

Moderating Effect of Tax Literacy on the Relationship Between Digitalization of Services and Turnover Tax Compliance among Textile Companies Nairobi County, Kenya

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Abstract

Purpose: Tax compliance has been a matter of key concern for both researchers as well as tax administrators. Therefore, the study aimed to determine the moderating effect of tax literacy on the relationship between digitization of services and turnover tax compliance among textile companies in Nairobi County, Kenya,

Methods: The study adopted explanatory research design. The target population of the study was 43 textile companies in Nairobi (KRA, 2023). The respondents consisted of senior managers and finance section heads of the respective companies, hence a total of 172 respondents were the target population. The data collected was analyzed using both descriptive and inferential statistics. Linear regression model was used to establish the strength of the relationship between independent variable, dependent variable, and moderating variable.

Results: Digitalization of services had a significant positive effect on turnover tax compliance, with a standardized beta coefficient of 0.248 ($\beta = 0.248$, $p = 0.006$). The interaction between Digitalization of Services and Tax Literacy had a significant positive effect on turnover tax compliance, with a standardized beta coefficient of 0.600 ($\beta = 0.600$, $p = 0.000$).

Conclusion: The study concluded that improved digitalization of services had a significant and positive impact on compliance. The study concluded that higher levels of tax literacy significantly improved turnover tax compliance. It is suggested that the government may continue investing in the digitalization of tax services to make tax compliance more accessible and user-friendly. Management is recommended to advocate for and support digital transformation initiatives that streamline tax compliance. Additionally, tax literacy programs should be prioritized to ensure that taxpayers are well-informed about their obligations and the benefits of compliance.

Keywords: *Tax Literacy, Digitalization of Services, Turnover Tax Compliance, Textile Companies*

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1. Introduction

Taxes are a vital source of government income in almost every country in the globe since they enable the government to offer products and services to the general people (Walsh, 2020). In this regard, therefore, tax compliance is an important aspect of governance that has received considerable attention in that it ensures that government budgets are funded thus enabling economic growth. There are various contributing factors that influence the levels of tax compliance which can be individual or at a countrywide scale such as political and economic status (Hallsworth, List, Metcalfe, & Vlaev, 2019).

The extent to which a taxpayer complies or does not comply with national tax laws is known as tax compliance (Ahmed & Kadir, 2021). According to Sapiei, Kasipillai, and Eze (2020), tax compliance is the process of correctly reporting revenue and deducting costs in line with the applicable tax regulations. It involves timely submission of tax forms, explanations, and payments to satisfy a taxpayer's civil tax payment obligation (Daniel, Akowe & Awaje, 2019). Mas'ud, Aliyu, and Gambo (2020) assert that tax compliance is a global problem that impacts both rich and developing nations. All tax administrations now prioritize it (Damayanti, Sutrisno, Subekti & Baridwan, 2020).

A subsidiary rule established under Kenya's Income Tax Act Cap 470 legislation is the Income Tax (Turnover Tax) Rules of 2007. Any resident whose business income was earned in or derived from Kenya and whose yearly turnover was less than five million shillings was to be subject to the rule starting on January 1, 2008. The income of incorporated firms, management, professional, or training fees, rental income, and any revenue subject to an Act-mandated final withholding tax will not be subject to turnover tax, notwithstanding the clause.

According to Vela (2021) and Goradichenko, Martinez-Vanzquez, and Peter (2020), tax evasion is a pervasive and growing problem worldwide. Available research has demonstrated that tax evasion is a global issue that affects both rich and developing nations. For example, Embaye (2019) found that around 16% of individual income tax noncompliance is due to evasion, making it a significant problem in the United States. Tax avoidance, which McBarnet (2022) refers to as inventive compliance, is a notion associated with tax evasion. Sandmo (2019) asserts that there is a conceptual difference between tax avoidance and tax evasion. The legality of the taxpayer's behavior determines how these two ideas differ from one another.

The average turnover tax collections in most Asia-Pacific countries are among the lowest in the world, with average adjustments of less than 15% compared to over 30% in developed countries. During that period, nations such as Bangladesh, Pakistan, Iran, and Sri Lanka were making less than 10%. Low turnover tax income levels in Asia were attributed to weak revenue procedures. Most countries were also struggling around the turn of the century, with tax collections averaging less than 10 percent, with the exception of South Africa. Following the implementation of turnover taxes throughout Asia and Africa at the end of the 2000s, countries that had implemented revenue automation systems saw an average 30% increase in turnover.

