I Ninsiima Azoora Collins dedicate this research to my parents, mom Azoora Jackline and Dad Azoora David, my siblings Azoora Carlos, Atuhura Clara Coleen, Ahura Calvin Clavell, Atuhura Carol. I would also like to express my gratitude to all the willing participants in my research and the school of business, supervisor Mrs. Allen Kagume whose support guided me along this path.

### **ACKNOWLEDGEMENT.**

I would like to extend my deepest gratitude to all the willing participants in my research and my supervisor Mrs. Allen Kagume whose cooperation expertise and insight were instrumental in the completion of this work.

## **ABSTRACT.**

This study explores the relationship between electronic tax adoption and tax compliance among small and medium enterprises in FortPortal Municipality Kabarole district Uganda . While Uganda Revenue Authority has accelerated digital integration through systems like EFRIS. Despite intended benefits , many users expressed dissatisfaction with major roll outs like the Electronic Fiscal Receipting and Invoicing System that faced immediate pushback .

The research adopted a cross sectional ,mixed methods design utilizing questionnaires from 151 valid respondents and 12 purposive interviews . The data was analysed using SPSS and thematic analysis to better understand the objectives of the study them being , adoption levels, impact on compliance and existing challenges.

The findings reveal that e-tax adoption in Fort Portal is moderate and unevenly distributed with higher and better results in hospitality and wholesale sectors. Adopters reported timeliness and 24/7 filling access as key benefits but overall impact on compliance costs remained neutral as businesses struggle with upfront investments. The study identified system downtime during peak periods (mean - 4.42) and high infrastructure costs (mean - 4.28) and digital literacy gap as major barriers to sustained use.

The study concludes that while electronic tax systems offer genuine administrative benefits , they have not yet shifted the broader compliance culture due to persistent technical and skill issues. Recommendations include implementing targeted digital literacy training in local languages , simplifying the user interface .

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## LIST OF ABBREVIATIONS

ACODE --	Advocates Coalition for Development and Environment
CMI -----	Chr. Michelsen Institute
COVID ---	Coronavirus Disease
DTS -----	Digital Tax Stamp
EFRIS -----	Electronic Fiscal Receipting and Invoicing System
EPRC -----	Economic Policy Research Centre
GDP -----	Gross Domestic Product
ICT -----	Information and Communication Technology
ICTD -----	International Centre for Tax and Development
IMF -----	International Monetary Fund
MIS -----	Management Information Systems
OECD -----	Organization for Economic Cooperation and Development
SME(s) ----	Small and Medium Enterprises
SPSS -----	Statistical Package for the Social Sciences
TAM -----	Technology Acceptance Model
TREP -----	Taxpayer Register Expansion Program
UBOS -----	Uganda Bureau of Statistics
UGX -----	Uganda Shillings
URA -----	Uganda Revenue Authority
VAT -----	Value Added Tax

## CHAPTER ONE

### 1.0 Introduction

This chapter covers the background, the statement of the problem, purpose of the study, objectives of the study, compelling research questions, scope of the study, the significance of the study, conceptual framework of the study.

### 1.1 Background of the Study

Taxation has always been regarded as a major tool governments have to mobilize the domestic resources needed to fund public goods, infrastructure and national development. Besley and Persson (2013) point out that the ability to generate revenue is a crucial aspect of state capability as countries that do not establish an effective tax administration often face challenges in delivering public services and ensuring long term fiscal sustainability in Uganda like similar developing countries, enhancing this capability that has become an urgent policy goal.

To address revenue shortfalls and compliance issues, tax administrations worldwide have begun investing in electronic tax systems with a transition from previous processes representing a notable administrative change in the last 20 years. These new systems include electronic filing and others which hold potential lower costs for taxpayers and enforce laws more effectively (Mpofu 2022). The Uganda Revenue Authority launched its first electronic tax platform in 2009 and has slowly enhanced its digital capabilities with EFRIS being the most recent significant development.

Small and Medium Enterprises take on a complex position within Uganda's economy as they constitute approximately 90% of all private businesses and are a primary source of employment outside agriculture (Uganda Bureau of Statistics, 2024) though the vast majority operate informally without formal registration, accounting records and meaningful engagement in the tax system. This informality is the principal reason why Uganda's tax ratio has remained persistently low, averaging approximately 13.6% in the financial year 2023/2024 and falling well short of the government's own 18% target (Uganda Revenue Authority 2024). The Economic Policy Research Centre (2022) also noted that broadening the tax base to include more SMES is among the highest priority reforms identified in Uganda's latest development Plan, yet progress still has been limited.

The International Monetary Fund 2024 shows Uganda's Tax GDP ratio at 13.6% as of 2023 well below the Sub-Saharan Africa average of approximately 16.5% and East African peers like Kenya that stood at approximately 17.5% in 2023. This is interesting as Uganda has spent a lot on digital tax infrastructure over the past decade and one would hope for better results showing weaknesses still exist. Fjeldstad and Moore (2008) studied tax authorities' performance in Africa identifying upgrading alone doesn't improve compliance unless accompanied by reforms in taxpayer education, institutional trust and the regulatory environment for small businesses and Uganda appears to follow this pattern closely.

EFRIS was made to connect VAT registered businesses directly to URA's servers hence when effective the system enables URA to check sales against actual transaction records hence making underreporting harder. The URA Annual Report 2023 shows that over 64000 businesses had registered on EFRIS by the 2022/2023 financial year with a high active usage rate of about 83% using it. However this figure is only on businesses that have formally registered for VAT which represents a small fraction of Uganda's total SME sector. Studies by Niwagaba (2023) on Kampala Central Division and Nabunnya, Magala, and Musiimenta (2025) on Kira Division are valuable but focus on conditions in Uganda's most developed areas where internet infrastructure is robust, businesses are formally organized with URA's support networks being more accessible. However secondary cities such as Fort Portal which serves as the regional hub for western Uganda remain comparatively understudied despite their importance to the national economy.

Fort Portal Municipality hosts a large active SME sector dominated by retail trade, hospitality and wholesale commerce and per 2025 approximately 1298 businesses held active trading licenses within Fort Portal Central Division, some 289 registered hotels and a number of real estate and service businesses (Fort Portal City Authority 2025) but more businesses operate without formal licenses placing them outside the reach of URA's digital systems. The combination of high SME density with limited formal registration and relatively weak digital infrastructure makes Fort Portal a particularly interesting and practically important context for studying e-tax adoption.

This examines the relationship between electronic tax adoption and tax compliance among SMES in Fort Portal Municipality with an aim of generating evidence that is useful both for an academic understanding, practical policy and overall program design.

### **1.2 Statement of the Problem**

Uganda Revenue Authority 2024 report indicates Uganda's Tax ratio has remained stubbornly low at 13.6% as of the 2023/2024 financial year and often missing the government's 18% target. However, Electronic tax systems like EFRIS were designed to widen this net by making compliance more convenient and difficult to evade. The compliance paradox described by Rwakihembo, Namutebi and Wakoko (2024) persists even among businesses that express willingness to comply hence actual compliance rates remaining low.

This suggests that the principal barrier is operational as businesses encounter numerous issues that require specialist knowledge to navigate and high costs. These problems are estimated to be more pronounced in Fort Portal than Kampala given the weaknesses of digital infrastructure in western and because Fort Portal has not been the subject of dedicated research on electronic tax adoption. The problem in this area remains poorly understood and this study addresses the evidence gap by investigating the level of electronic tax adoption impact on compliance behavior and the challenges that prevent use among SMES in Fort Portal Central.

### **1.3 Purpose of the Study**

This study looks at how electronic tax adoption affects tax compliance among Small and Medium Enterprises in Fort Portal municipality identify the factors that hinder that relationship.

