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The effect of electronic fiscal devices (EFDs) program on tax compliance: A case of SMEs in Lusaka

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Abstract
This study investigates the impact of an effective Electronic Fiscal Devices (EFDs) program on tax compliance, specifically focusing on Small and Medium-sized Enterprises (SMEs) in Lusaka. Employing a quantitative approach within a correlational research design, the research explores the relationship between EFDs and SMEs' tax compliance behaviours. The population under study comprises 3000 SMEs, with a sample size of 322 participants. Data collection utilized a structured questionnaire. The study's results reveal intriguing insights. The model employed achieved an R^2 value of 0.296, indicating that the variables within the model collectively account for 29.6% of the variance in tax compliance changes among SMEs. Among the variables, ease of use and reliability demonstrated significant impacts on tax compliance. These findings imply that SMEs are more likely to adhere to tax regulations when they find the EFDs system user-friendly and reliable. However, the variable of responsiveness was deemed non-significant, suggesting that the speed and effectiveness of customer support in EFDs implementation do not significantly influence SMEs' tax compliance behaviour ($p > 0.05$). This study provides valuable insights into the intricate relationship between EFDs and tax compliance among SMEs. The significance of ease of use and reliability emphasizes the importance of designing EFD systems that are intuitive and dependable, as these aspects contribute positively to tax compliance behaviour. Conversely, the non-significance of responsiveness implies that while customer support is valuable, it might not be a primary factor driving SMEs' tax compliance decisions. This research contributes to the understanding of how technology-driven tax systems impact compliance behaviour within the SME sector. The findings can inform policymakers and tax authorities in designing and implementing EFD programs that effectively enhance tax compliance among SMEs.

Keywords: Electronic fiscal devices, ease of use, reliability, responsiveness and tax compliance

Introduction

This study investigates the impact of Electronic Fiscal Devices (EFDs) implementation on tax compliance, focusing specifically on Small and Medium-sized Enterprises (SMEs) in Lusaka, Zambia. EFDs, designed for business use, serve as tools for efficient management control of sales analysis and stock control. They trace all economic activities of registered businesses for tax purposes, ensuring accurate tax calculations. Unlike Electronic Cash Registers (ECR), EFDs enhance tax collection by preventing tampering and reducing paperwork.

In 2015, Zambia Revenue Authority (ZRA) enacted the EFD law to combat tax evasion, especially among small and medium taxpayers. The devices are distributed to taxpayers, who are mandated to use them for all transactions. Despite challenges in sales-based tax administration, the introduction of EFDs is expected to address tax evasion issues.

Previous studies in Zambia focused on taxation, but none specifically explored the relationship between EFDs and tax compliance. This study aims to fill this knowledge gap, considering the substantial taxpayer money invested in EFD implementation. To maximize tax revenue, ZRA introduced reforms, including EFDs, to tackle non-compliance issues. However, there are claims that EFDs may not always lead to improved tax compliance.

The study seeks to understand how the ease of use of Electronic Fiscal Devices (EFDs) influences tax compliance among SMEs in Lusaka. It also aims to assess the impact of EFDs' responsiveness on tax compliance within the SME sector in Lusaka. Additionally, the study explores the relationship between EFDs' reliability and tax compliance among SMEs in the same region.

The study focuses on registered taxpayers in Kitwe town in 2020, specifically on EFDs, as involving all electronic devices used by ZRA would be complex. EFDs are evaluated based on ease of use, reliability, and responsiveness, while tax compliance is measured using indicators reflecting individuals' willingness to pay tax.

The study looked at the relationship between effective EFDs and tax compliance. Based on the literature reviewed, the independent variables were availability, reliability, ease of use, usability and responsiveness while the dependent was tax compliance. The conceptual model is shown in figure 1 below.

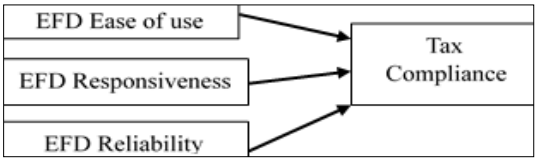

Fig 1: Conceptual framework (Author, 2023)

Electronic Fiscal Devices (EFDs) originated in Italy in 1980, designed by the Ministry of Economics to record financial data, including VAT, total sales, and taxpayer information (Casey and Castro, 2015). Adoption extended to European, Asian, and African nations, addressing challenges in establishing effective tax systems, particularly in developing countries (OECD, 2013).

