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Role of Information Technology on Value Added Tax Compliance in Moshi Municipality

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Abstract: ***Tax administration issues affect many nations, businesses and individuals. Many nations experience challenges in managing taxes and therefore constantly develop tools and strategies for administering tax effectively. The objective was to determine the role of information technology on VAT compliance. Technology Acceptance Model governed the study, which allow people to adopt technology due to its major constructs, which are perceived ease of use (PEOU) and perceived usefulness (PU). The study used convergent parallel design under mixed approach to collect both qualitative and quantitative data. Total population for this study was 680 registered VAT payers and 8 key informants from Tanzania Revenue Authority management personnel at normal flow unit, which specifically deals with the collection of VAT in Moshi Municipality. Sample size of 251 respondents were obtained through Yamane Formula (2004) from taxpayers in Moshi Municipal. Systematic sampling was used to get respondents during data collection from taxpayers and key informants guide to TRA officers. Primary data was collected using questionnaires and an interview guide. The validity of the research instrument was ensured by research professionals, to check for ambiguities and confusion of the instruments while internal consistency was tested using Cronbach's alpha coefficient. An Alpha Coefficient of 0.751 was obtained which indicates strong reliability for the study to proceed. The quantitative data was sorted and analyzed using frequency, percentage, mean, and standard deviation. The descriptive statistics were done by using the Statistical Package for Social Science (SPSS). Qualitative data was presented in terms of context and interpreted based on the research objective. The study found that there is a positive impact between information technology and tax compliance and concluded that, IT has increased compliance to VAT traders and improved monitoring and fraud detection to TRA officers. Researcher recommended to TRA office to improve their network availability and system security to protect taxpayers from unintended consequences in terms of privacy, confidentiality, data leakages and cyber security.***

Key Terms: Information Technology; Value Added Tax (VAT); Tax Compliance; Electronic Tax Filing; Electronic Fiscal Device (EFD)

I. INTRODUCTION

A. Background

Tax administration issues affect many nations, businesses and individuals. Many nations experience challenges in managing taxes and therefore constantly develop tools and strategies for administering tax effectively.

The goal of the public administration system around the world is to increase the efficiency and flexibility of tax administration by using information technology (IT) (WBG, 2018). The integration of these technological advancements into business processes has resulted in enhanced operational effectiveness, enhanced data collection capabilities, seamless machine-to-machine information interchange, expense minimization, and streamlined adherence oversight, among other advantages (Kavoyo, 2018) [15]. This convergence has yielded enhancements in both quality and operational efficiency, driving down expenditures and boosting output (Anwar & Climis, 2018) [2].

Information technology possesses a noteworthy capacity to conduct operations from a distance, thereby enhancing the pace at which data can be processed, assessed, and employed. This augmentation in agility empowers enterprises to make decisions regarding the strategic locales for significant business operations, potentially relocating prevailing functions to new areas. Such shifts might distance these activities not only from the primary market jurisdiction but also from the domains where interconnected business processes unfold. The adoption of contemporary technologies facilitates the rapid and precise processing, transmission, manipulation, and retrieval of diverse forms of information (OECD, 2019) [25].

Tax authorities, functioning as a government entity, are progressively embracing solutions rooted in e-government principles [26], such as electronic tax filing (e-filing), under the rationale that it enhances the provision of public services and optimizes fiscal efficiency (Hamza et al., 2021) [13]. Sabir et al. (2021) outlined e-taxation as "a process in which tax-related documents or tax returns are submitted via the internet [27], often without the requirement for physical paper submissions [14]." E-taxation encompasses the utilization of internet technologies, the global web, and software to cater to a broad spectrum of tax administration and compliance objectives (Aziz et al., 2021) [5].

