

# Effect of Digitalization Effectiveness on Turnover Tax Compliance among Textile Small and Medium Size Enterprises in Eastleigh, Nairobi County.

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## Abstract

Tax is an important stream of revenue for any government's development projects in both developed and developing economies. The main purpose of this study was to determine the effect of digitalization effectiveness on turnover tax compliance among small and medium size enterprises in Eastleigh, Nairobi County. The specific objectives that guided the research were: to study the relationship between technological ease of use and turnover tax compliance; to establish the relationship between technology usefulness and turnover tax compliance and to examine the relationship between system security mechanism and turnover tax compliance among small and medium size textile enterprises. This study was grounded on Technology Acceptance Model and Unified theory of Acceptance and use of Technology. Descriptive research design was applied in this study. The target population was textile enterprises operating in Eastleigh Avenue. Stratified sampling technique was utilized since the population itself was stratified in nature. Yamane's formula was used to determine the sample size of 243 textile SMEs. Data was collected using questionnaires and analyzed descriptively. To establish the relationship between study variables correlations and regression analyses were carried out. The study findings revealed that regression coefficient for technological ease of use, technology usefulness and system security mechanisms had ( $\beta = .098, .311$  and  $.129$ ) had positive and significant relationship with turnover tax compliance. The study concludes that technology facilitates compliance by reducing user effort and increasing openness to new technologies. It recommends that the Kenya Revenue Authority (KRA) ensure their digital systems are user-friendly, reliable, and effective. Enhancing the online system's ease of use, reliability, and functionality could improve the efficiency and convenience of tax filing, fostering a positive user experience and greater compliance.

Keywords: Digitalization Effectiveness, Turnover Tax Compliance, Textile Small and Medium Size Enterprises, e-filing system, iTax system, KRA

## Introduction

Tax compliance refers to the extent to which a taxpayer abides by the tax laws of their country (Ahmed & Kedir, 2015). It involves the accurate reporting of income and claiming of expenses according to tax laws (Sapiei, Kasipillai & Eze, 2014). Compliance includes the timely fulfillment of tax payment obligations, filing of tax returns, and providing explanations required by tax authorities (Daniel, Akowe & Awaje, 2016).

It is a global issue affecting both developed and developing countries, becoming a major concern for tax administrations (Mas'ud, Aliyu & Gambo, 2014; Damayanti, Sutrisno, Subekti & Baridwan, 2015).

Several factors influence tax compliance, including economic, social, and psychological aspects (Heenkenda, Weerasekara & Chaturangani, 2016). Economic deterrents such as tax rates, benefits of evasion, detection probability, and penalties for fraud play significant roles. Social norms and government expenditure on public goods and services also impact compliance (Damayanti et al., 2015). Researchers categorize compliance determinants differently, often overlapping, into industry, accounting, psychosocial, tax administration, and economic factors (Thúc, 2013). Tax non-compliance may involve failure to file returns on time or declare the correct taxes. It encompasses illegal conduct by taxpayers, either intentional or unintentional, to evade taxes (Bidin & Sinnasamy, 2017). Non-compliance reduces government revenue, as noted by Otusanya (2011), who highlighted cases of multinational companies underreporting profits and manipulating records.

Digital platforms have transformed daily life and economic operations (Schallmo & Tidd, 2021). More than 50 countries have digitalized their tax systems to enhance compliance and reduce costs (Barreix & Zambrano, 2018). Digitalization helps improve tax administration efficiency and service delivery (Gupta, 2017). It is now essential for developing voluntary compliance and providing taxpayer services through various means (OECD, 2016). Advanced digital platforms enable real-time data collection and analysis, driving taxpayers to adapt their business models and approaches to tax payment and their relationship with tax offices (OECD, 2018). Electronic tax compliance improves collection and reduces fraud and compliance costs (KRA, 2020).

### *Global Perspective*

Many tax administrations globally have integrated technology to enhance compliance. Leading countries in digital tax networks include Australia, Canada, and Italy (Hartley & Stanley-Smith, 2019). Australia's "Digital by default" program, started in 2013, assumes digital interaction as the preferred method. The Single Touch Payroll system requires real-time payroll reporting, and personal tax accounts use two-factor authentication. Canada Revenue Agency has increased technological capabilities and reduced compliance complexity. About 90% of personal and over 99% of corporate

returns are filed electronically. Their online portal supports easy client authorization and junior staff access limitation. New systems are developed in consultation with major stakeholders and tested internally before implementation. Italy has mandated online tax filings for over a decade, with pre-population of tax forms for employees and retirees since 2015. This improved information sharing and reduced tax evasion. The Italian tax gap fell from 7.6% to 6.6% of GDP between 2007 and 2015.

### *Regional Perspective*

Uganda, Nigeria, Rwanda, and Kenya have embraced electronic tax filing. South Africa's e-filing system, introduced in 2001, now handles over 90% of PAYE filings. Uganda's E-Tax system, launched by the Uganda Revenue Authority (URA), facilitates electronic registrations, filings, and payments, significantly improving service delivery and revenue collections. In Nigeria, the Lagos State Internal Revenue Service (LIRS) launched an e-filing platform for employers' tax returns in 2019, enhancing electronic interaction and eliminating hard copy returns. Nigeria's government promotes digitalization to improve business attractiveness. Zimbabwe's 2015 e-filing system by ZIMRA increased tax submissions and ease of doing business. The system allows online submission of tax returns, although users have mixed perceptions about its relevance and usefulness.

### *Local Perspective*

Kenya introduced its tax e-filing system in 2009, facing initial acceptance challenges due to processing speed issues (KPMG Africa, 2016). KRA's digitization journey began with an editable online tax return form, progressing through the Simba custom platform and TEAMS to the current iTax system. iTax allows taxpayers to file returns, receive assessment notifications, and submit responses (Deloitte, 2019). Digitalization in Kenya has significantly identified data inconsistencies and increased revenue collections. In 2021, KRA de-listed over 95,000 non-compliant VAT taxpayers and threatened de-registration of inactive iTax accounts. KRA's digital systems provide real-time data on consumer spending, aiding revenue prediction. KRA aims to widen digital service tax scope and ensure fair and equitable tax collection. This study aims to establish the effect of digitalization effectiveness on turnover tax compliance among SMEs in Eastleigh, Nairobi County.