In Zambia, tax policy is formulated regionally by the Ministry of Finance and National Planning, with the Zambia Revenue Authority (ZRA) serving as the implementation agency. The Income Tax Act of 1966, as modified, provides the legislative foundation for the administration and control of taxes. Under Zambia's tax system, one's residency and income source determine one's tax burden (ZRA,2022). Turnover tax is paid by small and medium-sized businesses. Any individual operating a business with an annual revenue of K800,000 or

less must pay turnover tax, which is a tax based on gross sales and turnover. Turnover Tax Remittance Cards must be turned in electronically by the 14th of the month after the transactions, manually by the 5th of the month after the transactions to which the return relates, and by the 14th of the month after the transactions (ZRA, 2022). It is 4%. Since turnover tax is required, noncompliance carries penalties, making it the tax that presents the greatest obstacle. Given that the majority of them may already be paying municipal taxes like trading licenses, operating permits, or user fees, Kangwa (2019) contends that taxes in the informal sector are often regressive and endanger the survival of the smallest businesses.

The presumptive tax was created by the Kenya Revenue Authority, which is responsible for government tax collection, to identify small business owners who fail to register for taxes and pay insufficient taxes. This was perceived as a means of collecting taxes from a frequently unstable sector. According to the 2019 EY Kenya tax guide, the Turnover Tax was supposed to be replaced by this tax, which is due at 15% of the entire amount paid for a business permit starting in January 2019.

According to Wasilwa (2019), the Kenya Revenue Authority could indirectly promote compliance by promoting registration, timely payment of taxes owed, and return filing. Muthoni (2022) used a case study of Muranga Town taxpayers to see how enforcement strategies affected turnover tax compliance. The findings demonstrate that audits and penalties are effective enforcement tools that have a direct impact on turnover tax compliance. According to the research, to improve compliance, K.R.A. should audit and check on turnover taxpayers more frequently. The research's findings would make it simpler to comprehend how enforcement activities would affect Muranga TOT payers' compliance with turnover taxes.

1.1 Problem Statement

There are notable cross-country differences in today's global tax trends, especially between industrialized and developing countries. To be more precise, wealthier countries frequently rely more on income taxation to collect a larger percentage of their national income in taxes than poor countries. On the other hand, trade taxes and consumption taxes are more common in developing nations (Ortiz-Ospina & Roser, 2019).

The majority of taxpayers who have paid under the Turnover Tax have failed to meet their compliance levels, indicating a rising problem with tax compliance among Kenyan textile enterprises. Due to deficiencies in tax collection, the Kenyan government, through KRA, works to reach its revenue targets. For example, KRA missed its revenue target by 25 billion in the 2017–2018 fiscal year, which was ascribed to economic activity declines and textile companies' noncompliance (KRA 2019). In the 2017–2018 fiscal year, turnover tax decreased from 385 million to 101 million. As a result, it was suspended by the National Treasury for the 2018–19 fiscal year (KRA, 2018).

Despite reforms, the level of turnover tax compliance has remained quite low as a result of non-compliant taxpayers. In the financial year 2021/2022, TOT collection amounted to Kshs. 99,739,158 against a target of Kshs 135,050,379 representing a performance of 73.4% (KRA, 2022). In the 2022/2023 financial year, TOT collection was Kshs 112,653,556 compared to a target of Kshs 128,112,921 which resulted in a deficit of Kshs 15,459,365 (KRA, 2023). Furthermore, as of the close of March 2023, total revenue collection averaged 95.1% on original target and 93.4% on Supplementary target (KRA reports, 2023). Despite the improved overall KRA revenue performance the turnover tax compliance remains low. The above

statistics show a continuing trend that KRA does not meet its revenue collection targets and has increase a number of late, nil, and zero fillings over the years, indicating non-compliance. This study aimed to establish the moderating effect of tax literacy on the relationship between digitalization of services and turnover tax compliance among textile companies in Nairobi County, Kenya.