Value Added Tax (VAT) was introduced in Tanzania in 1997 as a replacement for the sales tax that had been operational since 1976. VAT presents a significant potential to enhance adherence primarily due to its inherent self-enforcing mechanism, where purchasers are obligated to report their input acquisitions to offset the VAT they've paid against their own VAT liability arising from their sales activities (Salim, 2015). Kiiza (2005) outlined three merits associated with the VAT system [22]. Firstly, VAT boasts an extensive base that generates substantial government revenue even at relatively low rates. Secondly, it demonstrates administrative efficiency; functioning as a self-regulating tax, VAT curtails opportunities for tax evasion. Additionally, it

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upholds neutrality. From an economic perspective, VAT is imposed at a uniform rate and registration threshold, without impinging on consumers' choices among various goods. This aspect ensures that taxpayers' savings and spending choices remain unaffected by VAT. Furthermore, the VAT system encourages exports through zero-rating, fostering an environment where domestic production and distribution remain undistorted, while its operational mode should also be duly acknowledged.

The introduction of VAT has coincided with the implementation of electronic fiscal devices (EFDs) (Mascagni et al., 2022) [17]. EFDs are automated machines designed to instantly record transactions as they occur and electronically transmit this data to tax authorities [18]. These devices possess the potential to enhance tax compliance through various avenues [19]. Firstly, they contribute to delineating compliance by furnishing data on the total sales volume within a specific timeframe, which can be cross-referenced with self-reported sales figures found in both VAT and income tax declarations. Secondly, this information serves as a basis for overseeing compliance through the creation of databases and automatic flagging of irregularities and disparities [20]. These flags guide tax authorities in devising audit strategies for effective enforcement. Thirdly, EFDs, particularly the more sophisticated models, are also seen as facilitators of compliance, as they aid businesses in their record-keeping obligations (Mascagni et al., 2022) [21]. These devices can securely store critical details about sales, purchases, and inventory, which taxpayers can conveniently access when preparing their tax returns.

The technology-driven instruments is their capacity to enable taxpayers to interact with the tax system in a depersonalized manner. In the absence of such tools, taxpayers would likely be reliant on the judgment of tax officials who would manage information dissemination, transaction processing, and oversight through direct interaction. In conclusion, information technology holds a pivotal position in contemporary society. It has revolutionized our lives, rendering them more convenient, streamlined, and interconnected. From information accessibility and communication to remote work and electronic commerce, information technology has fundamentally reshaped our daily existence, professional engagement, and social interactions. With the utilization of devices like smartphones and laptops, the technology's outcomes manifest as diverse services such as social media, online banking, e-books, podcasts, virtual courses, and electronic commerce.

B. Statement of Problem

Information technology forms part of individuals' lives in the modern world. Dependency on technology by people is increasing on a daily basis [36]. The reason is that innovations in technological devices and applications are encouraged all over the world [37]. Individuals affiliated with organizations or governmental structures can reap advantages from a system that furnishes precise historical data, current status updates, and reliable predictive insights [38], all presented with utmost accuracy (Anwar & Shakur, 2021) [1]. Many countries are investing heavily in the tax collection systems. Governments depend on tax revenues to develop a country, hence the demand to improve tax administration systems (WBG, 2022).

Tanzania has now embarked on computerized system in collecting revenues. As tax regulations become increasingly complex, businesses face the challenge of ensuring proper compliance with VAT requirements. In this digital age, information technology (IT) plays a crucial role in enabling businesses to meet their VAT obligations efficiently and effectively (Anwar & Shakur, 2021). Illustrations of such applications include the utilization of Electronic Fiscal Devices (EFDs). Bakar (2016) [6] explored the influence of electronic fiscal devices on the process of value-added tax (VAT) collection in Tanga and discovered that these devices exert a significant impact on VAT collection and the submission of VAT returns. The study also revealed a positive correlation between the use of EFDs and enhanced VAT collections. Mushi (2018) [23], in an evaluation of the efficiency of Information and Communication Technology (ICT) in bolstering government revenue collection, specifically within the context of the Tanzania Revenue Authority (TRA) in Iringa, reported that ICT has notably improved revenue collection efforts. The integration of ICT tools has enabled the TRA to monitor revenue collection in real-time, while simultaneously fostering a more structured approach to communication and procedures. Silvanus (2013) [32] analyzed the role of technology in revenue collection, focusing on the tax region of Ilala, and highlighted its constructive contribution [33]. Nonetheless, little research have been conducted in Tanzania especially in Moshi to investigate the role of using IT in VAT compliance, highlighting the benefits it brings to businesses, tax authorities, and the overall economy [34]. Therefore this study attempt to fill this gap by assessing the role of technology on VAT compliance in Moshi Municipality [35].