### *Statement of the problem*

Tax non-compliance in Kenya is still very high irrespective of use of technology being mandatory in registration, filing tax returns and paying taxes due by taxpayers. This is manifest in failure by KRA to meet its targets over years. Statistics from National Treasury analyzed by Kenya National Bureau of Statistics (KNBS) in their annual economic surveys between 2014 and 2018 show that KRA did not achieve its projections for that period. Year 2013/2014 KRA collected Kshs. 911.8B against projection of Kshs.945.2B, year 2014/2015 collection of Kshs.1, 022.1B against projection of Kshs. 1,130.1B, and year 2015/2016 collection of 1,136.9B against projection of 1,

289.1B. Year 2016/2017 actual collection of Kshs. 1,277.2B against Kshs. 1,338.3B projected and year 2017/2018 a provisional collection of Kshs.1, 341.4B against a budget of Kshs.1, 466.2B. In this regard there is need to enhance compliance level among SMEs. Although there are several studies carried out on digitalization and tax compliance, they only focused either on tax payer education, tax rates, tax compliant attitude or turnover tax collection performance. Ali, Fjeldstad and Sjursen (2013) studied factors that determine citizens' tax compliance behavior in Kenya, Tanzania, Uganda, South Africa and found that in Kenya and South Africa, citizens who perceive it is difficult to avoid taxes are more likely to have a tax compliant attitude than citizens who think avoidance is relatively easier. KRA has implemented variety of digital systems like iTax, simba system, Electronic Cargo Tracking System, Customs Oil Stocks Information System, Valuation System, Cargo Manifest among others. The effectiveness of these digital systems and their effects on turnover tax compliance is not clear, thus presenting a contextual gap.

This study therefore sought to address this gap by examining the effect of digitalization effectiveness on turnover tax compliance among textile small and medium size enterprises in Eastleigh. It focused on three variables namely; technological ease of use, perceived usefulness and perceived security risk.

### *Objectives of the Study*

#### *General Objective*

The general objective of the study was to determine the effect of digitalization effectiveness on turnover tax compliance among textile small and medium size enterprises in Eastleigh, Nairobi County.

#### *Specific Objectives*

To determine the effect of perceived ease of use on turnover tax compliance among textile small and medium size enterprises in Eastleigh, Nairobi County

To establish the effect of perceived usefulness on turnover tax compliance among textile small and medium size enterprises in Eastleigh, Nairobi County

To examine the effect of perceived system security mechanism on turnover tax compliance among textile small and medium size enterprises Eastleigh, in Nairobi County.

### *Research Hypothesis*

Ho1: Technological ease of use has no significant effect on turnover tax compliance among small and medium size enterprises in Eastleigh, Nairobi County

Ho2: Technology usefulness has no significant effect on turnover tax compliance among textile small and medium size enterprises in Eastleigh, Nairobi County

Ho3: System security mechanism has no significant effect on turnover tax compliance among textile small and medium size enterprises. in Eastleigh, Nairobi County

### *Significance of the Study*

This study provides the Kenya Revenue Authority with insights into digitization progress, enhancing understanding of the SME sector, and highlighting taxpayer challenges,

ultimately improving tax compliance and collection efficiency.

### **Literature Review**

This chapter reviews literature related to the research topic, focusing on the relationship between technological ease of use, technology usefulness, perceived system security mechanisms, and turnover tax compliance. The chapter also covers theories, empirical literature, and the conceptual framework.

#### *Study Concepts*

##### *Turnover Tax*

Turnover tax is a lump sum direct tax collected by governments. It is calculated by applying a single tax rate to a taxable turnover, unlike income tax systems that require detailed proof of every expenditure (Russo, 2019). Parameters for turnover tax assessment vary by country and type of goods taxed to keep it affordable (Muyundo, 2012). Turnover tax can be elective for small businesses, allowing them to choose between standard tax systems or turnover tax (McCluskey, 2005). Compliance involves declaring income, filing returns, and timely tax payments (McCluskey, 2012). Non-compliance challenges include taxpayers' ignorance, high tax rates, and economic factors (Simiyu, 2013; Tadele, 2015).

#### *Effectiveness of Digitalization of Tax Administration – SMEs Perspective in Kenya*

SMEs in Kenya are defined by employee numbers, turnover, and capital, contributing over 90% of the labor force and playing a key role in economic development (KIPPRA, 2016; 2019). Digital platforms enable better tax revenue collection through sophisticated data analysis (OECD, 2018). Digitalization involves technologies, people, managing tax risks, financial resources, and communication (Juswanto & Simms, 2017). Successful digitalization requires strong organization, information systems, and professional employees (Lipniewicz, 2017). Tax policy must adapt to digital business for sustainable economic growth (European Commission, 2017).

#### *Perceived Ease of Use*

Perceived ease of use is the belief that new technologies will be free of difficulties (Hubert et al., 2019). Technologies should be flexible, easily learned, and understood (Jahongir & Shin, 2014). Simpler technologies are more likely to be adopted (Hubert et al., 2019). Efficiency and resource minimalism also contribute to ease of use (Humbani & Wiese, 2019). If taxpayers perceive the e-filing system as easy to use, they are more likely to comply (Singh & Srivastava, 2018).

#### *Perceived Usefulness*

Technology usefulness refers to the belief that a system improves individual performance (Davis & Venkatesh, 2000). It is measured by productivity, effectiveness, and overall benefit (Prasetya & Putra, 2020). Perceived usefulness drives technology adoption (Anouze & Alamro, 2019). Higher perceived usefulness of online tax filing systems increases tax filing efficiency and convenience, leading to positive attitudes and higher compliance (Lu, Huang & Lo, 2010; Setiawan & Kurniawan, 2018). Technologies improving performance are more likely to be adopted (Hubert et al., 2019).

### *Perceived System Security Mechanisms*

Perceived security refers to users' confidence in the protection of their personal data (Tan & Foo, 2012). Security management prevents unauthorized use and infiltration (Desmayanti, 2012). Users may avoid e-filing if they perceive high risks (Dewi & Susanti, 2019). Security mechanisms must protect user data and provide quick, easy access to services (Prawati & Dewi, 2018). High perceived risks deter technology adoption (Charag, Fazili & Bashir, 2019). Privacy risks, such as data misuse, reduce willingness to use online services (Ryu, Kim & Kim, 2018). Digitalization impacts tax policy and administration, introducing new tools and challenges. Policy development must adapt to a changing environment while providing clarity for sustainable growth (OECD, 2018).