1. Reasons for adopting EFDs

Successful implementation of EFDs in developed countries, such as improving VAT collection and fostering economic growth, has been reported (Chege *et al*., 2015) [17]. Tanzania aimed to enhance VAT delivery through EFD adoption, emphasizing the need for trader accessibility (Government of Tanzania, 2017, 2012).

2. Effective EFD programs and Tax compliance

Scholars link electronic systems to tax compliance, emphasizing factors like availability, usability, responsiveness, reliability, and ease of use (Maisiba and Atambo, 2016). An effective EFD program necessitates responsiveness, reliability, and ease of use.

While Kenya reported high EFD availability, tax compliance remained low, prompting scepticism about the correlation between availability and compliance (Kenyan Tax Authority, 2018; Kenyan Authority, 2020). The literature suggests that EFD ease of use is crucial (Casey & Castro, 2015). This has led to a proposition that EFD ease of use has no significant and positive effect on tax compliance and an alternative preposition that EFD ease of use has a significant and positive effect on tax compliance.

Studies in Tanzania and Uganda indicated positive effects of EFDs on VAT revenue, yet challenges with responsiveness impacted tax compliance (Lukumay, 2017 [12]; Nkote and Luwugge, 2018; URA, 2018; Prichard *et al*., 2019) [14]. Considering these arguments, it can be suggested that EFD responsiveness might not exert a notable positive influence on tax compliance. However, an alternative viewpoint is presented, proposing that EFD responsiveness could indeed have a significant and positive impact on tax compliance.

EFDs have been found to enhance accountability, transparency, and VAT collection, with claims about reliability influencing tax compliance (Nkundabanyanga *et al*., 2017 [15]; Amary, 2020 [16]; Eilu, 2018 [10]; Chege *et al*., 2015) [17]. This identified pattern suggests that the reliability of EFDs might play a crucial role in influencing tax compliance. It implies that the dependability of EFDs could have a significant and positive impact on taxpayers' adherence to compliance measures.

Tax compliance is also influenced by perceptions of trust in government, emphasizing the role of EFDs in creating fairness and equal treatment (Tayler, 2006 [20]; Siraji, 2015) [1].

3. Technology Acceptance Model (TAM, 1986)

Technology Acceptance Model (TAM) was first introduced by Davis in 1986. Ma *et al* (2005), pointed out that the model is most widely used model to explain acceptance and application of user behaviour. The theory is based on the theory of reasoned action (TRA) (Fishbein and Azjen, 1975). TRA explains that beliefs and attitudes are the basis of intention. Davies (1986 and 1989), introduced the constructs of the model which are usefulness, ease of use and attitude. The theory is based on the premise that individuals are more likely to use a technology when it is easy to use and there is usefulness for it. This summarised in the figure given below.

Studies by Taherdoost (2018) [19] and Wang *et al*. (2019) [23], who highlighted the significance of the technology's simplicity in ensuring that the technology becomes beneficial to people, provide credence to this perspective. The use behaviour is the primary dependent variable in the Technological Acceptance Model and is equivalent to the present study's rate of EFD use (Venkatesh and Bala, 2008) [24]. The Technology Acceptance Model has limitations as it is unclear how usage behaviour affects how organizations operate in areas like task efficacy, fairness, and even transparency.

In line with this study, EFDs are more likely to bring tax compliance if most taxpayers are adopting them and using them. However, that hasn't been the case, despite some taxpayers having them, they choose not to use them. This is because the machines are perceived not too easy to use, unreliable, unavailable and poor responsive behaviour by the supplier. Thus, the need for the theory.

4. Social Exchange Theory (SET)

This broad sociological theory aims to comprehend how resources are traded between people and communities while they are interacting. According to Cropanzano and Mitchell (2005) [25], the idea comprises a number of interactions that lead to responsibilities. In most cases, the interactions are viewed as interdependent and depending on the activities of other people. According to Molm (1994) [26], a distinguishing feature of social interaction is independence that entails complementary and mutual arrangements.

Although it was believed that the use of electronic fiscal devices (EFDs) would solve the problem of non-compliance by VAT-payers and potential VAT-payers, the procedure has not performed as expected specifically in countries like Rwanda and Malawi (Kenani *et al*. 2021) [18]. For example, when used as a tool for tax collection, EFDs in restaurants and retail establishments are typically believed to contain accurate information, but once they are equipped with specialized "Sales suppression" software, they can be used to facilitate the elaboration of tax frauds, which poses the challenge of losing anticipated tax revenue (Chiwango, 2012) [27]. This shows that it can be argued that EFDs lack the reliability components required for them to perform as expected.