### **1.4 Research Objectives**

To evaluate the general level of electronic tax system adoption by Small and Medium Enterprises in Fort Portal municipality.

To assess the impact of electronic tax systems on tax compliance by Small and Medium Enterprises in Fort Portal municipality.

To identify challenges faced by Small and Medium Enterprises while using electronic tax systems and to suggest practical solutions to address them .

### **1.5 Research Questions**

What is the level of electronic tax adoption by SMES in Fort Portal municipality?

What is the impact of electronic tax systems on tax compliance by SMES in Fort Portal municipality?

What are the challenges faced by small and medium enterprises while using Electronic tax systems and suggest practical solutions to address them?

### **1.6 Scope of the Study**

#### **Geographical Scope.**

This study was conducted within Fort Portal Central Division Fort Portal City Kabarole District in the western region of Uganda. This area was selected due to large portions of formally registered SMEs and providing business variations that are meaningful.

#### **Time Scope**

The study covered SMEs that had been operating from 2021 to 2025. This window covers periods during which EFRIS was slowly rolled out and electronic tax was strengthened hence making it a relevant period for assessing adoption and compliance .

#### **Content Scope.**

The study looked at electronic tax systems operated by URA that is EFRIS and the URA web portal. The primary analysis was by the Technology Acceptance Model (Davis 1989) the Theory of Planned Behavior (Ajzen 1991) and the Diffusion of Innovations theory (Rogers, 2003) as these frameworks account for attitudes social and systemic factors of tax adoption among SMES .

### **1.7 Significance of the Study**

#### **Small and Medium Enterprises**

It provides SMES in Fort Portal with practical evidence about benefits and costs of electronic tax adoption. By identifying the specific challenges that most commonly prevent sustained engagement with digital tax systems and these findings can help businesses make more informed decisions about how to manage their tax obligations and what to advocate for in terms of URA support .

### **URA and Policymakers**

It gives evidence based feedback for URA and policymakers on barriers to electronic tax adoption in urban centers. This is useful for designing targeted interventions such as simple filing interfaces for small businesses local training programs and infrastructure investment priorities that can increase the revenue yield from SMES without imposing unproportional compliance costs.

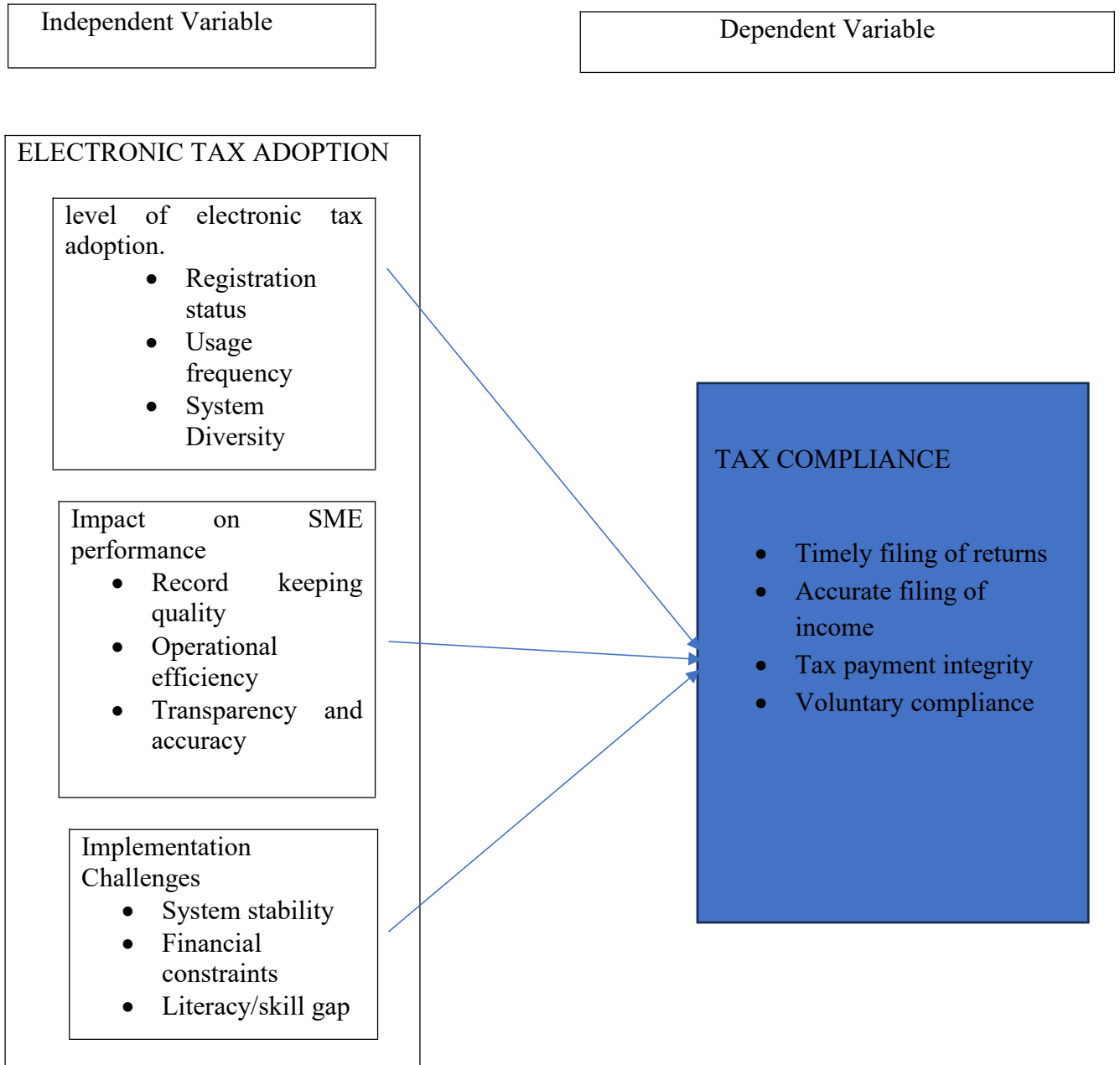
### **Future Researchers**

It contributes to academic knowledge on digital tax administration in developing countries especially in regional urban areas that have been ignored in existing literature. These findings provide foundation for longitudinal research on compliance trends and comparative studies and broader theoretical development on the conditions under which electronic tax systems achieve their intended effects.

## **1.8 Conceptual Framework**

This study positions electronic tax adoption as the independent variable and tax compliance among SMES as the dependent variable . Electronic tax adoption is seen in these three dimensions the level of electronic tax adoption measured by registration status usage frequency and system diversity the impact on SME performance on compliance measured by record-keeping quality and operational efficiency and finally implementation challenges measured by system reliability and digital literacy gaps. Tax compliance being through timely filing and voluntary payment behavior with the framework drawing on Technology Acceptance Model to connect perceived ease of use and perceived usefulness to adoption decisions.

## Conceptual Framework .



(primary source)

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0 Introduction**

This reviews existing data on electronic tax adoption and tax compliance and what these mean for small and medium enterprises in developing countries. It is organised around the objectives of the study drawing on studies from Uganda and similar developing economies situating these findings with frameworks guiding the study. Literature on electronic tax in Uganda has grown over the last decade tracking URA's digital platforms.

#### **2.1 Theoretical Framework**

To know why businesses adopt or avoid electronic tax systems requires thorough assessment and the Technology Acceptance Model (1989) proposes that an individual's intention to use a given technology is shaped by two perceptions with them being perceived usefulness and perceived ease of use. When both perceptions are positive adoption tends to follow and when either is low then resistance emerges even if it is well designed. TAM helps explain why businesses reject digital systems and that not because they oppose taxation but because those systems fail to feel useful enough to justify the change.