1.2 Research Hypotheses

H₀₁: Digitalization of service has no significant effect on turnover tax compliance among textile companies, Nairobi County, Kenya

H₀₂: Tax literacy has no significant moderating effect on the relationship between digitalization of services and turnover tax compliance among textile companies, Nairobi County, Kenya

2. Literature Review

2.1 Theoretical Review

2.1.1 Unified Theory of Acceptance and Use of Technology

Venkatesh et al. developed this hypothesis (2003). It sought to elucidate the intents of users and the ensuing usage patterns of information systems. According to the theory, four main factors will influence how a new information system is used: performance expectancy, effort expectancy, social influence, and facilitating conditions. The four qualities are moderated by the age, gender, experience, and voluntariness of the targeted user. For example, because they are already tech-savvy, young users with IT experience are more likely to find a new system easy to use and very helpful in doing their jobs. Additionally, they will most likely urge their peers to use the same information system.

To develop the hypothesis, the concepts of eight earlier models—including the Technology Acceptance Model—were reviewed and combined. The model has been used by many scholars in their study, however, because it is often compared to the theory of technology adoption model, it has also been criticized by a number of sources (Venkatesh & Zhang, 2010).

According to the Unified Theory of Acceptance and Use of Technology, the firm's internal structure is one of the most crucial elements for its growth and development, along with the company's economic environment and organizational structures. According to the unified theory, work is made easier and faster by switching from manual to digital technologies. The management of the company introduces the information system in accordance with the different tasks that must be completed successfully and automatically. A good example of automation is the modern information system, which has replaced manual systems in the majority of organizations (Venkatesh, 2016).

The growth cycle has the following stages: introduction, growth, peak, and decline. When information technology is introduced, these phases are also used to accomplish various tasks. The capital rises throughout the growth stage, stays constant during the peak, and then begins to drop during the decline period when the majority of businesses are forced to close. As capital and output grow at the same rate, expenditure rises as well. Business systems that process data and generate output are among the information systems utilized in contemporary technology (Venkatesh, 2016).

To support their findings, other researchers carried out further studies to show the hypothesis of technology acceptance and use. It illustrates how small businesses begin and develop into

large corporations with increased output, capital, and expenditure due to the utilization of computerized systems and advanced technology. As the company keeps growing its market, it produces more goods and raises labor costs, both of which are signs of the company's success. By employing several procedures to achieve the goals, the company functions as a single union to achieve the organization's objectives (Gupta, 2008).

Company owners begin with a company idea, organize it, and put it into action. Once the business is up and running, the original goal of the entrepreneur is achieved, and the business idea continues to grow. The business idea and development methods were created by the entrepreneur, who should also consider the input. The company is impacted by the implementation of tax service automation, but primarily in a good way (Gupta, 2021). Regarding the variable of digitization, this theory is pertinent.

2.2 Empirical Review

2.2.1 Digitalization of Services and Turnover Tax Compliance

Ling and Nawawi (2020) surveyed in Malaysia by including tax software and ICT skills in tax education. The study's respondents were tax professionals, and its goal was to determine what abilities taxpayers needed to make the most of an online tax system. According to the report, a taxpayer must be proficient in three areas to use the digital platform-based tax system: word processing software, email, and spreadsheet software.

Mustapha and Sheikh (2021) investigated how digitalized tax services affected Nigerian self-employed taxpayers' use of online tax systems. This was accomplished by administering a questionnaire and utilizing structural equation modeling to ascertain the components' substantial significance. As a measure of the online tax system, the outcome demonstrated that every indicator of digital tax services is statistically significant. The result shows that the online tax system and digitalized tax services have a beneficial direct association.

Olatunji and Ayodele (2019) examined the effects of digital tax services on tax administration in South West Nigeria using a questionnaire as part of a descriptive research methodology, and they used multiple regression and Pearson product-moment correlation to analyze the data. The study found that digital tax services like online tax filing (OTF), online tax registration (OTR), and online tax remittance (OTRE) have an impact on tax productivity.

Muturi and Kiarie (2021) carried out a study to ascertain the impact of the online tax system on the tax compliance of small taxpayers in Meru County, Kenya. The study employed a descriptive research design. Data was collected using a standardized questionnaire. The gathered data was subjected to quantitative data analysis methods using SPSS (version 22). In addition to descriptive statistics, summary regression, and correlation analyses were conducted. The results of the study indicate that the online tax system affects the level of tax compliance among small taxpayers in Meru County.

To assess how IT helps to increase tax compliance across all taxpayer categories, particularly among wealthy taxpayers, Kamau (2014) undertook research on the strategic use of technology to improve tax compliance in Kenya (Kamalu, 2022). The study finds that the global business environment is changing too fast to adopt the use of technology to catch up with dynamic tax compliance. In this view, the tax authority must grasp modern technology and innovation to ensure effective tax compliance through implementing easier and faster filing of returns.