Hence, it may be inferred that taxpayers' perceptions of the advantages greatly influence how well EFDs are used. If they see it favourably, the majority of businesspeople will apply for EFDs, increasing compliance with paying VAT and other taxes, which will increase the amount of tax revenue collected. Yet, if they have a poor perception of the usage of EFDs, there will be more non-compliance, which will result in low tax revenue collection. However, the current case is that the EFDs are not available, reliable, easy to use and responsive, therefore, this is likely to yield negative results. This theory was adopted because it clearly highlights that government and tax payers are collaborators. In this collaboration, tax payers are likely to comply if they perceive EFDs to benefit them. One way for that to happen if the EFDs are reliable, available, easy to use and responsive

5. Literature Gaps

The implementation of EFDs in tax collection has not been the solution to all issues with revenue collection and tax compliance, according to the literature that has been studied so far. The usage of these gadgets has presented the revenue authorities and the taxpayers with various obstacles, as with everything novel. The difficulties arise from a lack of technical expertise in operationalizing tax collecting and

corporate operations. These difficulties force one to consider if the use of EFDs is effective enough to improve revenue collection and company operations. the technique, study area, and overall conclusions reported in the articles from previous studies were insufficient, which led to the examination of this research. this research study was to evaluate the effectiveness of EFDs in Zambia in relation to tax compliance, paying particular emphasis to the availability, ease of use, reliability and responsiveness of EFDs.

The literature reviewed shows that most of the studies conducted on EFDs and tax compliance have been conducted outside Zambia. This creates a contextual gap that needs to be investigated. In addition, most materials published by ZRA claims that, EFDs improve tax compliance and yet there is no empirical evidence to support the hypothesis. Thus, creating a knowledge gap that needs to investigated. Besides, most studies addressed those challenges of EFDs in improving tax compliance. No study has approached factors of EFDs such availability, reliability, ease of use and responsiveness in addressing tax compliance. How effective are EFDs machines as means for revenue collection, given that some literature indicates that they have not contributed enough to tax collection and compliance? But if not, what difficulties exist?

Methodology

1. Research Paradigm

The positivist paradigm attempts to generalize the results of the phenomenon of an object; therefore, it cannot be used to solve a problem on the phenomenon of objects. Moreover, the paradigm cannot be used to generate theory because it does not involve continuous collection and validation of data. However, the weakness was not of importance in this study because the study did not aim to develop a theory but test them. On the other hand, the sample used shared a similar environment and thus it can be assumed that they faced the same problem and this supported the generalisation of the results. Positivism considers a free, objective and non-bias approach to research thus making the results of the study objective and valid.

2. Research Approach

The study adopted a purely quantitative approach. The study tested hypotheses based on the already published literature. In addition, the researcher aimed to produce results that are objective. Moreover, the researcher assumed that there is a reality to be observed and that logical witnesses of the same occurrence will essentially concur on its existence and properties. An effort to be as impartial as they can and, whenever possible, to avoid human prejudice. The variables were measured using already known indicators Therefore, this justifies adopting a quantitative approach.

3. Research Design

Research design refers to the overall approach that the researcher takes to carry out the study. From beginning to completion, it describes the processes the researcher takes to complete the study (Blumberg *et al*., 2014) [28]. In this study, the correlation research design was one method employed. The correlation design approach is used to determine if there is and how strong a link exists between two or more pairs of measurable variables. A correlational research approach is deemed acceptable since the researcher wants to know whether and how much there is a link between effect EFD program and tax compliance.

4. Data collection

The population of the study is the total number of SMEs in Lusaka registered with ZRA. There are 3000 SMEs distributed in Lusaka that are using EFDs. Therefore, the population of the study was 3000.

Based on the population, the yumane formula will be employed to determine the sample size. The formula was employed because it is the most used and simple formulas to determine a sample in social sciences (Iddon, 2022) [29].

$n = N/(1+N(e)2) = 3000/(1+3000(0.05)2) = 353.$

In order to select the respondents, simple random sampling technique will be employed. In scientific research, simple random sampling is a widely used sampling technique. When choosing participants for a research study at random, simple random sampling is used for groups that are quite homogeneous (Bhardwaj, 2019) [30]. Every person has an equal probability of being chosen for the sample from the population. Because each item has an equal chance of being picked, simple random sampling reduces sampling bias and that is why it was employed.