### *Theoretical Framework*

#### *Technology Acceptance Model (TAM) Theory*

Technology Acceptance Model (TAM) is a theory describing the perception of technology users. Davis (1986) created this model to explain the effects of system characteristics on users of computer-based Technology Systems. TAM is the most widely used model for identifying factors contributing to technology acceptance. The theory suggests that, when users are presented with a new piece of technology, several factors influence their decision about how and when they will use the technology (Ardiansah, Chariri, Rahardja & Udin, 2020). The goal of TAM is to explain the determinants of general computer acceptance and be able to explain user behavior across a broad range of end-user computing technologies and user populations (Rondan-Cataluña, 2015). The theory highlights the link between taxpayer acceptance of technology and compliance with turnover taxes. Technology Acceptance Model (TAM) is considered the most influential and commonly employed theory for describing an individual's acceptance of information systems. According to TAM, information technology adoption is influenced by two perceptions: usefulness and ease of use. It specifies the relationships among perceived usefulness, perceived ease-of-use, attitude toward computer use, and intention to use technology (Teo, 2011). The theory addresses the concept of digital technology acceptability, the theory is pertinent to this study. Users will make use of a certain technology if they believe it will offer beneficial results. The theory backs up the link between taxpayer acceptance of technology and compliance with turnover taxes

#### *Unified Theory of Acceptance and Use of Technology (UTAUT)*

UTAUT predicts technology adoption, emphasizing effort expectancy, performance expectancy, and social influence (Venkatesh et al., 2003). It relates perceived security to technology acceptance, relevant to taxpayers' security concerns with e-filing systems. The development of digital technology currently has a wide influence on the daily activities of users. In line with the increase in technology, it makes work easier and lighter. UTAUT aims to explain user intentions by proposing a unified model for information system use. Williams Rana, Dwivedi and Lal (2011)

highlighted that UTAUT was popular in the domain of information communication and technology (ICT). UTAUT posits that the three constructs namely effort expectancy, performance expectancy and social influence directly have an effect on the behavioral intention towards the use of technology. Social influence construct, measures the extent of significance which is placed on the opinion of outsiders regarding use of the new technology. The existing literature always relates security to perceived risk. Users' perceived security of a system can influence their intention to use it. UTAUT provide theoretical explanation of perceived risk in influencing the acceptance of e-filing. This theory is relevant in this study since it describes taxpayer's perceptions on security with the usage of tax filing systems..

### **Conceptual framework**

#### *Empirical Review*

#### *Technological Ease of Use and Turn over Tax Compliance*

Ismail, Shaharuddin, Shahroni, Ibrahim and Sani (2021) studied the impact of trust issues and ease of use of the e-filing system on tax compliance in the era of Big Data Analytics in Malaysia. Data is collected using online questionnaires. 70 respondents have been analyzed. The results show that taxpayers have significant positive trust of the e-filing and positive perception towards the ease of use of the system. Big Data also have an impact to the tax compliance among taxpayers. These findings are expected to give insight to tax authorities in planning their activities to increase taxpayers' compliance in the era of big data analytics. However, the study focused on Perceived Ease of Use in Malaysia thereby presenting geographical gap.

In a related study Mustapha and Obid (2015) examined the mediating effect of perceived ease of use on the relationship between tax service quality and online tax system in Nigeria. A total of 206 surveyed data was analyzed using structural equation modeling. The result showed that perceived ease of use has a significant mediating effect on the relationship between tax service quality and online tax system, and tax service quality has a positive significant relationship with an online tax system. The study focused relationship between perceived ease and tax service qualities thereby presenting contextual gap.

Mongwaketse (2015) investigated the perceived effects of an electronic filing system on tax compliance in a district municipality, South Africa. In the quantitative approach of research, a questionnaire was administered among 202 individual taxpayers in the district. The results and perceptions of taxpayers are said to be influenced by various factors such as cost-benefits analysis, attitude, perceived usefulness and ease of use, system's credibility and security. Research has also reported that many tax authorities that have leveraged on e-filing have experienced a reduction in handling costs of returns, shorter turnaround for processing and assessment of tax returns, and improved tax compliance. The proposed study will determine the effect of digitalization effectiveness on

turnover tax compliance among SMEs in Eastleigh presenting a contextual gap.

#### *Technology Usefulness and Turn over Tax Compliance*

Santhanamery and Ramayah (2018) examined on the mediating effect of perceived system usefulness on the relationship between tax service quality (correctness, response time, system support) and continuance usage intention of e-filing system in Malaysia. A total of 116 data was analysed using Partial Least Squared Method (PLS). The result showed that Perceived Usefulness has a partial mediating effect on the relationship between tax service quality (Correctness, Response Time) with the continuance usage intention and tax service quality (correctness) has significant positive relationship with continuance usage intention. Perceived usefulness was found to be the most important predictor of continuance usage intention. The study focused on Perceived usefulness and tax service quality thereby presenting contextual gap.

Mustapha (2013) researched on the impact of technology factors (Perceived ease of use, perceived usefulness) on an online tax system. To do this, questionnaire was used and analyzed using exploratory factor analysis and confirmatory factor analysis to determine the impact of each latent variable (perceived ease of use, perceived usefulness) on an online tax system. The result provides insight to the technology factors impact on an online tax system. The result shows a direct relationship between the technology factors and online tax system. The study focused on both perceived ease of use and perceived in an online system thereby presenting contextual gap.

Similarly Zaidi, Henderson and Gupta (2017) examined the effect of perceived usefulness on intention to use e-Filing. The results proved that perceived usefulness influenced intention to use e-Filing. Agustina and Anim (2018) found that perceived usefulness did not influence intention to use e-Filing. The results of interviews conducted by researchers showed that it was caused by the lack of socialization received by users regarding the use and benefits of e-Filing. However studies focused on perceived usefulness and e-Filing. The proposed study will determine the effect of digitalization effectiveness on turnover tax compliance among SMEs in Eastleigh presenting a contextual gap.

#### *Perceived System Security mechanism and Turn over Tax Compliance*

Tahar Riyadh, Sofyani and Purnomo (2020) conducted a survey to establish the effect of perceived security on the citizen's intention to use e-Filing. This study used primary data collected from Civil Servants Taxpayers in Indonesian National Armed Forces, and State Police of the Republic of Indonesia in Semarang City. One hundred fifty questionnaires were distributed, and 126 were processed and analyzed. The results indicated that perceived ease-of-use and perceived security had a positive effect on the use of e-Filing, while perceived usefulness has no effect on the use of e-Filing. However the study focused on perceived security and use of e-Filing presenting a geographical gap

Mujiyani and Wahyuningtyas (2019) examined the effect of perceived security toward intention to use e-Filing. The study revealed that security had a positive effect on users to use e-Filing. E-Filing system has security to protect the confidentiality of corporate user data. it can be concluded that when taxpayers has a perception that the e-Filing system is safe, it results in the higher the level of intention to use e-Filing.

Sinlairy Dewi and Susanti (2019), found that because users felt that e-filing could not guarantee data security, so they tended to avoid using it. The e-filing system, which can be utilized easily and comfortably by the corporate users in reporting taxes and does not need extra effort, indicates the quality of the system. Many taxpayers are not willing to utilize e-Filing because of the lack of trust on the website or the complexity of the system

#### *Summary of Literature Review and Research Gaps*

A review of the existing literature on digitalization of tax administration and turnover tax compliance, a critical analysis of previous literature reveals many conceptual and contextual study gaps. KRA has undertaken a number of reforms to improve tax compliance. Some of the reforms include strengthening administrative capacity of the tax system, taxpayers' e-registration, e-filing, enhance taxpayer education and taxpayer services. There is therefore, a gap in knowledge as to whether there is a relationship between digitalization of tax administration and turnover tax compliance. The summary of the research gaps is shown in Table 2.1.