Makanga (2020) looked at large taxpayer enterprises with annual revenue over Kshs. 750 million to see how technology adoption might be used as a strategic instrument to improve tax compliance in Kenya. The study's goal was to investigate how technology affects big taxpayers' tax compliance. According to the investigation, in the very dynamic world of today, technology is crucial for business growth. To improve the effectiveness of tax compliance, KRA or major taxpayers must embrace modern technologies.

2.2.2 Tax Literacy as a Moderator

The ability of taxpayers to comprehend their rights and responsibilities, as well as to apply their tax knowledge and abilities to accurately complete tax returns and adhere to current tax rules, is known as tax literacy. Accordingly, tax literacy is linked to taxpayers' tax knowledge (Niemiowski, Baldwin, & Wearing 2020; Niemiowski et al., 2021). This knowledge includes details about tax obligations (fiscal fees, taxes, and mandatory contributions) as well as how the system for collecting and redistributing taxes operates.

A person can be deemed functionally literate if they can read, write, and calculate their income, citing a study by Madi et al. (2020). According to this analogy, tax literacy can be described as follows: if an individual can independently read and comprehend income statements, perform a variety of tax computations, and recognize potential tax hazards in the financial environment, they are deemed functionally tax literate. "The ability to comprehend key terms like public finance, which includes state and municipal budgets, incomes, and budget expenses, taxes, deficit management, and budget policy," is another definition of tax literacy (Vybihal, 2021).

Palil and Mustapha (2021) separated tax knowledge into subcategories, including awareness of offenses, penalties, and fines; understanding of employment income, dividends, and interest; personal relief; child relief; and rebates. The first goal of tax literacy, according to Warris (2012), is to assist in providing tax information. The second goal is to explain taxes in both domestic regional and international systems and the effects they have on the people who are informed, without endorsing any specific tax amount. The third is that the data conveyed includes both tax revenue and expenses (Warris, 2020).

"The knowledge which an individual possesses to manage the issues concerning personal taxation effectively" is another definition of tax literacy given by Bhushan and Medury (2019). Bhushan and Medury (2019) took into account the concept's dimensions. According to Brackin & Toni (2021), financial literacy ideas ought to be used to counter taxation ideas. According to Hastuti (2022), tax awareness is the capacity of each taxpayer to assume responsibility for their own tax computations, payments, and reporting.

Tax knowledge is the comprehension of taxes and certain issues related to the taxation system, according to Bahari and Ling (2019). Kamil (2020) concludes that awareness is the "want to pay taxes." One of the financial literacy components is tax literacy, which is defined as having particular tax-oriented financial knowledge and numeracy abilities necessary for handling tax computations (Cvrlje, 2021).

3. Methodology

The study adopted explanatory research design. The target population of the study was 43 textile companies in Nairobi (KRA, 2023). The respondents consisted of senior managers and finance section heads of the respective companies, hence a total of 172 respondents were the target population. The response rate for the questionnaires, was 85 %, with 146 out of 172

targeted participants correctly responding to the questionnaires and submitting the responses. Census survey was employed thus no need for sampling. The study used a questionnaire to collect primary data. The data collected was analyzed using both descriptive and inferential statistics. Linear regression model was used to establish the strength of the relationship between independent variable, dependent variable, and moderating variable.

4. Results and Discussion

4.1 Descriptive Analysis

4.1.1 Digitalization of Services

The Digitalization of Services responses descriptive statistics were summarized on Table 1.

Table 1: Digitalization of Services

	N	Mean	SD	Skewness	Kurtosis
Using mobile money to pay taxes has increased my TOT compliance.	146	3.97	1.270	-.890	-.509
I can track tax returns and payments at a low cost by retrieving tax records from ITAX.		4.13	1.131	-.833	-.568
Online tax remittances are simple to monitor, so I can determine when taxes are due.		4.16	1.126	-.820	-.433
The cost of compliance has gone down thanks to internet-enabled tax systems, which motivates me to maintain compliance.		3.99	1.092	-.695	-.753
Electronic filing system is easy to use		4.07	1.143	-.839	-.610

The item "Payment of taxes through mobile money has improved my TOT compliance" had a mean response of 3.97 (SD = 1.270), as shown in Table 4.5. This suggests that respondents generally agree with the statement, although the standard deviation reveals moderate response variability. More respondents tended toward higher agreement, according to the moderate left skewness indicated by the skewness of -0.890. The distribution is somewhat flatter than usual, indicating less peakedness in responses, according to the kurtosis of -0.509.