This study used primary data; the primary data was gathered using questionnaires. All of the chosen respondents' information was gathered using closed-ended questionnaires. Responses were evaluated using a five-point Likert scale, with 1 denoting a strong disagreement, 2 denoting a disagreement, 3 meaning neither agree nor disagree, 4 denoting agreements, and 5 denoting a strong agreement. A questionnaire is thought to be simple to administer, economical to employ in gathering data, helpful in gathering quantitative data, and practical in gathering data (Yekosofati, 2019) [31].

5. Research validity and reliability

Validity and reliability are essential components of every research study (Gravetter and Lorenzo, 2012) [32]. validity is the subjective assessment by researchers of the relevance and presentation of the measuring instrument, more precisely, if the items in the instrument seem to be relevant, reasonable, unambiguous, and clear (Oluwatayo, 2012) [33]. To ensure validity of the study, the questionnaire was piloted among 100 SMEs in Kitwe. This ensured that items accurately capture the variables.

Reliability is the degree research findings that be replicated when another analysis is performed using the same analytical methods (Oluwatayo, 2012) [33]. In quantitative research, Cronbach alpha is employed to measure the reliability of the study. George and Mallery (2019) [34] proposed that the acceptable Cronbach alpha value is greater than 0.7, although some articles vaguely referred to “the acceptable values of 0.7 or 0.6” (Griethuijsen *et al*., 2014; Awang, 2014). Therefore, in this study Cronbach alpha values of greater than 0.6 were acceptable.

6. Data Analysiss

Statistical Package for Social Sciences V26 was used to analyse the data. The link between the dependent and independent variables was examined using inferential

statistics like Pearson correlation and hierarchical multiple regression analysis. The significance tests were done at 95% confidence level and 5% significance. This is because the study used a margin of error of 5% in the sample determination process.

7. Ethical Consideration

The primary ethical concerns raised in this study were: participants' privacy, information confidentiality, respondents' voluntary consent, clarification of research aims, and non-disclosure of sensitive institutional information (Gravetter & Lorenzo, 2012) [32]. By first requesting permission from the university to carry out the proposed study, ethical considerations were taken into account. The results were disclosed with the condition that they would only be utilized for academic reasons to the authorities and responders. To avoid any victimization, the identities of respondents who provided information were also kept secret and confidential.

Results and Interpretation

It was pointed out the study needs to target a sample size of 353 respondents. In this study, a sample of 322 was analysed representing a response rate of 91%. Therefore, in this study, there was a non-response rate of 9%. The respondents were not willing to submit the questionnaire and their wish was respected in line with research ethics.

1. Sample Profile

The demographics on age provide evidence that a majority of the respondents running SMEs in Lusaka are youth. This information is vital given that the number of unemployed youths is high, it is interesting to see that a majority of youths are doing businesses. The data gathered also looked at the level of education of the respondents which had secondary level as the highest having a percentage of 51.2% followed by diploma holders with who represented 24.5% of the sample size, 21.1% who were degree holders and lastly master's degree holders who represented 3.1%. The data collected goes on to show that most people involved in forming businesses are those who have not attended tertiary education.

A majority of the businesses have been in operation for less than 5 years (36%) followed by those that have been in operation between 6 and 10 years. According to the CSO (2015) most businesses fail in the less than 5 years in Zambia because they are still in the start-up phase. Therefore, this information provides a warning that most businesses in Lusaka are most likely to fail.

Table 1: Sample Profile

Description	Percentage
Age	
Female	50.6
Male	49.4
Age Range	
21 to 25	14.3
26 to 30	62.4
31 to 35	13.4
36 to 40	7.8
Above 40	2.2
Business Experience	
Below 5 years	36
Between 6 and 10 years	44.4
Between 11 and 15 years	7.8
Above 15 years	11.8
Education level	
Secondary	51.2
Diploma	24.5
Degree	21.1
Master's Degree	3.1

2. Correlation Analysis

When there is a correlation of 0.8 or higher between the independent variables, multicollinearity is considered to occur (Pallent, 2016; Hair *et al*., 2013). As a result, it was clear that no variable had a correlation that was over 0.8 with any other exogenous variable. The correlation values do not exceed the 0.8 and higher cut-off, as shown in Table 2. Consequently, it may be concluded that there are no problems with multi-collinearity because all the correlation values were below 0.8.