C. Research Objective

To determine the role of information technology on VAT compliance in Moshi Municipality

D. Research Objective

To what extent does information technology facilitate tax compliance on VAT administration?

II. LITERATURE REVIEW AND THEORETICAL FRAMEWORK

A. Literature Review

This part is important to the study since it allows the researcher to review others literature to clearly understand their discussion and recommendation in respect to Information technology deployment in tax compliance.

Basilius (2017) [7], investigated the contribution of technology on the Ilala tax region's revenue collection. The researcher conducted a descriptive cross-sectional survey, selecting Ilala region as a representative sample of other tax regions. Data was gathered from taxpayers through questionnaires and from TRA officials through interviews. The study employed a combination of qualitative and quantitative analysis, utilizing Excel spreadsheets. The findings indicated that overall, a majority of taxpayers held

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highly positive perceptions regarding the utilization of technology for tax payment. Among those who had utilized the system, a prevalent preference emerged due to numerous benefits, including ease of use, time efficiency, and error reduction, among others. Additionally, taxpayers recognized several advantages of employing technology for tax payment, encompassing cost savings, heightened productivity, time efficiency, process transparency, and minimized disruptions. Furthermore, the study identified four challenges that the TRA encounters in administering taxes using technology. The previous study was all about the taxpayer perceptions on the system but the current study were focused in the tax administrator on how simple is the system to capture the payment made by the taxpayer.

Bum et al (2020) [16], in the study on digital taxation around the globe, It is indicated that tax strategies have evolved to accommodate the expansion of digital goods and services, frequently originating from businesses without a taxable establishment within the nation where these products are used. Furthermore, policymakers have explored methods to modify corporate taxation in order to encompass the operations of digital companies within various countries. This resulted in increase of tax collection due to online submission of tax. While the previous study focuses on the digitalization of the operations of collecting taxes the current study is focused on the role of the system is on VAT administration.

The OECD report from 2019 demonstrates the rising adoption of e-administration in tax authorities [4], wherein data resources, diverse technological instruments, and analytics are harnessed to enhance tax adherence [24]. This shift toward e-administration is emphasized by the expanding availability of online avenues for submitting tax returns and making payments. The report's primary focus lies in examining the connection between e-administration and the compliance of businesses possessing a tangible presence. The current study were assessing the system in increasing revenue collection particular on VAT and the target sated.

According to Cassian & Associates (2018), their report titled "Tax Challenges in the Digital Economy" highlights how the utilization of the internet has transformed the operational models of businesses in Tanzania. Local business proprietors are on the rise, and startups are eager to harness the potential of the digital age. To foster the growth of these businesses, which contribute by revolutionizing our way of doing things, the government should assess the implications of existing tax policies on such enterprises. The report underscores that tax administration in Tanzania is not entirely efficient, emphasizing the government's ongoing need to ensure the proper collection of taxes across all aspects of production. Therefore, this study assessed the role of information technology to make sure that all kind of taxes are collected in either physical or non-physical businesses and the policies are well formulated..