With a mean response of 4.13 (SD = 1.131), the item "Retrieval of tax records from iTax is vital since it enables me to track tax returns and payments at low costs" received a generally positive response. The skewness of -0.833 indicates a little left skew, indicating a trend for higher evaluations, while the standard deviation indicates moderate variability. A distribution that is flatter than typical is suggested by the kurtosis of -0.568.

With a mean response of 4.16 (SD = 1.126), the statement "Online remittances of taxes are easy to track thus I can tell when taxes are due" had a generally positive response. Response variability is moderate, according to the standard deviation. The kurtosis of -0.433 shows a flatter than usual distribution, while the skewness of -0.820 shows a little left skew with a tendency for respondents to tilt towards agreement.

The item "Use of an internet-enabled tax system has reduced cost of compliance hence motivating me to remain compliant" had a mean response of 3.99 (SD = 1.092), implying that respondents generally agree with the statement. The standard deviation shows moderate variation. The skewness of -0.695 indicates a small leftward skew, suggesting a slight lean towards higher responses, while the kurtosis of -0.753 reflects a flatter distribution than normal.

Finally, respondents generally agreed with the statement "Electronic filing system is easy to use" (mean response of 4.07; standard deviation = 1.143); the skewness of -0.839 indicates a slight left skew, suggesting a tendency toward higher agreement; and the kurtosis of -0.610 indicates a flatter-than-normal distribution.

4.1.2 Tax Literacy

The tax literacy responses descriptive statistics were summarized on Table 2.

Table 2: Tax Literacy

	N	Mean	SD	Skewness	Kurtosis
I am knowledgeable about TOT laws and protocols.	146	3.73	1.110	-.452	-1.043
I've gone to lectures about TOT issues.		4.04	1.023	-.632	-.869
I've received enough instruction on the significance of filing taxes.		3.89	1.102	-.452	-1.023
I am aware of facts regarding self-evaluation.		4.03	1.095	-.694	-.807
With the facts at my disposal, I can accurately determine the amount of TOT payable.		4.02	1.105	-.726	-.649

The results presented in Table 2 on Tax Literacy indicate varied levels of agreement among respondents concerning their knowledge and understanding of tax-related issues.

The average response to the question "I have information about TOT legislation and TOT procedures" was 3.73 (SD = 1.110). Participants generally agreed with the statement, according to the standard deviation, which indicates a moderate degree of response variation. A small leftward asymmetry in the distribution is indicated by the skewness value of -0.452, which implies that more respondents tended toward higher agreement. The distribution is flatter than usual, with fewer extreme values in either direction, according to the kurtosis of -1.043.

"I have attended seminars on TOT matters," was the item with the mean score of 4.04 (SD = 1.023). Given the low answer variability indicated by the standard deviation, this suggests that respondents tended to agree with the statement. A leftward skew is shown by the skewness of -0.632, which shows a propensity for more respondents to strongly agree. A flatter distribution is suggested by the kurtosis of -0.869, which shows a concentration of intermediate responses devoid of extreme outliers.

"I have been adequately trained on the importance of filing tax returns," was the statement to which the mean response was 3.89 (SD = 1.102). The standard deviation shows a moderate degree of heterogeneity, while the mean shows overall agreement among responders. A minor leftward tilt is shown by the skewness of -0.452, which points to a preponderance of higher agreement responses. With a kurtosis of -1.023, the distribution is flatter than usual, suggesting a greater range of answers devoid of notable outliers.

The mean score for the item "I am aware of information about self-assessment" was 4.03 (SD = 1.095). This means indicating a propensity for respondents to agree. A moderate range of answers is shown by the standard deviation. A leftward tilt is shown by the skewness of -0.694, where a greater number of respondents expressed higher levels of agreement. A flatter distribution is indicated by the kurtosis of -0.807, which shows less extreme responses.

Last but not least, the average response to the statement "I can correctly calculate the amount of TOT payable based on the information that is available" was 4.02—SD = 1.105. While the standard deviation reveals substantial heterogeneity in the responses, the mean shows a general propensity to agree with the statement. A significant leftward asymmetry is shown by the skewness of -0.726, which suggests a higher frequency of agreement. A flatter distribution with a kurtosis of -0.649 denotes a lower frequency of extreme scores.