The Diffusion of Innovations theory (Rogers, 2003) complements TAM by explaining why adoption is uneven across business types and sectors. Here early adopters tend to be better resourced and formally organized plus willing to accept uncertainty while smaller and less formal businesses lag as they require peer influence or facilitation before adopting. It is useful for understanding patterns with adoption appearing concentrated in the hospitality and wholesale sectors.

The Theory of Planned Behavior (Ajzen, 1991) adds aspects by emphasizing the role of attitudes, subjective norms and perceived behavioral control in shaping compliance decisions. When businesses believe their peers are complying and not carrying real risks, their own intention increases. However when the social norm shifts towards avoidance and the

organization environment is seen as hostile rather than supportive the opposite tends to occur. This therefore connects the institutional trust aspect of the study. This research uses TAM as its organizing framework while drawing on these other theories where the evidence calls .

## **2.2 Tax Administration in Uganda**

The Uganda Revenue Authority established in 1991 manages and has progressively modernized its operations over the past three decades. The shift to digital tax administration began around 2009 with the introduction of e-filing and e-payment systems but has accelerated since with platforms such as EFRIS the Digital Tax Stamp system and the Taxpayer Register Expansion Program. Turyatamba and Turyasingura (2024) describe URA's digital strategy being a phased integration into its operations aimed at improving both revenue collection and service delivery with their analysis showing reduced processing time.

For SMES particularly those operating informally, the picture is more complex with Uganda Bureau of Statistics 2024 estimating that SMEs account for roughly 90% of private businesses but contribute only about 20% of GDP a gap that reflects the depth of informality. A study on Kira Division found that electronic filing and electronic payment systems improved tax compliance by reducing delays while internet unreliability remained a significant constraint (Nabunnya, Magala and Musiimenta, 2025). Evidence also shows that the adoption of Electronic Billing Machines had a positive effect on revenue collection as it reduced underreporting among targeted taxpayers (Kibuuka, Watundu & Musiimenta, 2023). Also electronic fiscal invoicing under EFRIS has improved VAT compliance in the sectors where it has been effectively implemented (Anaso, Mugisha & Tibamanya, 2025).

## **2.3 Development of Electronic Tax Systems**

The development of electronic tax systems globally reflects a broader trend towards digitization to improve public finance management. In most developing countries this has meant building systems which together help streamline tax operations and reduce errors (Mpofu 2022). In Uganda specifically the rollout of EFRIS has been the biggest recent development requiring VAT registered businesses to issue digital receipts linked directly to URAs servers thus creating trail of transactions that makes underreporting more difficult when the system is operating effectively .

Guma and Musiimenta (2024) examined effects of EFRIS on compliance and found the system improved compliance when it was properly implemented by increasing transaction accuracy and reducing evasion avenues. Niwagaba (2023) studying Kampala Central Division found that practical use remained a major barrier especially in pressure areas with good infrastructure thus most probably will be more pronounced in Fort Portal that has less infrastructure and a less formally organized community.

In Nigeria, Inegbedion (2021) found that acceptance of electronic tax systems positively influenced compliance and increased tax revenue but that acceptance was conditional on the system being seen as both useful and manageable. Salawu and Adigun et al (2024) reinforced this in their study and found that many Nigerian SMES lacked meaningful experience with online tax platforms which hindered adoption even when businesses wanted to comply. These findings are similar and suggest that the barriers Fort Portal SMES face are not unique.

## **2.4 Benefits of Electronic Tax Systems for Tax Compliance**

### **Improved Voluntary Compliance**

Muriithi and Waweru (2011) studying Kenyan tax reform found that simplifying tax procedures and improving service delivery increased the probability of SMES filing returns voluntarily. Night and Bananuka (2020) found that attitude toward the tax system acts as a partial mediator on compliance behavior hence if the system treats taxpayers fairly and consistently compliance improves. This is relevant for Fort Portal where negative attitudes toward URA are common and often reflect genuine experiences .

### **Reduced Compliance Costs and Administrative Burden**

Liedholm and Mead (1999) noted in their work on small enterprise development in Africa that cost reductions that appear modest can be significant relative to the operating capital of micro and small firms. This remains relevant as the cost of acquiring hardware maintaining connectivity and sometimes paying for technical assistance can offset the savings from reduced manual filing mainly in the early stages of adoption.

### **Transparency and Reduced Corruption**

When transactions are paper based and among humans there are numerous points at which money can change hands informally with records being altered. Digital systems reduce these opportunities by creating auditable trails that are difficult to manipulate. Fjeldstad and Heggstad (2011) documented this effect in East Africa authorities showing that digital platforms reduce the scope for discretionary behavior by tax officers which in turn builds taxpayer trust.

### **Revenue Collection and Real Time Monitoring**

Electronic tax systems enable more efficient and timely revenue collection and the World Bank (2019) study on digital tax systems in developing countries found that electronic filing adoption was associated with a 10--15% increase in VAT compliance in the short term in countries that combined digital tools with enforcement reform. In Uganda, URA's 2023 annual report shows that total domestic revenue collections in the 2022/2023 financial year reached UGX 22.3 trillion exceeding the revised target by 4.6% with EFRIS covered sectors showing stronger compliance.

## **2.5 Challenges to Electronic Tax Systems and Tax Compliance**

### **Limited Digital Literacy**

This is the most consistently cited barrier to electronic tax adoption among SME owners and their staff. Nhundu and Matamande (2023) in Harare found that computer literacy levels were positively correlated with tax compliance and that businesses with higher literacy were more capable of navigating online tax platforms. Conversely where digital skills were weak even well-intentioned business owners struggled to complete basic tasks hence eventual disengagement with this being compounded as URA's platforms particularly EFRIS have been developed being complex which suits businesses with dedicated accounting staff that largely ignores the other population.

### **Infrastructure Costs and Financial Constraints**

Fjeldstad and Moore (2008) documented the disproportionate compliance cost burden faced by small businesses in Africa arguing tax administrations underestimate these costs because they are measured in absolutes rather than proportion of business turnover. This argument

applies directly to Fort Portal where many businesses operate below the VAT threshold and have little incentive to invest in the infrastructure required for full electronic tax engagement.

### **System Reliability and Technical Failures**

Salawu et al (2024) identified server downtime and network failures as the top challenges impeding consistent electronic tax use with most failures being around peak filing periods . In Uganda URA's own 2022 annual report acknowledged user complaints about system delays and instability. The persistence of these despite years of investment suggests the improvements made have been insufficient.

### **Security and Privacy Concerns**

Wahyuni and Suhardi (2020) found security concerns were a secondary but significant hinderance on e-tax adoption. Kiprono, Kimitei and Kapkiyai (2023) found similar patterns in Kenya where perceived security risks reduced compliance among online traders. The implication for URA is that building trust in security of its platforms requires not only technical safeguards but sustained communication with the business community .

### **Psychological and Attitudinal Barriers**

Night and Bananuka (2020) established that attitude towards a tax system affects compliance behavior meaning that even when the practical barriers to electronic tax adoption are low negative attitudes can prevent adoption. In Uganda, there is a layer of institutional distrust that compounds individual attitudes and if businesses believe URA is primarily an enforcement body rather than a service provider, they are less likely to voluntarily engage with URA's digital platforms as engagement means visibility and visibility feels risky .

### **Complexity of Tax Laws and Regulatory Mismatches**

Bird and Zolt (2005) argued that in developing countries, simplified tax systems for small enterprises are necessary for broadening the tax base as the complexity of standard tax law is a major deterrent to voluntary compliance. This is seen as many Ugandan SME owners are

unsure of their precise obligations with this uncertainty making them reluctant to engage with systems that feel unfamiliar and potentially punishing if something is done incorrectly .

### **Inadequate Support and Training**

Nangoli Muhumuza and Kituyi (2019) noted that training offered to SMEs in Uganda was often too brief and too technical and with no follow up thus one time training session being insufficient to build the sustained competence that consistent electronic tax use requires. This is particularly acute in upcountry areas where access to direct support is limited and digital support alternatives require the kind of literacy and connectivity that many businesses lack.