Table 2.1: Summary of Literature Review and Research Gaps

Author & Year	The focus of the study	Research Gap
	Focus on the current study	
Ismail, Shaharuddin, Shahroni, Ibrahim & Sani (2021)	Perceived ease of use of the e-filing system on tax compliance	The study focused on Perceived Ease of Use in Malaysia thereby presenting geographical gap. This study focused on Perceived ease of use and turnover tax compliance among small and medium size enterprises
Mustapha and Obid (2015)	Perceived ease of use tax service quality	The study focused relationship between perceived ease and tax service qualities thereby presenting contextual gap. This study focused on relationship between perceived ease of use and turnover tax compliance among small and medium size enterprises.
Mongwaketse (2015)	Perceived effects of an electronic filing system	The study focused on perceived effects of an electronic filing system on tax compliance presenting contextual gap. This study focused on relationship between perceived ease of use and turnover tax compliance.
Santhanamery & Ramayah (2018)	Perceived usefulness and tax service quality	The study focused on mediating effect of perceived usefulness on the relationship between tax service qualities presenting contextual gap. This study focused on perceived usefulness and turnover tax compliance among small and medium size enterprises
Mustapha (2013)	Technology factors on online tax system	The study focused on both perceived ease of use and perceived in an online system thereby presenting contextual

gap. This study focused on perceived usefulness and turnover tax compliance among small and medium size enterprises

Zaidi, Henderson & Gupta (2017) Perceived usefulness on intention to use e-Filing Study focused on Perceived usefulness challenges on intention to use e-Filing presenting contextual gap. This study focused on perceived usefulness and turnover tax compliance among small and medium size enterprises

Tahar Riyadh, Sofyani & Purnomo (2020) Perceived security on the citizen's intention to use e-Filing. The study focused on perceived security and use of e-Filing presenting a geographical gap. This study focused on perceived security risk and turnover tax compliance among small and medium size enterprises

Mujiyani & Wahyuningtyas (2019) Perceived security toward intention to use e-Filing The study focused on perceived security toward intention to use e-Filing presenting contextual gap. This study focused on perceived security risk and turnover tax compliance among small and medium size enterprises

Source: Researcher (2022)

## Research Methodology

### Introduction

This chapter outlines the research methodology, population characteristics, sampling methods, data collection instruments, and data analysis.

### Research Design

An explanatory research design was used in this study. This research design was appropriate since it enabled the researcher to examine the relationship between the independent variables (technological ease of use, perceived technology usefulness and perceived system security) and the dependent variable (turnover tax compliance).

### Target Population

The population of interest for this study comprised of licensed textile SMEs operating in Eastleigh First Avenue in Nairobi County. According to Nairobi City County (2021), there are six hundred and forty-four (620) textile enterprises operating in Eastleigh First Avenue as shown in table 3.1 below. This place was of particular focus for this study due to its large concentration of textile businesses which made it easier for the researcher to get a representative sample and use less time.

Table 3.1: Textile SME, Target Population

Category of Textile SMEs	Population	Percentage
Adult & kids wear (clothes)	423	68%
Curtains and interior designs	107	17%
Blankets and specialized fabrics	90	15%
Total	620	100%

### Sampling Design

A sample design is the framework, or road map, that serves as the basis for the selection of a survey sample and affects many other important aspects of a survey as well. The study made use of stratified sampling technique, with simple random sampling being done in every stratum in the selection of the sample. With this sampling technique, each member of the

population had an equal chance of being included in the sample and each sample of a particular size had the same probability of being chosen.

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### Sample Size

A sample size is a part of the population chosen for a survey or experiment. According to Mathews (2010) a sample must be properly chosen to be representative of the population and the researcher must guarantee that the subdivisions involved in the study are accurately cared for. The sample size for this study was determined using Yamane's (1973) formula which accurately represented the total 620 SMEs taxpayers. With an assumption of a 95% confidence level and  $P = .5$ . This formula was used to calculate the sample size of 243 respondents for the study as follows

Table 3.2: Category of SME, Sample Size

Category of textile SMEs	Population	Percentage	Sample Size
Adult & kids wear (clothes)	423	68%	166
Curtains and interior designs	107	17%	42
Blankets and specialized fabrics	90	15%	35
Total	620	100%	243

### Data Collection methods and Instrument

The study employed primary data collection method of a self-made questionnaire. Close-ended questionnaire was adopted by the researcher. The responses in the questionnaires helped in gaining an in-depth understanding the effect of digitalization effectiveness on turnover tax compliance among textile small and medium size enterprises in Eastleigh First Avenue, Nairobi Kenya. The questionnaire was structured to contain a likert scale questions. It was divided into two major sections: the first section sought to ask personal information about the respondents and their businesses. The second section sought information relating to effect of digitalization effectiveness on turnover tax compliance with particular reference to the variables of this research.

### Data collection Procedures

Data collection procedures begun upon approval of the proposal after it had been approved. An introduction letter was issued to the sampled entities for consent to collect data from the respondents. The questionnaires were administered to the respondents directly by the researcher because most businesses in the study area were in close proximity to each other. For those respondents who were not available for a sit-in filling of the questionnaire, the questionnaire was e-mailed to them.

## Research Findings and Presentations

### Response Rate

The sample size of the study was 242 respondents that were furnished with the study questionnaire, and only 171 questionnaires were used in the study analysis because they were completely filled, and did not have any errors. This signified that the study achieved a 70.4% response rate. Creswell (2014) opines that any response rate above the 50% threshold is thought to be valid, indicating that the study exceeded this threshold as provided in Figure 2.

Figure 2: Response Rate

Source: Research Data (2022)

### Descriptive Analysis

#### Technological Ease of Use and Turnover Tax Compliance

Descriptive analysis evaluated technological ease of use and turnover tax compliance. Frequencies, means, and standard deviations were used (Table 1). Findings showed most owners or managers of small and medium-sized textile enterprises in Eastleigh agreed they became tax compliant due to the i-tax platform's ease of use (Mean=4.04, SD=0.993).

Table 1: Technology Ease of Use and Turnover Tax Compliance

#### Technology Usefulness and Turnover Tax Compliance

Descriptive analysis evaluated technology usefulness and turnover tax compliance. Frequencies, means, and standard deviations were applied (Table 2). Findings showed that most owners or managers of small and medium-sized textile enterprises in Eastleigh agreed that online tax filing systems increased their intention to file taxes, indicating perceived usefulness (Mean=4.11, SD=1.006).