IMF Report (2022), investigated on the impacts of digitization on tax compliance of VAT e-invoicing reform in Peru. The study used secondary data on firm-to-firm transaction and quasi experimental in Peru through the reform of variation in the rollout of electronic invoicing to identify the penetration of e-invoicing system in tax compliance. According to the report, enterprises with partners that are required to implement e invoicing had greater rates of voluntary adoption, suggesting beneficial technology adoption spillovers. Stronger spillovers come from partners downstream and from businesses that focus on exports. In addition, the report shows that firms are mandate to transact with a partner who has been adopting e invoicing to minimize network segmentation. The previous study based on the adoption of e invoicing of tractions to increase compliance level among business that have adopted the e-invoicing, the current study is on the role of technology if it facilitate the compliance of the taxpayers.

Olatunji & Ayodele (2017) [28], investigated on information technology's impact on Southwest's Nigeria tax administration. The study investigated how information technology affects tax collection in south-western Nigeria [29]. The study concentrated on scrutinizing how information technology influences the efficiency of tax collection, implementation, and planning [30]. Employing a descriptive research design, the investigation employed questionnaires for data collection, and the subsequent analysis utilized techniques such as multiple correlation, regression, and Pearson correlation [31]. The findings drawn from the research led to the conclusion that information technology contributes to enhancing the efficacy of tax administration and productivity. Consequently, the study recommends that the pertinent governmental bodies responsible for tax collection, both at federal, state, and local levels, should initiate targeted awareness initiatives, such as seminars and sensitization campaigns. These efforts should emphasize the significance of information technology in tax administration and its applicability. The current study assessed the role of information technology on facilitating tax compliance among taxpayers and hence increase tax collections.

B. Theoretical Framework

A theoretical framework serves as the intellectual structures of ideas used for research or analysis. It comprises concepts, theories, and models that underpin a study structures and guide its exploration. Under this study, the researcher used technology acceptance model developed by Davis (1989). The model is based on the premise that user acceptance and usage behavior are influenced by two key factors: perceived usefulness (PU) and perceived ease of use (PEOU). These factors are further influenced by external variables that shape an individual's perception and acceptance toward adopting a technology. Perceived Usefulness (PU) describes how much a person thinks a certain technology will improve their performance, productivity, or general effectiveness in accomplishing tasks. (Davis, 1989). If users believe a technology is good and useful for their purposes, they are more inclined to adopt it. Perceived Ease of Use (PEOU), reflects the user's perception of the simplicity and ease with which they can interact with the technology. Technologies that are perceived as easy to learn and use are more likely to be adopted. In addition to PU and PEOU, TAM incorporates several external variables that influence the perception of usefulness and ease of use such as social Influence, the impact of friends, family, colleagues, and other social networks on an individual's decision to adopt a technology, facilitating Conditions, the extent to which an individual believes that the

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necessary resources and support are available to use the technology effectively.

The model is relevance to this study as it facilitates the adoption of new VAT technology during compliance: The technology acceptance model can be used to predict the adoption of new VAT technology, such as electronic invoicing, online filing, and real-time reporting. By understanding the perceived usefulness and ease of use of these technologies, policymakers can design and implement measures to promote their adoption and reduce resistance to taxpayers.

Strengths of the theory are easy to understand and apply, making it accessible to both researchers and practitioners. It is flexible and can be adapted to different contexts and technologies. It has been found to have a high predictive power in various studies. The model predicts the acceptance and adoption of various technologies, including mobile devices, e-commerce, and social media with its major variables of perceived usefulness and perceived ease of use, which facilitate technology acceptance. Furthermore, the model can be integrated with other models to enhance its predictive power. For example, it has been combined with the Theory of Planned Behavior to better understand the role of social influence in technology acceptance. Apart from strengths, the model has a weakness of lack of attention to cultural differences; The TAM does not consider cultural differences in technology acceptance. Cultural factors, such as values, beliefs, and attitudes, can significantly influence how individuals perceive and use technology, and therefore may need to be integrated into the model to improve its predictive power as well as limited attention to post-adoption behavior: The TAM model focuses primarily on the decision to adopt a technology, and does not fully address post-adoption behavior, such as continued use or abandonment of the technology.