### **E-Tax Adoption in East Africa**

In Kenya, Kimitei and Kapkiyai (2023) found that while iTax significantly improved compliance among registered businesses, adoption among small enterprises remained limited due to the connectivity problems and concerns about system complexity. In Tanzania, a study found evidence that electronic tax adoption improved voluntary compliance with the quality of the user experience being the critical variable (Nkwe 2013). The Rwanda Revenue Authority however after heavily investing in digital tax infrastructure has achieved notable improvements in compliance rates among formal businesses though gains have been concentrated among larger formally organized firms (Mascagni, Monkam, and Nell, 2016).

Niwagaba (2023) and Nabunnya et al (2025) together suggest that the challenges facing Fort Portal are consistent with a broader national experience. The specific combination of limited infrastructure high retail sector dominance and distance from URA's main support centers makes Fort Portal a particularly important and underserved context for research .

### **2.7 The Compliance Gap; Why SMEs in Uganda Remain Outside the System**

Crazy enough, a significant number of businesses have never been formally registered and are therefore outside the reach of any tax system being digital or otherwise. The Advocates Coalition for Development and Environment 2024 estimates that Uganda loses

approximately UGX 474 billion annually to businesses operating in the informal sector and closing that gap requires not just better tax tools but a broader approach .

Rwakihembo Namutebi and Wakoko (2024) call it the compliance paradox with the observation that even among registered businesses compliance rates remain low despite increasingly convenient digital tools. Their analysis suggests this paradox reflects that positive attitudes toward compliance do not translate into actual compliance because the digital tools required to change this are not implemented. This though shifts the focus from persuasion toward attitude adjustments .

## **2.8 Summary and Research Gaps**

This chapter shows that electronic tax systems have genuine potential to improve tax compliance, reduce corruption and increase revenue collection. There is credible evidence from within the region that this can be realized under the right conditions which though are demanding as they require reliable infrastructure and accessible support. In Uganda and East Africa, these conditions have not been met for the majority of SMES particularly small retailers and sole traders .

Existing research on electronic tax in Uganda has focused on Kampala leaving a significant gap in understanding how these play out in regional areas such as Fort Portal. The retail section is dominated by low capital businesses of Fort Portal Central Division presenting an area that existing literature does not directly address which this study attempts to fill.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.0 Introduction**

This chapter presents the research methodology describing the research design of the study population and measurement of these variables plus other related areas. It also addresses validity and reliability, ethical considerations plus limitations of the methodology. The objective of the methodological choices described are to ensure that the findings are accurate, reliable and valid .

#### **3.1 Research Design**

This study adopted a cross sectional, mixed-methods research design, combining quantitative and qualitative approaches within a single round of data collection. The quantitative part was designed to measure the extent of electronic tax adoption, its association with compliance and the specific challenges across the study population. The qualitative component was designed to provide a richer understanding of these experiences, perceptions and reasoning of individual business owners .

The use of these mixed methods is justified by nature of the research questions as adoption and compliance impacts are meaningfully measured quantitatively using structured questionnaires and statistical analysis. However, understanding why businesses behave as they do in relation to tax systems and how the environment shapes their decisions requires the kind of detailed sensitive information that qualitative interviews provide . Creswell and Plano Clark (2018) call this a convergent parallel design in which quantitative and qualitative data are collected together, analyzed separately and then merged at interpretation to produce a more complete understanding .

This research is primarily explanatory and it aims not only to describe the current state of electronic tax adoption in Fort Portal but explain factors that account for changes in adoption and compliance. This ambition reflects the purpose of the study being to generate findings that are actionable for URA and policymakers .

### **3.2 Study Population**

The study population consisted of Small and Medium Enterprises operating within Fort Portal Central Division Kabarole District western Uganda. It was selected because it has one of the highest numbers of formally and semi-formally registered SMES and because it provides a sectoral variation being retail wholesale, hospitality and manufacturing to enable meaningful analysis of differences across business types .

According to records from Fort Portal City Authority (2025), approximately 1298 businesses held active trading licenses within Fort Portal Central Division as of early 2025. In addition, 289 hotels and guesthouses are registered with a number of real estate and service businesses operating in varying aspects of formal registration. Additional businesses operate without formal licenses placing them outside the sampling spectrum, the target population for this study was defined as the owners, managers and accountants of these formally or semi registered SMEs with active trading licenses hence 1298 enterprises .

### **3.3 Sampling Design and Sample Size**

The size was determined using the Krejcie and Morgan (1970) formula which is one of the most widely applied sample size determination methods in social science research in Uganda. For a population of 1298, the Krejcie and Morgan table recommends a minimum sample size of 297 respondents at a 95% confidence level with a 5% margin of error. However, due to resource and time constraints while also drawing on the precedent set by comparable studies in Uganda, a target of 161 respondents was set with a distributed questionnaire pool of 170 to account for expected non-response and incomplete returns .

Stratified random sampling was used to ensure that the sample adequately represented the major business sectors in Fort Portal Central Division. The population was divided into four strata based on business type being retail trade, wholesale trade, hotels, hospitality, manufacturing and other services. The allocation of respondents across strata was determined based on the relative size of each sector within the business register ensuring the sample

reflected the sectoral composition of the population. Within each stratum however, businesses were selected using simple random sampling .

For the qualitative component, purposive sampling was employed to select a subset of 12 SME owners and operators for detailed interviews. Purposive sampling was appropriate here because the goal was not statistical representativeness but identification of knowledgeable persons that could provide detailed accounts of their experiences with electronic tax systems. Selection included at least two years of business operation and some prior exposure to URA's digital platforms, business sector, gender and level of electronic tax engagement. This aligns with the suggestions by Patton (2002) on purposive sampling in qualitative research .

Allocation by Business Sector.

<b>Sector</b>	<b>Estimated Population</b>	<b>Proportion (%)</b>	<b>Sample Allocated</b>
Retail Trade	645	49.7%	80
Wholesale Trade	301	23.2%	37
Hotels and Hospitality	258	19.9%	32
Manufacturing and Other	94	7.2%	12
<b>Total</b>	1,298	100%	161

### **3.4 Data Sources**

It used both primary and secondary data sources and primary data was collected directly from SME owners, managers and accountants through structured questionnaires mainly with some interviews also being included. Secondary data was obtained from URA annual reports, the Uganda Bureau of Statistics, Fort Portal City Authority business registers and relevant published academic literature. It served two purposes that being providing background for interpreting primary findings and enabling analysis of empirical results against established evidence .

### **3.5 Data Collection Methods and Instruments**

#### **3.5.1 Structured Questionnaire**

The structured questionnaire was the primary data collection instrument and it was organized into the following . Section A collected background information on respondent demographics these being business type, capital level and prior interaction with URA's digital platforms. Section B contained items measuring the level of electronic tax adoption, Section C contained areas measuring the perceived impact of electronic tax systems on tax compliance and finally Section D containing items measuring specific operational challenges .

Sections B through to D used a five point Likert scale ranging from 1 for Strongly Disagree to 5 for Strongly Agree. Likert scales are widely used in studies of tax behavior and technology adoption because they allow respondents to express their agreement rather than binary yes/no responses and they enable analysis using mean, standard deviations and correlation techniques (Dillman, Smyth and Christian, 2014). The mean scores were interpreted using the following guide; 1.00--2.49 = Disagree, 2.50--3.49 = Neutral, 3.50---5.00 = Agree .

#### **3.5.2 Interview Guide**

An interview guide was used to collect qualitative data from the selected 12 respondents. The interview guide contained open ended questions organized around the three research objectives while probing follow up questions to explore specific themes deeper. Interviews were conducted in English with translation into Runyoro Rutooro done when necessary to ensure full understanding .