Table 2: Technology Usefulness and Turnover Tax Compliance

#### System Security mechanism and Turnover Tax Compliance

Descriptive analysis evaluated the system security mechanism's effect on turnover tax compliance. Frequencies, means, and standard deviations measured the results (Table 3). Findings showed that most owners or managers of small and medium-sized textile enterprises in Eastleigh agreed that i-tax platform security mechanisms protect their information (Mean=4.25, SD=0.975), enhancing SMEs' trust in digital tax systems.

Table 3: System security mechanism and Turnover Tax Compliance

### Correlation Analysis between digitalization effectiveness and Turnover Tax Compliance

Correlation test was carried out to determine the kind of relationship that exists between study variables. The findings showed that there was moderate positive significant relationship between technological ease of use, technology usefulness, system security mechanism and turnover tax compliance, as is indicated by the following parameters (Pearson's  $r=0.369$ ,  $p<0.000$ ), (Pearson's  $r=0.525$ ,  $p<0.000$ ) and (Pearson's  $r=0.493$ ,  $p<0.000$ ) respectively. This can be

concluded that there is an existing association between digitalization effectiveness and turnover tax compliance among small and medium size textile enterprises as shown in table 4 below.

Table 4: Correlation matrix

To assess the effect of digitalization effectiveness on turnover tax compliance, regression test was carried out. The regression results were as follows:

#### Model Summary

The regression model summary that was conducted between digitalization effectiveness factors (technological ease of use, technology usefulness, and system security mechanism) and turnover tax compliance. The adjusted  $R^2$  value (0.285) indicates that digitalization of tax administration factors (technological ease of use, technology usefulness, and system security mechanism) account for 28.5% of the variance in turnover tax compliance of small and medium size textile enterprises in Eastleigh as elaborated in table 5 below.

Table 5: Model Summary

#### Regression ANOVA

The obtained results for the ANOVA that was conducted between digitalization effectiveness factors (technological ease of use, technology usefulness, and system security mechanism) and turnover tax compliance. The obtained ANOVA output  $F = 23.628$ ,  $p = .0000$ ,  $p < 0.05$ ) shows that there existed a statistical linear relationship between digitalization of effectiveness factors (technological ease of use, technology usefulness, and system security mechanism) and turnover tax compliance of small and medium size textile enterprises in Eastleigh as shown in table 6 below.

Table 6: Regression ANOVA

#### Regression Coefficients

The obtained results below for the regression coefficient that was conducted between digitalization effectiveness factors (technological ease of use, technology usefulness, and system security mechanism) and turnover tax compliance. The obtained regression coefficient ( $\beta = .098$ ,  $t(171) = 1.343$ ,  $p > .05$ ) shows that technological ease of use when combined influenced turnover tax compliance, where a single unit improvement in technological ease of use improved turnover tax compliance of small and medium size textile enterprises in Eastleigh statistically by 9.8%. Similarly, the obtained regression coefficient ( $\beta = .311$ ,  $t(171) = 3.126$ ,  $p < .05$ ) shows that technology usefulness when combined influenced turnover tax compliance, where a single unit improvement in technology usefulness improved turnover tax compliance of small and medium size enterprises in Eastleigh statistically by 31.1%. Lastly, the obtained regression coefficient ( $\beta = .129$ ,  $t(171) = 1.51$ ,  $p > .05$ ) shows that system security mechanism when combined influenced turnover tax compliance, where a single unit improvement in system security mechanism improved turnover tax compliance of small and medium size textile enterprises in Eastleigh statistically by 12.9%.

Table 7: Regression Coefficients between Digitalization effectiveness and Turnover Tax Compliance

### *Hypotheses Testing*

The first null hypothesis (H01) that stated technological ease of use has no significant relationship with turnover tax compliance among small and medium size textile enterprises was accepted. This implied that technological ease of use did not have a significant relationship with turnover tax compliance among small and medium size textile enterprises in Eastleigh.

The second null hypothesis (H02) that stated technology usefulness has no significant relationship with turnover tax compliance among small and medium size textile enterprises was rejected. This implied that technology usefulness has a significant relationship with turnover tax compliance among small and medium size textile enterprises in Eastleigh.

The third null hypothesis (H03) that stated system security mechanism has no significant relationship with turnover tax compliance among small and medium size textile enterprises was accepted. This implied that system security mechanism did not have a significant relationship with turnover tax compliance among small and medium size textile enterprises in Eastleigh as shown in table 8.

Table 8: Hypotheses Test and Results

## **Summary, Conclusions and Recommendations**

### *Summary of the findings*

#### Technological Ease of Use and Turnover Tax Compliance

While there was a weak relationship between technological ease of use and turnover tax compliance, the study found that a single unit improvement in ease of use improved compliance by 9.8%. However, no significant relationship was found ( $P=0.181>0.05$ ).

#### Technology Usefulness and Turnover Tax Compliance

Technology usefulness significantly impacted compliance, accounting for 31.1% of variance. Online tax filing systems increased intention to file taxes, with a moderate positive relationship ( $P=0.002<0.05$ ).

#### Perceived System Security Mechanism and Turnover Tax Compliance

System security had a moderate positive relationship with compliance, but no significant impact was found ( $P=0.151>0.05$ ).

### *Conclusions*

Technology, particularly the i-tax platform, facilitated compliance by removing effort barriers. Online filing increased intention to comply, and perceived system security enhanced trust in the system.

### *Recommendations*

#### Practice and Management

Although this study did not establish any significant relationship between technological ease of use and turnover tax compliance, it is important to appreciate the transformation that technology have brought to tax compliance. Therefore, the study recommends KRA to ensure that the online system is easy to understand, navigate and use. This is because when the taxpayer's perception of using the

online tax filing system is easy to use, they will be more willing to use the application, thus increase their compliance. This study established that there existed a significant relationship between technology usefulness and turnover tax compliance. Thus, it is recommended that KRA need to ensure that their online system is reliable and functional. This may increase the efficiency and convenience of filing taxes which may lead to positive experience and attitude that would facilitate compliance. Similarly, KRA management needs to establish a more robust and secure systems to enhance its trust and effectiveness. This may lead to users perceiving e-filing as a secure process, thus elucidate trust. The level of trust of the taxpayer in using the system has a significant effect on increasing their level of compliance.

### *Implication to Theory*

This study add on the existing empirical studies on the extent to which digitalization influence on turnover tax compliance. This study contributes to academic knowledge in several ways by providing evidence pointing towards significant application of effective digital systems, and enhanced security systems to ensure improvement on Turnover tax compliance by SMEs. This study confirmed various theoretical contributions and advances support for the relationships hypothesized. The results strengthens literature by confirming the postulations of the Technology Acceptance Model and Unified theory of Acceptance and use of Technology

### *Policy Implication*

Kenyan government through KRA should improve on fiscal policies, to incorporate new technologies and automated systems. Additionally, KRA should devise effective policies to ensure any system deployed is effective and usable by tax payers in order to boost turnover tax compliance especially in the informal sector.