III. RESEARCH METHODS

In this study, convergent parallel design under a mixed approach was used to provide a comprehensive understanding of a research problem by triangulating data from multiple sources and perspectives, this approach promote a holistic and integrated approach to research, enhancing the overall quality of the study. The target population involved in this research comprised of 680 registered taxpayers and 8 key informants from the Tanzania Revenue Authority normal flow unit, a sample size of 251 respondents was obtained through Yamane Formula from taxpayers in Moshi Municipal. The study used systematic sampling to get respondents during data collection from taxpayers, this technique was used to select taxpayers by using the physical presence and selecting the users in an orderly manner and key informants guide to TRA officers. A set of structured questionnaires and a key informant interview guide were used to collect primary data. Content validity of the research instrument was ensured by the research professional; while reliability was tested using a duly completed questionnaire by ten (10) randomly selected respondents of registered taxpayers using a Cronbach Alpha Coefficient. An Alpha Coefficient of 0.751 was obtained indicating a strong reliability for the study to proceed. The quantitative data was sorted and analyzed using frequency, percentage, mean, and standard deviation. The descriptive statistics was done by using the Statistical Package for Social Science (SPSS). Qualitative data were presented in context and interpreted in light of the research objective. As part of the ethical considerations, some cultural values and customs were carefully observed during the process of data collection.

IV. RESULTS AND DISCUSSIONS

This part presents the core outcome of research findings and the discussion of it. It shows the significant discoveries and insight that have emerged from the rigorous investigation. Discussion and interpretation of data was done in comparison of other scholar's findings and the model used.

A. Demographic Characteristics of Respondents

The respondents for this study were from taxpayers of Moshi Municipal Council. The expected number of respondents was 251. Among the respondents, 191 participated in the study, which is 76% of the targeted respondents. The number of respondents is fair enough to answer the research objective for the study. The Demographics information of respondents focuses on Gender, Age, and Education level of the respondents. The demographic responses are summarized in the Table below

Table-I: Demographic Characteristic

Demographic	F	%
Gender		
Male	123	64.4%
Female	68	35.6%
Age		
Age between 18-30	34	17.8%
Age between 31 – 40	48	25.1%
Age between 41 – 50	72	37.7%
Age above 51	37	19.4%
Education level		
Primary school	3	1.6%
Secondary school	29	15.2%
Certificate/Diploma	83	43.5%
University level (degree)	55	28.8%
Postgraduate	21	10.9%

Source: Field data, (2023)

Table 1 shows demographic characteristics of the respondents, which includes gender, age and education level. The data in the table shows that (64.4%) of respondents were male while (35.6%) of the respondents were female. This implies that most of the big business owners in Moshi Municipality are male compare to females. Therefore, data shows that male interact frequently with system during VAT compliance to TRA than female.

The table 1 shows that respondents aged between 41 to 50 (37.7%) compliance to TRA via system which implies that it is the matured and energetic age to work hard so as to make sure their business grows daily as a result they are using system to compliance to TRA as the system save more time for them . Respondents aged between 31 to 40 (25.1%) are emerging youth to business, which implies that their business still need more effort to grow. Respondents aged 18 to 30 (17.8%) are young youth which implies that they are at start up stage of the business; therefore, they need more efforts to grow. Lastly;

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respondents aged 51 and above (19.4%) were old implying that this group are incapable of interacting with the system during VAT administration.

Table 1 shows that (43.5%) were certificate or diploma holders, (28.8%) were degree holders, (15.2%) were secondary education holder, (1.6%) were postgraduate Diploma holders and (1.6%) were primary education holders. This implies that many VAT business traders who use system during VAT compliance their education level is certificate or diploma. The results also indicate that it is not necessary to have higher education level to be familiar with the use of the system.

Therefore, under demographic results shows that more male aged 41 to 50 with their certificates or Diploma are much more conversant to use system during their VAT compliance. This implies that there is gender disparity in digital literacy and technological access. The study indicates that men have greater exposure to IT resources than women, which make more business operators in Moshi Municipality be men than woman. Therefore, to ensure equal opportunity in accessibility of IT during VAT administration, education and training should be provided to empower women on the use of IT.