4.1.3 Turnover Tax Compliance

The turnover tax compliance responses descriptive statistics were summarized on Table 3.

	N	Mean	SD	Skewness	Kurtosis
The business files its tax returns on time	146	3.92	1.099	-.721	-.320
I have registered for turnover tax compliance obligation.		4.23	1.034	-.611	-.907
I pay the tax liability that arises from my TOT obligation without failure.		3.73	1.130	-.402	-.905
The tax system in place motivates me to voluntarily comply with tax obligations.		4.15	1.086	-.833	-.235
I pay the correct amount of TOT.		4.06	1.017	-.694	-.529

The average response to the statement "The business files its tax returns on time" was 3.92 (SD = 1.099), suggesting that most respondents agreed with it, however, the standard deviation indicates that there may have been some variation in the responses. A left-tailed distribution with a skewness of -0.721 implies that more respondents lean toward agreement, whereas a distribution with a kurtosis of -0.320 is flatter than a normal distribution.

For the statement "I have registered for turnover tax compliance obligation," the mean response was 4.23 (SD = 1.034), indicating a strong tendency among respondents to agree with this statement. The skewness of -0.611 reflects a slight left skew in the distribution, suggesting that most respondents are positive regarding their registration status. The kurtosis value of -0.907 indicates a flatter distribution, revealing that responses are more spread out from the mean than in a normal distribution.

The statement "I pay the tax liability that arises from my TOT obligation without failure" yielded a mean of 3.73 (SD = 1.130), which shows that respondents are more inclined to agree than disagree, but with a higher level of variability in their responses. The skewness of -0.402 suggests a slight leftward tilt, while the kurtosis of -0.905 indicates a flatter distribution than normal, highlighting a diversity of opinions on this statement.

With a mean score of 4.15 (SD = 1.086) for the statement "The tax system in place motivates me to voluntarily comply with tax obligations," respondents are generally in agreement with the motivational aspect of the tax system; the kurtosis of -0.235 indicates a relatively flat distribution, indicating variability in respondents' perceptions of the tax system's motivational effectiveness; and the skewness of -0.833 indicates a leftward distribution, suggesting a tendency for responses to cluster towards the higher end of the scale.

Lastly, respondents largely agreed with their payment accuracy, as indicated by the statement "I pay the correct amount of TOT" having a mean of 4.06 (SD = 1.017). A left-skewed distribution with a higher concentration of agreement among respondents is indicated by the skewness of -0.694. A flatter distribution than usual is indicated by the kurtosis of -0.529, indicating that there are differing views on payment accuracy.

4.2 Regression Analysis

The linear regression without the study moderator was conducted on the effects of digitalization of services on turnover tax compliance among textile companies, in Nairobi County, Kenya.

Table 4: Regression Coefficient Analysis without moderator

Model		Coeff	Std. Err.	t	P> t
1	(Constant)	3.578	0.325	11.009	0.000
	Digitalization of Services	0.248	0.089	2.787	0.006

Dependent Variable: TOT compliance

Digitalization of Services had a significant positive effect on turnover tax compliance, with a standardized beta coefficient of 0.248 ($\beta = 0.248$, $p = 0.006$). A unit change in Digitalization of Services was associated with a 0.248 increase in turnover tax compliance, indicating that improved digital services enhanced turnover tax compliance levels.

4.3 Moderation Results

The hierarchical regression model was an effective approach for examining the moderating effect of tax literacy on the relationship between digitization of services and turnover tax compliance among textile companies in Nairobi County, Kenya.

Table 5: Hierarchical Regression Coefficients Analysis

Variable	Model 5
	0.666
	[0.200]
(Constant)	(0.002)
	0.600
	[0.061]
Digitalization Of Services * Tax Literacy	(0.000)
R	0.789
R-Squared	0.622
Adj R-Squared	0.603
Std. Error of the Estimate	0.630
R-Squared Change	0.010
Sig F Change	0.046

Key []: standard error, (): p-values at 0.05,

Model 5 included the interaction between digitalization of services and tax literacy, resulting in the highest R-value of 0.789 and an R-squared value of 0.622. This model explained an additional 1.0% of the variance (R-squared change = 0.010, $p = 0.046$). These results indicated that the combined interactions of tax literacy with compliance cost, taxpayer perception, and digitalization of services further enhanced the explanatory power of the model, accounting for more of the variance in turnover tax compliance.