#### **3.5.3 Documentary Analysis**

Published documents were reviewed to add on the primary data and provide ground for the findings. Key documents reviewed included URA Annual Reports for 2021/22 and 2022/23, the Uganda Bureau of Statistics Statistical Abstract 2024, Fort Portal City Authority business licensing records and the national electronic tax policy and EFRIS implementation guidelines. The documentary analysis enabled me to situate local findings within the broader national context and to verify factual claims by URA .

### **3.6 Measurement of Variables**

The independent variable electronic tax adoption was measured through these three areas them being, the level of adoption, the impact on SMES and the implementation challenges Each though was computed as a mean of the Likert scale items .

The dependent variable, tax compliance was measured through an aspect covering timeliness of return filing, accuracy of information submitted and the degree to which compliance was perceived as voluntary. These align with the compliance definitions used by the OECD (2014) plus concepts adopted in prior research, including Night and Bananuka (2020) and Nangoli et al (2019) .

### **3.7 Validity and Reliability**

#### **3.7.1 Validity**

Content validity was established through a review of the questionnaire and interview guide by the research supervisor who confirmed that the instruments covered the constructs relevant to the study's objectives. Internal consistency of the Likert scale and confirming items measuring the same construct were positively correlated with one another enabled to further test validity. According to Creswell (2014), validity in quantitative research refers to the degree by which an instrument measures like designed and the procedures described here being standard .

#### **3.7.2 Reliability**

Reliability was assessed using Cronbach's alpha coefficient which is a widely used measure of internal consistency in Likert scale instruments. Reliability for the qualitative component was addressed through member checking whereby summaries of interview findings were shared with selected participants for verification and through the use of verbatim transcription to minimize interpretation bias .

### **3.8 Methods of Data Analysis**

#### **3.8.1 Quantitative Analysis**

Quantitative data from the questionnaires was entered into IBM SPSS Statistics version 26 for analysis. Descriptive statistics of mean and standard deviations were computed for all variables and used to address the Objectives. For the background variables and adoption indicators, frequencies placed in tables. For the Likert scale items, means and standard

deviations were reported with items ranked by mean to identify which aspects of adoption, compliance and challenges were most prominent .

### **3.8.2 Qualitative Analysis**

Qualitative data from the interview was analyzed using thematic analysis following the six phase process described by Braun and Clarke (2006). Familiarization with the data, generation of initial codes, searching for themes, reviewing themes, defining and naming themes and finally producing the report. Themes were identified inductively from the data and then mapped against the research objectives to ensure the findings spoke directly to the research questions .

### **3.9 Ethical Considerations**

The study was conducted in accordance with the ethical guidelines of Uganda Christian University and the general principles of research ethics applicable to social science research in Uganda. Informed consent was obtained from all participants before data collection and participants were informed of the purpose of the study. Their right to withdraw at any time without penalty and assurance that their individual responses would be kept confidential and used solely for academic purposes was made known. No names or identifying details of individual respondents are reported in this research and questionnaires were coded.

### **3.10 Limitations of the Methodology**

This study acknowledges the following methodological limitations .

The sample size of 161 respondents while consistent with comparable studies in the Ugandan context is smaller than the Krejcie and Morgan recommendation for such a population size. This limited the statistical power of the bivariate analysis and means hence differences between manufacturing and other sectors might and can be interpreted with some caution.

Social desirability bias may have affected reported compliance behavior since respondents might have overstated their compliance given the sensitivity. The use of anonymous questionnaires was intended to mitigate this risk but it cannot be totally eliminated.

Finally, the cross sectional design captures a single point in time and cannot establish causal direction in the relationship between adoption and compliance.

### **3.11 Solutions to the Limitations**

I suggest further research on this study be done to get a more comprehensive understanding on this topic which would ensure that the sample size limitations are minimized to get a more accurate general view of the topic and others related .

Interviews should be more widely used as they help get a broad based view on sensitive topics compared to questionnaires and help avoid the bias issue especially if it's not a tense environment but rather informal in style of how its handled or occurs.

### **3.12 Summary**

This chapter has presented methodology used to examine electronic tax adoption and tax compliance among SMEs in Fort Portal Central Division. A cross sectional mixed methods design was adopted combining a structured questionnaire administered to 161 respondents with interviews of 12 purposively selected SME operators. Quantitative data was analyzed using SPSS . The limitations of the methodology have been acknowledged and accounted for in interpretation of the findings presented in the next chapter.

**CHAPTER FOUR**  
**PRESENTATION OF FINDINGS AND DATA ANALYSIS**

**4.0 Introduction**

This chapter presents and discusses data gathered from 151 usable responses collected from owners and operators of Small and Medium Enterprises within Fort Portal Central Division, Kabarole District. The chapter is organized around the objectives and results presented using frequencies, means and standard deviations all being discussed in relation to relevant literature.

**4.1 Response Rate**

Out of 170 questionnaires distributed to SMEs in Fort Portal Central Division, 161 were returned but after screening for completeness and internal consistency, 151 questionnaires were used for analysis giving a final response rate of 88.8%. This is above the 70% threshold recommended by Mugenda and Mugenda (2003) as adequate indicating that the data is sufficient for drawing reliable conclusions.

Response Rate

<b>Category</b>	<b>Frequency</b>	<b>Percentage</b>
Questionnaires distributed	170	100%
Questionnaires returned	161	94.7%
Unusable questionnaires	10	5.9%
Valid responses used	151	88.8%

**4.2 Background Information of Respondents**

It is always useful to understand the demography of respondents and this section covers gender, business type, duration of use business expenditure on electronic tax adoption plus other relevant areas all helping provide further understanding of the topic.

**4.2.1 Gender Distribution**

## Gender Distribution of Respondents

Gender	Frequency	Percentage
Male	91	60.3%
Female	60	39.7%
<b>Total</b>	151	100%

Male respondents were 60.3% of the sample reflecting the formal SME sector in Fort Portal where male-owned businesses predominate in retail and wholesale trade. Surprisingly, this is consistent with national patterns of Uganda Bureau of Statistics 2024 data indicating that approximately 65% of formally registered enterprises in Uganda are male owned. Nangoli et al (2019) also noted a gender difference in electronic tax engagement with male business owners being more likely to attempt registration. The gap however was not substantial and did not extend to sustained compliance .

### 4.2.2 Age Distribution

#### Age Distribution of Respondents

Age Group	Frequency	Percentage
Below 25 years	12	7.9%
25–34 years	58	38.4%
35–44 years	31	20.6%
45 years and above	50	33.1%
<b>Total</b>	151	100%

Majority of respondents that is 38.4% fell within the 25--34 age bracket which is broadly consistent with the age range of active enterprise owners in Uganda. Respondents aged 45 and above shockingly constituted 33.1% of the sample a high percentage that majorly hinders

digitalization. Comparable studies show that older business owners tend to have lower digital literacy and express higher discomfort with unfamiliar digital interfaces (Kashere, 2024).

### 4.2.3 Education Level

Education Level of Respondents

Education Level	Frequency	Percentage
Primary	15	9.9%
Secondary	55	36.4%
Certificate/Diploma	61	40.4%
Degree	20	13.3%
<b>Total</b>	151	100%

Certificate education was the most common attainment among respondents being 40.4% followed by secondary level education at 36.4% with only 13.3% holding a university degree and these educational matters for electronic tax adoption as navigating EFRIS and the URA portals requires some digital literacy and basic accounting knowledge that less education alone may not provide. Nangoli et al (2019) identified low formal education as one a consistent factor in e-tax avoidance among Ugandan SMES and this sample suggests that this factor is possibly relevant in Fort Portal .