### *Recommendations for Further Research*

The study focused on the relationship between digitalization effectiveness and turnover tax compliance among small and medium textile enterprises within Eastleigh.. The research primarily focused the three specific variables namely; technological ease of use, technology usefulness and system security mechanisms.

## **REFERENCES**

- [1] Agustina, D., & Anim, K. (2018). E-filing system acceptance among Malaysian taxpayers: An empirical study. *Asian Journal of Multidisciplinary Studies*, 6(8), 50-61.
- [2] Anouze, A. L., & Alamro, L. (2019). Assessing the impact of perceived usefulness, perceived ease of use, and perceived enjoyment on the acceptance of the e-government services in Libya. *International Journal of Information Management*, 47, 201-213.
- [3] Bidin, Z., & Sinnasamy, P. (2017). Taxpayer's awareness and attitudes towards goods and services



- tax implementation in Malaysia. *Journal of Taxation and Regulation of Financial Institutions*, 30(3), 1-11.
- [4] Charag, M. A., Fazili, A. A., & Bashir, A. (2019). User's perceived trust and security in E-commerce: A comprehensive review. *International Journal of Engineering and Advanced Technology*, 8(6), 2321-2462.
- [5] Daniel, J. T., Akowe, J. I., & Awaje, A. D. (2016). An investigation into the compliance behaviour of individual taxpayers in Nigeria. *American Journal of Economics*, 6(2), 76-82.
- [6] Davis, F. D. (1986). A technology acceptance model for empirically testing new end-user information systems: Theory and results. Massachusetts Institute of Technology.
- [7] Deloitte. (2019). Digital tax administration in Kenya: An overview. Deloitte Africa.
- [8] Desmayanti, D. A. (2012). The influence of perceived ease of use, perceived usefulness, security, and trust on online tax reporting: An experimental study on young Indonesian taxpayers. *International Journal of Management and Business*, 2(1), 1-14.
- [9] Dewi, E. S., & Susanti, Y. (2019). The influence of perceived security, perceived ease of use, and trust on the intention to use e-filing in Indonesia. *Journal of Accounting, Finance and Auditing Studies*, 5(2), 25-41.
- [10] European Commission. (2017). Report on taxation and digitalization. European Commission.
- [11] Goodhue, D. L., & Thompson, R. L. (1995). Task-technology fit and individual performance. *MIS Quarterly*, 19(2), 213-236.
- [12] Gupta, R. (2017). Digital India programme: Bridging the digital divide for inclusive growth. *South Asian Journal of Business Studies*, 6(2), 204-218.
- [13] Hartley, R., & Stanley-Smith, P. (2019). Tax administration 3.0: The technology revolution that is transforming tax. Ernst & Young.
- [14] Heenkenda, S., Weerasekara, P. D., & Chaturangani, K. C. (2016). Determinants of tax compliance in Sri Lanka: Evidence from value added tax. *International Journal of Accounting and Taxation*, 4(2), 51-63.
- [15] Hubert, M., Blut, M., Brock, C., & Backhaus, C. (2019). Information technology adoption in retailing: A review of the literature. *Journal of Retailing and Consumer Services*, 47, 310-326.
- [16] Jahongir, A., & Shin, Y. (2014). Conceptualizing user familiarity and its impact on the users' perceived ease of use of technology. *Communications of the Association for Information Systems*, 34(1), 187-209.
- [17] Juswanto, W., & Simms, A. (2017). Factors influencing the success of tax compliance management system: A case study in Indonesia. *Journal of Theoretical and Applied Information Technology*, 95(3), 514-526.
- [18] KPMG Africa. (2016). Unlocking Kenya's potential through its small and medium sized enterprises. KPMG.
- [19] Lipniewicz, W. (2017). Designing a model of managing the implementation of tax IT projects in Poland. *Contemporary Economics*, 11(2), 187-198.
- [20] Lu, H. P., Huang, C. H., & Lo, C. H. (2010). Modeling the determinants of e-filing adoption and acceptance: An empirical investigation of taxpayers' behavior. *Government Information Quarterly*, 27(3), 297-313.
- [21] Mas'ud, A. B., Aliyu, A. A., & Gambo, A. A. (2014). Tax non-compliance and revenue generation in Nigeria: Issues, challenges, and prospects. *International Journal of Economics, Commerce and Management*, 2(4), 1-15.
- [22] McCluskey, W. J. (2005). The value of a simplified income tax system. *Public Finance Review*, 33(1), 84-99.
- [23] McCluskey, W. J. (2012). Tax compliance in a nutshell. *Revenue Law Journal*, 22(1), 18-45.
- [24] Mongwaketse, M. L. (2015). Factors influencing tax compliance behavior of small and medium enterprises in South Africa. University of the Witwatersrand.
- [25] Mustapha, A. F., & Obid, S. N. (2015). The mediating effect of perceived ease of use on the relationship between tax service quality and online tax system in Nigeria. *International Journal of Academic Research in Business and Social Sciences*, 5(9), 169-187.
- [26] Mustapha, M. K. (2013). Factors influencing online tax filing in Malaysia: The moderating role of taxpayer type. *Procedia Economics and Finance*, 7, 203-210.
- [27] Muyundo, B. (2012). Analysis of challenges affecting tax compliance in Africa: A case of the East African community (EAC) partner states. *African Journal of Business Management*, 6(4), 1477-1486.
- [28] Mujiyani, E. N., & Wahyuningtyas, I. (2019). The effect of perceived security, perceived ease of use, and perceived usefulness on intention to use e-filing of taxes. *IOP Conference Series: Materials Science and Engineering*, 662(1), 012041.
- [29] OECD. (2016). Digital government in Chile: Strengthening the institutional and governance framework. OECD.