B. Information Technology to facilitate Tax Compliance

The study aimed to determine the role of information technology on VAT compliance in Moshi Municipality. Table 2 shows the results obtained from the 191 respondents of VAT traders.

Table-II: Information Technology to Facilitate Tax Compliance

	Factors that facilitate tax compliance	SD		D		N		A		SA		Mean	SD
		f	%	f	%	f	%	f	%	f	%		
I	Technology has reduced the period of time between when the tax is generated and the moment it is paid	29	15.2	24	12.6	13	6.8	94	49.2	31	16.2	3.39	1.31
ii	Information technology facilitates speed in VAT administration	18	9.5	8	4.2	16	8.4	123	64.7	25	13.2	3.68	1.06
iii	The automated system is flexible to allow VAT administration to be carried out anywhere.	14	7.3	12	6.3	17	8.9	121	63.4	27	14.1	3.71	1.03
iv	High security in VAT administration is facilitated by IT for your business	3	1.6	25	13.1	31	16.2	103	53.9	29	15.2	3.68	0.93
v	A proper set of the tax base for monthly submission of your business is facilitated by IT	8	4.2	31	16.2	34	17.8	93	48.7	25	13.1	3.50	1.05
vi	Online payment processes save Man-hour	7	3.7	41	21.5	26	13.6	90	47.1	27	14.1	3.47	1.08
vii	The efficiency of dealing with TRA is improved by online processes	2	1.0	6	3.1	17	8.9	120	62.8	46	24.1	4.06	0.74
viii	Information Systems have improved efficient time utilization	2	1.0	6	3.1	15	7.9	113	59.2	55	28.8	4.12	0.75
ix	Quality delivery of taxpayers, have improved by information technology	5	2.6	32	16.8	47	24.6	70	36.6	37	19.4	3.53	1.06
x	Information technology have increased revenue collection compared to previous paper-based processes.	13	6.8	17	8.9	23	12.0	78	40.8	60	31.4	3.81	1.17

Source: Field data, (2023)

Data in table 2 shows that (59.2%) of respondents with a mean of 4.12 and standard deviation of 1.31 agreed that, Information Systems have improved efficient time utilization. This implies that more business owners prefer to use system during VAT administration from where they are compared to the old system of paperwork. This finding agrees with the findings of Basilius (2017), who found that the majority of taxpayers expressed highly favorable viewpoints regarding the utilization of technology for tax payment. Furthermore, individuals who had experienced the system demonstrated a clear preference for it due to a multitude of benefits. These advantages encompass not only the straightforward nature of employing the technology but also the considerable time saved and a marked decrease in errors, among other favorable outcomes. This has a direct relation with the theory of technology acceptance model that has major two constraints of perceived ease of use and perceived usefulness, which lead them to adopt the use of technology in order to reduce the time spent to accomplish the work and hence increase performance. One interviewee said that,

> "*The use of information technology has facilitated compliances on time since it allow taxpayers to keep recording their VAT transaction on daily basis*."*Source TRA interview 10/05/2023.*

This implies that traditional manual methods of VAT calculation and reporting are prone to errors, leading to potential penalties and financial losses. IT solutions enable businesses to automate these processes, reducing the likelihood of errors and ensuring accurate VAT calculations.