### 4.2.4 Type of Business

Type of Business

Type of Business	Frequency	Percentage
Retail trade	75	49.7%
Wholesale trade	35	23.2%
Hotels and hospitality	30	19.9%
Manufacturing	6	4.0%

Type of Business	Frequency	Percentage
Other	5	3.2%
<b>Total</b>	151	100%

Retail trade dominated the sample at 49.7% showing the general dynamics of trade in Fort Portal Central Division. This is significant because retail businesses tend to be smaller, less formally organized and less likely to exceed the VAT registration threshold than businesses in the hospitality or wholesale sectors. As a result many retail respondents may not yet be obliged to use EFRIS hence limiting their exposure to URA's digital systems.

#### 4.2.5 Prior Interaction with URA's Online Platform

Prior Interaction with URA's Online Platform

Response	Frequency	Percentage
Yes	102	67.5%
No	49	32.5%
<b>Total</b>	151	100%

The finding shows that 32.5% of respondents had never used URA's online platform at all and it indicates that awareness and accessibility remain barriers to engagement. This suggests that the reach of electronic tax systems is more limited than registration statistics might imply .

#### 4.2.6 Duration of Use

Duration of Interaction with URA's Platform

<b>Duration</b>	<b>Frequency</b>	<b>Percentage</b>
Less than 6 months	32	21.2%
6 months to 1 year	52	34.4%
1–5 years	54	35.8%
More than 5 years	10	6.6%
<b>Total</b>	148	98.0%*

The three respondents who had not used the platform were excluded from this table. The concentration of users in the six months to five years range suggests that digital engagement with URA's platform in this sample is relatively recent. Experienced users with more than five years of experience were only 6.6% of the sample. This recency of engagement implies that many businesses are still in learning curve which may explain some of the navigation and usability difficulties reported in the challenges section.

#### 4.2.7 Business Expenditure on Electronic Tax Adoption

Business Expenditure on Electronic Tax Adoption (UGX)

<b>Expenditure Range (UGX)</b>	<b>Frequency</b>	<b>Percentage</b>
Below 300,000	45	29.8%
300,000–500,000	72	47.7%
500,001–1,000,000	25	16.5%
Above 1,000,000	9	6.0%
<b>Total</b>	151	100%

Most of the respondents that is 77.5% reported spending between UGX 0 and 500000 in connection with electronic tax adoption comprising of internet access costs and in some cases fees for assistance with filing. Nangoli et al (2019) argued that compliance cost estimates systematically understate the burden on small businesses because they are expressed in absolute rather than proportional ones .

### 4.3 Findings by Research Objective

Likert-scale items in Sections B--D were scored from 1 for Strongly Disagree to 5 as Strongly Agree. Mean scores were interpreted as follows; 1.00--2.49 = Disagree, 2.50--3.49 = Neutral, 3.50--5.00 = Agree .

#### 4.3.1 Level of E-Tax Adoption

##### Level of Electronic Tax Adoption

Statement	Mean	SD	Rank	Interpretation
Digital literacy among employees significantly influences successful electronic tax adoption.	4.15	0.78	1	Agree
The business has fully integrated URA's electronic tax services into its regular operations.	3.82	0.92	2	Agree
The business frequently uses electronic tax systems such as EFRIS and the URA portal.	3.76	1.05	3	Agree
The business uses electronic tax systems to verify supplier tax compliance before contracts.	3.45	1.02	4	Neutral
The overall process of adopting electronic tax systems has been easy and straightforward.	3.28	1.20	5	Neutral

Statement	Mean	SD	Rank	Interpretation
Electronic tax filing processes are highly integrated with the business's accounting records.	3.12	1.15	6	Neutral

The highest ranked item of digital literacy as a driver of adoption confirms that human capital remains a major hinderance on e-tax engagement in the sample. Businesses that have integrated electronic tax into their daily operations scored 3.82 indicating general agreement with full integration among those who have adopted the system .

#### 4.3.2 Impact of Electronic Tax Systems on Tax Compliance

##### Impact of Electronic Tax Systems on Tax Compliance

Statement	Mean	SD	Rank	Interpretation
Transition from manual to electronic filing has improved timeliness of tax submissions.	4.21	0.72	1	Agree
24/7 access to URA systems enhances ability to file returns before deadlines.	4.05	0.81	2	Agree
Automated electronic tax notifications effectively reduce penalties from late payments.	3.98	0.85	3	Agree
The business maintains a high level of overall electronic tax compliance.	3.88	0.89	4	Agree
Perceived ease of use of the URA portal influences voluntary compliance.	3.55	0.98	5	Agree
Integration of electronic tax systems	3.15	1.25	6	Neutral

Statement	Mean	SD	Rank	Interpretation
has reduced overall costs of tax compliance.				

The positive results for timeliness and constant access confirm that electronic tax has delivered genuine administrative benefits for those who use it. However the neutral score on cost reduction is consistent with available literature as the cost savings that electronic tax theoretically offers are not yet being felt by most respondents particularly those who have recently adopted the system and are still absorbing the up front costs. TAM would interpret this pattern as evidence that the system has crossed the perceived usefulness threshold for filing convenience but has not yet been cleared for economic benefit .

### 4.3.3 Challenges in Using Electronic Tax Systems

#### General Challenges and User Perceptions

Statement	Mean	SD	Rank	Interpretation
Technical barriers such as system downtime and internet issues frequently hinder electronic tax use.	4.35	0.68	2	Agree
System errors on the URA platform are frequent enough to negatively affect my experience.	3.92	0.91	5	Agree
I have full confidence in URA's ability to handle my business's tax information securely.	3.65	0.88	8	Agree
I would recommend the use of electronic tax services to other SMEs.	3.58	0.94	9	Agree
My overall experience with using the electronic tax system has been highly	3.42	1.05	10	Neutral

<b>Statement</b>	<b>Mean</b>	<b>SD</b>	<b>Rank</b>	<b>Interpretation</b>
satisfactory.				
Current URA support mechanisms are highly effective in resolving user difficulties.	3.10	1.12	12	Neutral
System downtime during peak filing periods hinders timely submission of tax returns.	4.42	0.65	1	Agree
High costs of maintaining stable internet and power backup are a significant burden.	4.28	0.75	3	Agree
The EFRIS user interface is too complex for a non technical person to use easily.	4.02	0.89	4	Agree
Lack of ICT skills makes it difficult to navigate the electronic tax portal.	3.85	0.98	6	Agree
It is difficult to synchronize internal accounting records with the URA electronic tax system.	3.74	1.02	7	Agree
Security concerns regarding sensitive financial data discourage full transparency.	3.15	1.18	11	Neutral

System downtime during peak periods scored the highest mean of any item in the entire questionnaire at 4.42 confirming that reliability is the single most pressing challenge for businesses in this sample. Infrastructure costs ranked second at 4.28 easily reinforcing the

pattern seen in expenditure data. Taken together, the challenges documented here compound each other in ways that make sustained electronic tax use genuinely difficult for the average small business in FortPortal .

#### **4.4 Summary of Key Findings**

Data from this chapter points to a situation in which electronic tax systems have real but unevenly distributed benefits. Overcoming the initial barriers of registration, equipment and training the improvements in filing convenience and record organization being relevant can be argued. Majority of SMEs in Fort Portal particularly smaller retailers, the combination complex challenges remain a significant deterrent. However the difference between URA's data and what has been compiled leaves more being needed to be done.