- [30] OECD. (2018). Technology tools to tackle tax evasion and tax fraud. OECD.
- [31] Otusanya, O. J. (2011). Corporate social responsibility as a determinant of corporate tax compliance in Nigeria. *Journal of Accounting and Taxation*, 3(7), 134-146.
- [32] Prasetya, P. M., & Putra, I. M. (2020). The effect of perceived usefulness, perceived ease of use, and perceived enjoyment on the acceptance of the e-government services in Indonesia. *Journal of Governance*, 5(2), 77-86.
- [33] Prawati, F., & Dewi, S. (2018). Determinants of tax e-filing adoption: A case study in Indonesia. *Journal of Accounting and Taxation*, 10(2)

## 2.3 Conceptual framework

### Independent variable

### Dependent variable

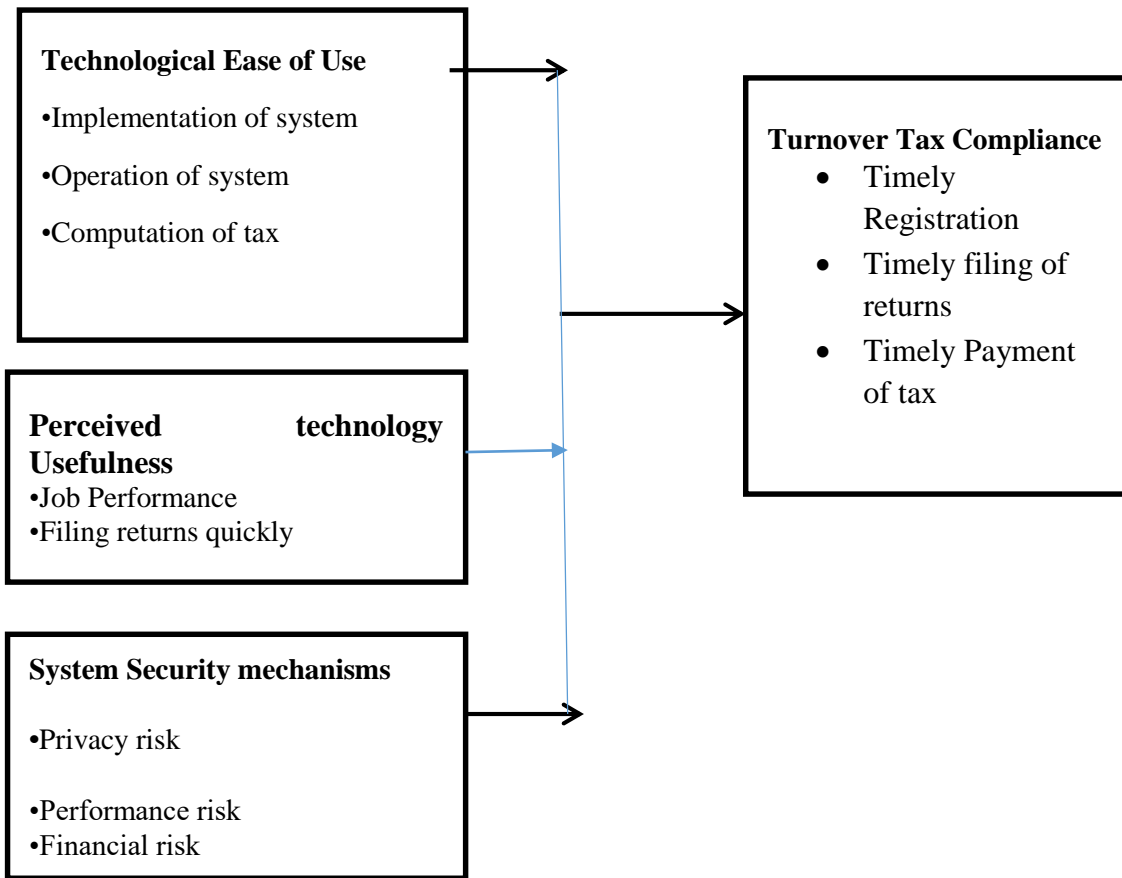


Table 2.1: Summary of Literature Review and Research Gaps

Author & Year	The focus of the study	Research Gap	Focus on the current study
Ismail, Shahrudin, Shahrini, Ibrahim & Sani (2021)	Perceived ease of use of the e-filing system on tax compliance	The study focused on Perceived Ease of Use in Malaysia thereby presenting geographical gap.	This study focused on Perceived ease of use and turnover tax compliance among small and medium size enterprises
Mustapha and Obid (2015)	Perceived ease of use tax service quality	The study focused relationship between perceived ease and tax service qualities thereby presenting contextual gap.	This study focused on relationship between perceived ease of use and turnover tax compliance among small and medium size enterprises.

Mongwaketse (2015)	Perceived effects of an electronic filing system	The study focused on perceived effects of an electronic filing system on tax compliance presenting contextual gap.	This study focused on relationship between perceived ease of use and turnover tax compliance.
Santhanamery & Ramayah (2018)	Perceived usefulness and tax service quality	The study focused on mediating effect of perceived usefulness on the relationship between tax service qualities presenting contextual gap.	This study focused on perceived usefulness and turnover tax compliance among small and medium size enterprises
Mustapha (2013)	Technology factors on online tax system	The study focused on both perceived ease of use and perceived in an online system thereby presenting contextual gap.	This study focused on perceived usefulness and turnover tax compliance among small and medium size enterprises
Zaidi, Henderson & Gupta (2017)	Perceived usefulness on intention to use e-Filing	Study focused on Perceived usefulness challenges on intention to use e-Filing presenting contextual gap.	This study focused on perceived usefulness and turnover tax compliance among small and medium size enterprises
Tahar Riyadh, Sofyani & Purnomo (2020)	Perceived security on the citizen's intention to use e-Filing.	The study focused on perceived security and use of e-Filing presenting a geographical gap.	This study focused on perceived security risk and turnover tax compliance among small and medium size enterprises
Mujiyani & Wahyuningtyas (2019)	Perceived security toward intention to use e-Filing	The study focused on perceived security toward intention to use e-Filing presenting contextual gap.	This study focused on perceived security risk and turnover tax compliance among small and medium size enterprises

Source: Researcher (2022)

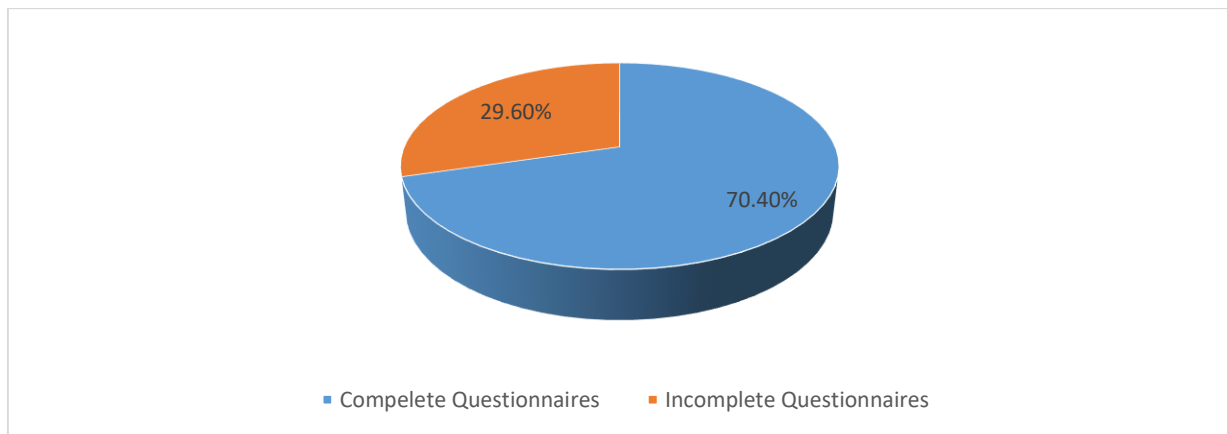
**Table 3.1: Textile SME, Target Population**

Category of Textile SMEs	Population	Percentage
Adult & kids wear (clothes)	423	68%
Curtains and interior designs	107	17%
Blankets and specialized fabrics	90	15%
<b>Total</b>	<b>620</b>	<b>100%</b>

**Table 3.2: Category of SME, Sample Size**

Category of textile SMEs	Population	Percentage	Sample Size
Adult & kids wear (clothes)	423	68%	166
Curtains and interior designs	107	17%	42
Blankets and specialized fabrics	90	15%	35
<b>Total</b>	<b>620</b>	<b>100%</b>	<b>243</b>

Figure 2.