Also, data in table 2 shows that (49.2%) of respondents with a mean of 3.39 and standard deviation of 1.06 agreed, that Technology has reduced the period between when the tax is generated and the moment it is paid. This implies that with the use of electronic filing systems, online payment platforms, and real-time data integration enable faster tax calculations, reporting, and payments hence minimizes the risk of non-compliance and penalties. This also was supported by one key informant, who said that,

> "*Integration of TRA systems (purchases and sales) should be done to maintain automatic online updates on VAT amount." Source TRA interview 10/05/2023, 10.10 am*

This implies that TRA as a tax authority should think of developing of accounting

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software which can be integrated with business operation of tax payers to generate a VAT liability on daily basis so as to save more time to tax payers and increase collection to the authority

Moreover, data in table 2 shows that (64.7%) of respondents with a mean of 3.68 and standard deviation of 1.0 agreed that Information technology facilitates speed in VAT administration. The findings confer to OECD, (2019) which found that the proficiency of information technology in executing tasks from a distance is noteworthy, amplifying the pace at which information undergoes processing, analysis, and utilization. This advancement imparts a heightened adaptability to businesses, enabling them to decide the strategic locales for significant operations or even facilitate the relocation of current functions to new areas. This is conceivable even when such locations might be geographically distant from the primary market jurisdiction and other locales hosting interconnected business operations. The application of contemporary technologies facilitates swift and precise handling, transmission, manipulation, and retrieval of diverse forms of data. This also was supported by one interviewee, who said that,

> "*Through the use of EFD machines gives room to taxpayers to issue sales receipts in time which allow speed in the preparation of VAT liability*." *Source TRA interview 10/05/2023, 11.30 am*

This implies that EFD machines automate the process of generating and recording sales transactions, ensuring accuracy, efficiency, and compliance with tax regulations and the process just in time

The data in table 2 shows that (63.4%) of respondents with a mean of 3.71 and standard deviation of 0.93 agreed that the automated system is flexible to allow VAT administration to be carried out anywhere. This implies that businesses can carry out VAT administration tasks from anywhere, regardless of geographical boundaries. It ensures that VAT administration can be managed efficiently and accurately, even when dealing with complex transactions. The findings confers with Bum et al (2020), who asses that ...taxation strategies have evolved to accommodate the expansion of goods and services delivered digitally, frequently bypassing the requirement for businesses to maintain a taxable presence in the nation where these products are consumed. Additionally, policymakers have explored alternatives for altering corporate tax structures to encompass the operational activities of digital companies operating across various countries. This resulted in increase of tax collection due to online submission of tax.

The table 2 shows that (53.9%) with a mean of 3.68 and standard deviation of 1.05 agreed that, high security in VAT administration is facilitated by IT for your business. This implies that the user account, which every taxpayer has, is accessed via the unique Tax Identification Number (TIN) which facilitates security to the user of a particular account. This also was supported by one key informant, who said that,

> "*Many taxpayers worrying about transparency of the system. As they want to be assured by the authority that their information cannot be seen by third parties especially taxpayer with old ages whom are not familiar with the operations of the computer" Source TRA interview 10/05/2023, 12.30 pm*

This implies that when taxpayers lack confidence in the transparency of the tax system, it erodes trust in the government and undermines compliance efforts, therefore TRA should prioritize transparency through clear regulations, open communication, and accessible information so as to allow all taxpayer to compliance via a system

Furthermore, data in table 2 shows that (48.7%) of respondents with a mean of 3.50 and standard deviation of 1.08 agreed that, a proper set of the tax base for monthly submission of your business is facilitated by IT. This implies that more taxpayers were satisfied with the online facilities found in the system concerning VAT administration, through the use of software, businesses can record and categorize their income and expenses, making it easier to calculate taxable amounts and generate reports that summarize the tax base, making the monthly submission process more efficient and reducing the likelihood of errors. This finding agreed with the findings of Salim (2015), who found VAT possesses significant capacity to enhance adherence, primarily due to its inherent self-regulating mechanism. This mechanism relies on buyers reporting their input acquisitions to subsequently deduct the VAT they initially paid from their own VAT liability stemming from their sales activities..

In addition, data in table 2 shows that (47.1%) of respondents with a mean of 3.47 and standard deviation of 0.74 agreed that, online payment processes save Man-hour. This relate with the Theory of Technology Acceptance Model with its constraints of the user's perception of the degree to which using the system will improve his or her performance in the workplace, Basilius (2017), who saw that information technology saves time and Charity, (2018) [8] who said that Information technology saves time since all information required is easily accessible and communication is made easier [9]. This also was supported by one interviewee who said that.