## **CHAPTER FIVE**

### **SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.0 Introduction**

This chapter brings together findings from the study drawing conclusions about what they mean for electronic tax adoption and compliance while offering practical recommendations for URA, policymakers and SME support organizations. It also identifies areas where further research is needed with the chapter being structured around its objectives as a guide

## **5.1 Major Findings**

### **Level of Electronic Tax Adoption**

Data shows that electronic tax adoption in Fort Portal Central Division is moderate and uneven. While 67.5% of respondents had interacted with URA's platforms at some point, a meaningful share had either never engaged or subsequently stopped. Among active users, engagement was frequently described as inconsistent and businesses filed when required to do so rather than as part of a regular practice. Capital size and business type emerged as the clearest predictor of use with hospitality and wholesale businesses showing stronger adoption than retail. This is consistent with findings by Nangoli et al (2019) in Uganda and others which identify capital thresholds as the primary dividing lines in adoption.

Nationally, URA's data shows that out of 64428 EFRIS registrants, the active usage rate is about 83% with this being businesses that have already formally registered for VAT. The gap between registration statistics and engagement documented here is not a contradiction but a measurement feature of registered and unregistered.

### **Impact of Electronic Tax Systems on Compliance**

For businesses that actively use electronic tax systems, genuine benefits are evident and respondents who were regular users reported improvements and better experience of complying with tax obligations. However the overall compliance impact at the population level is modest rather than transformative primarily because the majority of SMEs in the sample are not yet using the system consistently. This is backed by Adeniran and Ahmad (2021) who argue that digital tax systems improve how compliance happens rather than whether it happens and that the deeper drivers of compliance willingness require separate studies.

### **Challenges in Using Electronic Tax Systems**

The challenges section produced the study's most practically significant findings.

System downtime during peak filing periods, infrastructure costs, EFRIS interface complexity and the digital skills gap are all rated in the agree range meaning they are widely experienced rather than isolated problems .

However most concerning is the low effectiveness rating for URA's support mechanisms suggesting that when businesses run into trouble, they find the available support channels inadequate. This is consistent with observations during data collection where several respondents described relying on informal networks, friends rather than URA's help channels. The Advocates Coalition for Development and Environment (2024) estimates that Uganda loses approximately UGX 474 billion annually to informal sector businesses and these operational barriers are a significant part of the reason hence less revenue collection is to be expected till they are addressed .

## **5.2 Conclusions**

Based on evidence from 151 respondents and some in depth interviews, the following conclusions are drawn;

E-tax adoption in Fort Portal Central Division is still incomplete and centered towards larger and more formally organized businesses. The gap between the formal regulatory framework, that extends EFRIS obligations to all VAT registered businesses and the reality in which many smaller businesses struggle to engage consistently with the system is real and persistent .

However, where electronic tax has been adopted, it has brought genuine administrative benefits. These gains have not yet produced a broader shift in compliance culture but Electronic tax makes compliance easier for businesses already inclined to comply and has not yet addressed the deeper economic and attitudinal barriers that keep many SMEs outside the formal tax net. Davis's (1989) TAM remains and the system has crossed the perceived usefulness threshold for administrative convenience but not consistently the perceived ease of use for independent sustained use without outside assistance.

The infrastructure and skills challenges documented in this study are not unique to Fort Portal and they are not new as these have been shown in Uganda focused electronic tax

research for nearly a decade but what is particularly concerning is their persistence despite the investments made. This persistence suggests that the approach to addressing these challenges needs to change with improvements to the existing system not being sufficient if the underlying infrastructure, skills and support gaps are not addressed directly at the local level.

### **5.3 My recommendations and of the study population.**

#### **Invest in Targeted Digital Literacy Training**

The skills gap is the most consistently important finding in this study. URA and local government bodies should invest in practical hands on training tailored specifically to non technical users delivered in short task specific modules rather than comprehensive one off workshops. Training should cover discrete tasks such as registering on the URA portal submitting a quarterly return and generating an EFRIS receipt with separate sessions for each. Many people suggested short video tutorials in local languages be distributed through widely accessible platforms like YouTube, TikTok as they would extend reach to business owners who cannot attend in person sessions.

#### **Address Internet Access and System Reliability**

Encouraging electronic tax adoption while the internet is unreliable and the URA portal experiences downtime during peak filing periods is inherently crazy. The government should accelerate infrastructure investment in Fort Portal and other urban centers with investments in server infrastructure to ensure that the portal remains accessible during filing deadlines. Extending filing windows and providing alternative channels for submission during periods of technical failure would reduce the penalty risk for businesses attempting to comply in good faith. Fjeldstad and Moore (2008) identified infrastructure as the foundational prerequisite for effective digital tax administration in developing countries with this study's findings being consistent with that conclusion.

#### **Simplify the Electronic Tax Interface for Small Businesses**

EFRIS and the URA portal were designed with a level of functionality appropriate for larger formally structured businesses. URA should consider developing a simplified interface for

small enterprises presenting only the functions relevant to them using language rather than technical tax terms. International experience including Rwanda Revenue Authority's tiered filing interface shows how this can be done without compromising the data integrity that URA require .

### **Expand URA Support in Upcountry Areas**

The low effectiveness score for URA's support mechanisms with mean 3.10 indicates that the current help infrastructure is not meeting the needs of SMES in Fort Portal. URA should station dedicated support officers at its Fort Portal regional office, run regular open sessions at accessible community venues where businesses can receive assistance and invest in a responsive phone helplines specifically for upcountry users with online FAQs and digital guides while useful are inaccessible to the significant proportion of business owners who lack the connectivity or confidence to use them.

### **Strengthen Cybersecurity Awareness**

A number of respondents in the interview described sharing their URA portal login credentials with third parties to get help with filing and this creates significant security risks. URA should incorporate simple, practical cybersecurity guidance into its training materials covering what URA will and will not ask over the phone or by email like how to create and protect secure passwords and the risks of sharing login access. Also regular security alerts to registered users sent via SMS or email would reinforce this message at low cost.

### **Introduce Multilingual and Simplified Communications**

English interfaces and communications are a barrier in many regions where many small business owners are more comfortable in Runyoro Rutooro or their local languages. URA should explore adding multilingual support to its digital platforms beginning with the most widely spoken regional languages in western Uganda. Atleast key instructions like error messages and help content should be available in Luganda and Runyoro Rutooro and such localization has been successfully implemented by mobile money operators and commercial banks hence should be applied to tax administration .

## **5.4 Areas for Further Research**

This study has produced useful findings for Fort Portal Central Division, but it also points out questions that remain unanswered which would benefit from further investigation which I highlight below .

A longitudinal study tracking the same businesses over three to five years would provide much stronger evidence about whether electronic tax adoption leads to sustained improvements in compliance, filing accuracy and business performance. This is because most research in this area captures a single point in time and hence cannot establish a direction.

A detailed cost analysis quantifying the actual time and financial burden of electronic tax adoption for different categories of SMES is another area and would provide policymakers with evidence needed to design proportionate measures on compliance cost estimates at the SME level in Uganda that remain largely impressionistic which gives wrong assumptions .

The effectiveness of URA's sensitization and training programs has not been independently evaluated as the reach and real world impact of these programs particularly in secondary cities would help URA make better decisions about where to direct its training resources .

Finally the role of institutional trust in shaping SME compliance decisions emerged as an important area in the interviews though it was not the primary focus of this study. Research specifically examining how trust and URA's institutional reputation shape compliance **decisions among SMEs would be a valuable .**

## **5.5 Conclusion**

Electronic tax systems in Uganda have potential to improve compliance however in Fort Portal Central Division, that potential remains significantly unrealized for the majority of SMES. The technology is not the main obstacle as the environment in which businesses are expected to use it are characterized by infrastructure gaps, skills deficits, high relative compliance costs and inadequate support being where the real barriers are. Addressing these barriers requires locally tailored interventions that go beyond system design and attitude adjustment is necessary as its another major factor.

## **REFERENCES**

Adeniran & Ahmad, R. (2021) Digital tax systems and administrative efficiency in developing economies. *Journal of Fiscal Studies*, 14(2), 45–62 .