**Figure 2: Response Rate**

Source: Research Data (2022)

**Table 1: Technology Ease of Use and Turnover Tax Compliance**

	SD	D	N	A	SA	Mean	Std Dev
	%	%	%	%	%		
Technology has removed the effort for me to become compliant	4.1	4.7	13.5	42.7	35.1	4.00	1.023
I am open to accept new technology that will enable me become compliant	1.8	11.1	11.7	48	27.5	3.88	.993
I make use of i-tax return filing platform to remain compliant	1.8	13.5	22.2	42.7	19.9	3.65	1.002
I always use available technology to file my tax returns	1.2	3.5	21.1	39.8	34.5	4.03	.897
The technology that is available is accurate enough to facilitate my tax filing	1.8	10.5	14.6	40.4	32.7	3.92	1.026
KRA officers are always available to assist with i-tax challenges/ problems	3.5	9.9	24	32.2	30.4	3.76	1.099
KRA i-tax services are easy to use	1.2	6.4	27.5	32.7	32.2	3.88	.975
I like using the i-tax platform to file my returns	1.2	11.1	29.2	34.5	24	3.69	.996
I have become tax compliant because of the i-tax technology platform	2.3	5.8	15.8	38	38	4.04	.993

Source: Research Data (2022)

**Table 2: Technology Usefulness and Turnover Tax Compliance**

	SD	D	N	A	SA	Mean	Std Dev
	%	%	%	%	%		
I believe that technology can assist me in becoming compliant	2.9	7.6	18.1	53.2	18.1	3.76	.937
Technology has made my tax filing become more effective	1.2	10.5	13.5	38.6	36.3	3.98	1.014
Technology has improved my tax compliance level	2.9	7.6	26.3	22.8	40.4	3.90	1.110
Technology has increased my convenience of filing my tax returns	4.1	17	28.7	25.1	25.1	3.50	1.160

The online tax filing system is very useful to my compliance	1.2	11.1	25.1	32.2	30.4	3.80	1.034
The online tax filing system as supporting technologies that make it easy for me to file my returns	5.8	24	25.1	29.8	15.2	3.25	1.152
Online tax filing systems have increased my intention to file my taxes	0.6	9.9	12.3	32.7	44.4	4.11	1.006
KRA's online tax filing platform is very functional	0.6	9.4	16.4	39.8	33.9	3.97	.967
I have found the i-tax platform to be very useful	0.6	9.9	17.5	40.9	31	3.92	.967

**Source: Research Data (2024)**

**Table 3: System security mechanism and Turnover Tax Compliance**

	<b>SD</b>	<b>D</b>	<b>N</b>	<b>A</b>	<b>SA</b>	<b>Mean</b>	<b>Std Dev</b>
	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>		
I believe my tax records on the online platform are safe	0.6	10.5	14.6	31	43.3	4.06	1.027
I believe that the information security system on i-tax platform can protect it from unauthorized access	0.6	8.8	8.2	30.4	52	4.25	.975
E-filing of my tax returns guarantees my data security	0.6	8.8	9.4	35.1	46.2	4.18	.966
The e-filing system has security to protect confidentiality of my data	0.6	7	11.1	45	36.3	4.09	.896
I use online filing system because of the accuracy that the platform provides	2.3	13.5	15.8	35.7	32.7	3.83	1.101
The KRA online tax system performs as expected	0.6	9.9	10.5	40.9	38	4.06	.968
I am concerned about the network disruption that frequently occur leading to payment delays and incurring of fines	0.6	10.5	10.5	39.8	38.6	4.05	.984
I have confidence in the security measures applied by KRA on their online system	2.3	8.2	9.9	52.6	26.9	3.94	.953
I use online tax filing because I trust the system	1.8	10.5	8.8	43.9	35.1	4.00	1.012

**Source: Research Data (2024)**

**Table 4: Correlation matrix**

		Tax Compliance	Technological ease of use	Technology usefulness	System Security mechanism
Tax Compliance	Pearson Correlation Sig. (2-tailed) N	1  171			
Technological ease of use	Pearson Correlation Sig. (2-tailed) N	.369** .000 171	1  171		
Technology usefulness	Pearson Correlation Sig. (2-tailed) N	.525** .000 171	.513** .000 171	1  171	
System Security mechanism	Pearson Correlation Sig. (2-tailed) N	.493** .000 171	.548** .000 171	.800** .000 171	1  171

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Source: Research Data (2024)

**Table 5: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.546 <sup>a</sup>	.298	.285	.50222

a. Predictors: (Constant), Technological ease of Use, Technology usefulness, System security mechanism

Source: Research Data (2024)

**Table 6: Regression ANOVA**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	17.878	3	5.959	23.628	.000 <sup>b</sup>
Residual	42.121	167	.252		
Total	59.999	170			

a. Predictors: (Constant), Technological ease of Use, Technology usefulness, System security mechanism

b. Dependent Variable: Tax Compliance

Source: Research Data (2024)

**Table 7: Regression Coefficients between Digitalization effectiveness and Turnover Tax Compliance**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.83	.266		6.884	.000
Technological Ease of use	.098	.073	.105	1.343	.181
Technology Usefulness	.311	.099	.342	3.126	.002
System Security mechanism	.129	.090	.162	1.442	.151

a. Dependent Variable: Tax Compliance

Source: Research Data (2024)

**Table 8: Hypotheses Test and Results**

No:	Hypothesis	P-Value	Decision
<b>H0<sub>1</sub></b>	Technological ease of use has no significant relationship with turnover tax compliance among textile small and medium size enterprises	.181 > 0.05	Accept
<b>H0<sub>2</sub></b>	Technology usefulness has no significant relationship with turnover tax compliance among textile small and medium size enterprises	.002 < 0.05	Reject
<b>H0<sub>3</sub></b>	System security mechanism has no significant relationship with turnover tax compliance among textile small and medium size enterprises	.151 > 0.05	Accept