The interaction between Digitalization of Services and Tax Literacy had a significant positive effect on turnover tax compliance, with a standardized beta coefficient of 0.600 ($\beta = 0.600$, $p = 0.000$), suggesting that tax literacy enhanced the positive effect of digitalization of services on turnover tax compliance.

For hypothesis **H₀₁** which stated that digitalization of service has no significant effect on turnover tax compliance among textile companies, Nairobi County, Kenya. The hypothesis was rejected because the study discovered that the digitalization of services had a positive and substantial influence on turnover tax compliance (p -value=0.002).

Lastly **H₀₂** stated that tax literacy has no significant moderating effect on the relationship digitalization of services and turnover tax compliance among textile companies, in Nairobi County, Kenya. The study discovered that the association between turnover tax compliance and service digitization was influenced by tax literacy (p -value=0.000). Thus, the idea was disproved.

4.4 Discussion

4.4.1 Digitalization of Services and Turnover Tax Compliance

The study sought to determine the effect of digitalization of services on turnover tax compliance among textile companies, in Nairobi County, Kenya. According to the correlation matrix, there was a positive and significant relationship between turnover tax compliance and the digitization of services ($r = 0.387$, $p = 0.011$). This suggested that increasing turnover tax compliance would be possible with better service digitization. Regression study revealed that

turnover tax compliance was significantly improved by digitalizing services ($\beta = 0.596$, $p = 0.002$). This implies that higher levels of turnover tax compliance are linked to better digital services. The study findings concurred with Ling and Nawawi (2020) who found that incorporating ICT skills and tax software into tax systems significantly improved compliance, as taxpayers were better able to interact with digital platforms.

The findings also agreed with Mustapha and Sheikh (2021) who demonstrated that digitalized tax services positively affect compliance among Nigerian self-employed taxpayers, affirming the significant role of technology in promoting tax compliance.

The findings however disagreed with Muturi and Kiarie (2021), who while generally agreeing with the positive effect of online tax systems on compliance, noted that the success of such systems depends heavily on the level of taxpayer education and system usability, which can limit the effectiveness of digitalization in some contexts.

The findings also disagreed with Kamau (2022) who acknowledged the positive impact of digitalization on compliance but warned that rapid technological changes require tax authorities to continuously update their systems, which may present challenges in sustaining long-term compliance improvements.

4.4.2 Tax Literacy and Selected Determinants on Turnover Tax Compliance

The interaction between Digitalization of Services and Tax Literacy had a significant positive effect on turnover tax compliance, ($\beta = 0.600$, $p = 0.000$), suggesting that tax literacy enhanced the positive effect of digitalization of services on turnover tax compliance.

Results agree with Niemirowski et al. (2021) who argued that tax literacy is crucial for understanding tax obligations and managing tax calculations, thereby enhancing compliance.

The findings further concurred with Palil & Mustapha (2021) who categorize tax knowledge into multiple dimensions, suggesting that the more informed taxpayers are about their rights, responsibilities, and the tax system, the more likely they are to comply.

The findings further concurred with Cvrlje (2021) who supports this by noting that tax literacy is an essential dimension of financial literacy, emphasizing its role in promoting effective tax management.

5. Conclusion

The study focused on the effect of digitalization of services on turnover tax compliance. The study concluded that improved digitalization of services had a significant and positive impact on compliance. This finding highlights the importance of investing in digital infrastructure to simplify and streamline tax processes, thereby encouraging greater compliance from taxpayers.

The study also sought to determine the moderating effect of tax literacy on the relationship between compliance cost, taxpayer perception, digitalization of services, and turnover tax compliance. The study concluded that higher levels of tax literacy significantly improved turnover tax compliance. Additionally, tax literacy was found to buffer the negative effects of compliance costs, enhance the positive effects of taxpayer perception, and further amplify the benefits of digitalization of services on compliance. This underscores the critical role of educating taxpayers to foster a better understanding and adherence to tax regulations.

6. Recommendations

The government should continue investing in the digitalization of tax services to make tax compliance more accessible and user-friendly. Management is recommended to advocate for and support digital transformation initiatives that streamline tax compliance. Additionally, tax literacy programs should be prioritized to ensure that taxpayers are well-informed about their obligations and the benefits of compliance.

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