Advocates Coalition for Development and Environment, ACODE (2024). Informal sector taxation and revenue loss in Uganda. ACODE Policy Research Series No. 78. Kampala: ACODE.

Ajzen, I (1991) The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211 .

Anaso, J Mugisha, P & Tibamanya, F (2025) Electronic fiscal invoicing and VAT compliance among registered businesses in Uganda. *East African Journal of Tax Research*, 4(1), 18–35.

Besley T & Persson T. (2013). Taxation and development. In A. Auerbach, R. Chetty, M. Feldstein, & E. Saez (Eds.), *Handbook of Public Economics* (Vol. 5, pp. 51–110). Amsterdam: Elsevier.

Bird, R & Zolt, E. M. (2005). Redistribution via taxation; The limited role of the personal income tax in developing countries. *UCLA Law Review*, 52(6), 1627–1695.

Braun & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.

Creswell, W. (2014). *Research design: Qualitative, quantitative and mixed methods approach* (4th ed.). Thousand Oaks, CA: SAGE .

Creswell J. W & Plano Clark (2018). *Designing and conducting mixed methods research* (3rd ed.). Thousand Oaks, CA: SAGE.

Davis F D. (1989). Perceived usefulness perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340.

Dillman A., Smyth, J. D & Christian, M. (2014). *Internet, phone, mail, and mixed-mode surveys: The tailored design method* (4th ed.). Hoboken, NJ: Wiley .

Economic Policy Research Centre. (2022). Uganda's tax-to-GDP ratio and domestic revenue mobilization: A policy analysis. EPRC Research Series No. 164. Kampala; EPRC .

Fjeldstad, O.-H & Heggstad, K K. (2011). The tax systems in Mozambique, Tanzania and Zambia: Capacity and constraints. CMI Report 2011:3. Bergen: Chr. Michelsen Institute .

Fjeldstad O.-H & Moore, M. (2008). Tax reform and state-building in a globalized world. In D. Brautigam, O.-H. Fjeldstad, & M. Moore (Eds.), *Taxation and State-Building in Developing Countries* (pp. 235–260). Cambridge, Cambridge University Press .

Fort Portal City Authority (2025). Business licensing register ; Fort Portal Central Division, 2024/2025. Fort Portal: Fort Portal City Authority .

Guma P & Musiimenta, P. (2024). Electronic fiscal receipting and invoicing system adoption and tax compliance among SMEs in Uganda. *Makerere Business Journal*, 20(2), 41–60.

Inegbedion H. E. (2021). Acceptance of electronic tax systems and SME contribution to tax revenue through compliance mediation. *International Journal of Tax Research* 19(1), 88–107.

International Monetary Fund (2024). *Regional economic outlook; Sub-Saharan Africa -- A tepid and pricey recovery*. Washington, DC: IMF .

Kashere, G. (2024). Technology anxiety and e-tax adoption among small business owners: Evidence from Uganda. *Journal of Small Business and Entrepreneurship Development*, 11(1), 22–38.

Kibuuka, M., Watundu, S., & Musiimenta, P. (2023). Electronic billing machines and revenue collection in Uganda: Evidence from URA targeted businesses. *African Journal of Accounting*, 8(2), 55–72.

Kiprono, D., Kimitei, E., & Kapkiyai, C. (2023). Electronic tax filing and compliance among SMEs: Evidence from the Kenya Revenue Authority's iTax system. *East African Journal of Accounting and Finance*, 5(1), 14–29.

QUESTIONNAIRE.

**ELECTRONIC TAX ADOPTION AND TAX COMPLIANCE AMONG SME's IN FORTPORTAL CENTRAL DIVISION KABAROLE UGANDA.**

I am Ninsiima Azoor Collins a student at Uganda Christian University doing research on electronic tax adoption and tax compliance among SMEs within Fort portal central and was humbly requesting for your participation in filling this questionnaire. This questionnaire is purely for academic purposes and information obtained will be confidential.

Thank you.

**Research Questions**

**SECTION A: DEMOGRAPHIC INFORMATION**

1) Gender.

Male	Female

2) Age.

Below 25 years	25 – 34 years	35- 44 years	45+ years

3) Level of education.

Primary	Secondary	Certificate	Degree

4) What is your type of business.

Retail	Wholesale	Hotels/ Hospitality	Manufacturing	others

5) Position in the business.

--

6) Have you interacted with URA’s online platform.

Yes	No

7) How long have you interacted with URA’s platform.

Less than 6 months	6 months to 1 year	1- 5 years	5+ years

8) How much has your business spent on E-tax system adoption and use.

Below 300,000	300,000 – 500,000	500,000 – 1000,000	1000,000 +

**Rating Scale.**

1: Strongly Disagree (SD) 2: Disagree(D) 3: Neutral (N) 4: Agree(A) 5: Strongly Agree (SA)

**SECTION B: LEVEL OF E-TAX DOPTION ASSESSMENT**

**SD, D, N, A, SA**

1) The business has fully integrated URA’s Electronic tax services (e-registration, e-filing and e-payment) into its regular operations.					
2) The level of digital literacy among employees is a significant factor in the successful adoption of electronic tax systems within the business.					
3) The business frequently utilizes e-tax systems such as EFRIS and the URA portal, for its tax related activities.					

4) Electronic tax filing processes are highly integrated with the business's primary accounting records and financial systems.					
5) The business uses e-tax systems to verify the tax compliance of suppliers as a standard procedure before finalizing contracts.					
6) The overall process of adopting electronic tax systems within the business has been easy and straight forward.					

**SECTION C: EVALUATE IMPACT OF E-TAX SYSTEMS ON COMPLIANCE.**

1: Strongly Disagree (SD) 2: Disagree(D) 3: Neutral (N) 4: Agree(A) 5: Strongly Agree

**SD, D, N, A, SA**

1) The transition from manual to electronic filing has significantly improved timeliness of tax return submissions among taxpayers.					
2) The perceived ease of use of the URA portal influence users' willingness to comply voluntarily with tax obligations.					
3) Automated e-tax notifications and reminders are Effective in reducing penalties and interest charges arising from late payments.					
4) The integration of e-tax systems has led to a reduction in overall costs of complying with tax obligations for the business.					
5) 24/7 access to URA systems has enhanced the business's ability to file returns and make payments on or before the set deadlines.					
6) The business maintains a high level of overall e-tax compliance.					

**SECTION D: CHALLENGE ANALYSIS**

1: Strongly Disagree (SD) 2: Disagree(D) 3: Neutral (N) 4: Agree(A) 5: Strongly Agree (SA)

1) Technical barriers such as system downtime, internet connectivity, power outages frequently hinder effective use of e-tax services .					
2) Current URA support mechanisms such as online guides and help desks are highly effective in resolving user difficulties.					
3) System errors on the URA platform are frequent enough and last long enough to negatively affect my experience with the platform.					
4) My overall experience with using the e-tax system has been highly satisfactory.					
5) I have full confidence and trust in the URA's ability to handle my business's tax information securely.					
6) I would highly recommend the use of e-tax services to other small and medium enterprises.					
7) System downtime; Frequent instability and downtime during peak filing periods hinder my ability to submit tax returns on time.					
8) Infrastructure costs; High costs of maintaining stable internet and reliable power backups are a significant burden for the business.					
9) Digital skills gap; A lack of specialized ICT skills among staff makes it difficult to navigate the e-tax portal without external help .					
10) Platform complexity; The user interface of the systems like EFRIS is too complex for non-technical person to use easily .					
11) Security concerns; Concerns regarding privacy and security of sensitive financial data uploaded to the portal discourage full transparency.					
12) Integration Difficulty; It is difficult to sync our internal accounting records with the URA e-tax system leading to repetitive manual data entry.					

Do you have any additional information, comments or suggestions as regards electronic tax adoption and tax compliance in Uganda?

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