> "*Using technology reduces paperwork and it saves time as well." Source TRA interview 11/05/2023, 10.30 pm*

This implies that IT enable businesses to digitize VAT-related documents, store them electronically, and automate calculations and reporting which then will give them more time to focus on core activities of their business [10].

Furthermore, data in table 2 shows that (62.8%) of respondents with a mean of 4.06 and standard deviation of 0.75 agreed that, quality delivery of taxpayers, have improved by information technology [11]. This implies that the use of the system minimizes the frequency of taxpayer to go TRA offices for VAT payment. This findings agreed with Kavoyo (2018), who said that "the application of these technologies into business operations has led to improved efficiency, intelligence gathering, machine- to-machine data exchange, cost reduction [12], compliance management among others" and Anwar & Climis (2018) [3], said "IT improves quality and increases operational efficiency, reduced costs, and increases productivity." This was supported by key informant, who said that,

> "*IT maximizes tax compliance that leads minimization of tax evasion, saves time, low cost, and reliable retrieve of data and hence increases revenue collection to TRA*." *Source TRA interview 11/05/2023, 11.30 pm*

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This implies that the use of IT has a positive impact to the whole process of VAT compliance since it simplify the work and saves time.

Moreover, data in table 2 indicates that (40.8%) of respondents with a mean of 3.81and standard deviation of 1.06 agreed that, Information technology have increased revenue collection compared to previous paper-based processes. This implies that the use of IT simplifies the work since many activities are automated in the system with the help of drop down menu and reduced the likelihood of errors and ensuring accurate VAT calculations. This findings agreed with Salim (2015), who found VAT offers substantial potential to enhance adherence, largely due to its inherent self-regulatory mechanism, where purchasers are required to document their input acquisitions in order to deduct the previously paid VAT from their own VAT liability linked to their sales.

V. CONCLUSION AND RECOMMENDATION

A. Conclusion

The role of information technology on value-added tax (VAT) compliance has a positive impact to taxpayers and tax officers. IT has transformed the way tax authorities collect, process, and manage VAT data, leading to improved efficiency, quality delivery, reliability and speed in tax compliance. The use of electronic filing systems to taxpayer is much more important because it necessitated minimal or negligible human intervention and proved to be cost-effective in comparison to human labor. This technology has significantly compressed the time interval between tax generation and payment, concurrently mitigating errors inherent in manual data collection processes and overall diminishing the expenses associated with tax administration and save more time for them to concentrate with their business as the VAT processes can be carried out anywhere as long as the VAT trades has a reliable network which allow them to interact with TRA system. In addition, it has increased general awareness and accessibility of tax information since everything is available on the TRA website. Therefore, IT has enhanced compliance to VAT traders and improve monitoring and fraud detection to TRA officers.

B. Recommendation

To further leverage the potential use of IT in VAT compliance, it is recommended to TRA office to improve their network availability and system security to protect taxpayers from unintended consequences in terms of privacy, confidentiality, data leakages and cyber security. TRA should provide extensive awareness campaigns and trainings to taxpayer group, which is less familiar with the use of the system during VAT administration so as to be sure that every taxpayer in all age can comply via system in order to facilitate good monitoring of taxes and increase transparent in VAT administration which will lead to increased revenue collection and reduced tax evasion.

In addition, it is recommended to taxpayers that as they have adopted the use of IT during VAT compliance they should ensure that they have proper training on how to properly identify, and track their payments using the e-system, as well as how to effectively and efficiently manage their tax returns and tax compliance risks.

Lastly Government should enforcement law to punish business operators whom evade taxes as tax is the back born source of revenue in the country which help in the development of a Nation.

DECLARATION STATEMENT

After aggregating input from all authors, I must verify the accuracy of the following information as the article's author.

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