Table 2: Correlation Matrix

	Ease of use	Reliability	Responsiveness	Tax compliance
Ease use	1			
Reliability	0.056	1		
Responsiveness	0.011	0.055	1	
Tax compliance	.175**	.447**	0.078	1

The results obtained show that Tax compliance was positively and significantly correlated with ease of use (r= 0.175, P< 0.05); and reliability (r= 0.447, p < 0.05). Based on the correlation values, the strength of the correlation although significant are weak (Schober and Boer, 2018). The implication of the results is that improving ease of use and reliability of EFDs leads to an improvement in tax compliance of SMEs. This means that the ZRA ought to focus on ensuring that EFDs are easy, available and reliable. On the other hand, EFD responsiveness (r= 0.078, p > 0.05) was found to have a positive and insignificant correlation with tax compliance. This means that EFD responsiveness did not improve tax compliance of SMEs in Lusaka.

3. Hierarchical Multiple regression Analysis

Model 1

In model 1, the R^2 is shown to be 0.143 implying that education, age, gender, duration of business and business orientation jointly explain 14.3% of the changes in tax compliance. The coefficient of determination was significant (p < 0.05). From the sample profile variables in model 1, it was revealed that age and business orientation had a positive influence on tax compliance (p < 0.05). The implication of the results is that an increase in the levels of age improved the tax compliance of the business. This means that older business owners are more likely to pay tax compared to younger business owners. On the other hand, gender, duration of business and education levels had no effect on tac compliance.

Model 2

In the third model, the R^2 is found to be 0.275 implying that the education, age, gender, duration of business, business orientation and reliability explained 27.5% of the changes in tax compliance. In addition, the results show that the addition of reliability led to an R2 change of 0.132 implying that EFD ease of use alone explained 13.2% of the changes tax compliance. This means that a 1% increase in EFD reliability leads to a 13.2 % increase tax compliance. The results show that gender, duration and education had no significant influence on tax compliance (p-value > 0.05). EFD reliability had an effect on tax compliance (refer to b-value). In this model, EFD reliability is found to have a positive and significant effect on tax compliance. The results imply that an improvement in EFD reliability leads to a positive change in tax compliance.

Model 3

In the third model, the R^2 is found to be 0.294 implying that education, age, gender, duration of business, business orientation reliability and ease of use explained 29.4% of the changes in tax compliance. The results show that the addition of EFD ease of use led to an R2 change of 0.019 implying that EFD ease of use alone explained 1.9% of the changes in tax compliance. Based on the R2 change, the results indicate that EFD ease of use an effect on tax compliance. In this model, EFD ease of use and reliability are found to have a positive and significant effect on tax compliance ($p < 0.05$). This means that both EFD ease of use and reliability lead to an improvement in tax compliance.

Model 4

Model four is the last model which comprises of all the variables of the study. In this model, it is seen that the addition of responsiveness leads to a small change in the R2 indicating that it was not significant to the model. Overall, the model had an R2 of 0.296 implying that all the variables of the model explain 29.6% of the changes in tax compliance.

Table 3: Correlation analysis

Variables	Model 1		Model 2		Model 3		Model 4		
	Beta	P-value	Beta	P-value	Beta	P-value	Beta	P-value	VIF
Gender	0.078	0.148	0.018	0.717	0.018	0.720	0.017	0.740	1.099
Age	0.220	0.000	0.177*	0.001	0.185*	0.000	0.181*	0.001	1.190
Duration	-0.024	0.651	-0.022	0.645	-0.018	0.711	-0.024	0.624	1.049
Business orientation	-0.219	0.000	-0.166*	0.001	-0.149*	0.004	-0.150*	0.004	1.178
Education	-0.009	0.859	-0.011	0.823	-0.019	0.692	-0.018	0.709	1.033
Reliability			0.379*	0.000	0.373*	0.000	0.371*	0.000	1.087
Ease use					0.138*	0.004	0.138*	0.004	1.020
Responsiveness							0.043	0.375	1.029
R square		0.143		0.275		0.294		0.296	
R^2 Change				0.132		0.019		0.002	

It is important to notice that the addition of responsiveness leads to a 0.002 change in the R^2. This is an indication that the variable added no significant improvement to model. Nevertheless, in the final model, age, business orientation, ease of use and reliability were found to be significant while responsiveness, gender, education and duration of business all had no effect on tax compliance ($p > 0.05$).

Discussion

In this study, the effect of Electronic Fiscal Devices (EFDs) on tax compliance among Small and Medium Enterprises (SMEs) in Lusaka was investigated through three key factors: ease of use, responsiveness, and reliability (Table 3). The results indicated that the ease of use of EFDs had a positive and significant effect on tax compliance among SMEs in Lusaka (B-value= 0.118, $p < 0.05$), with SMEs perceiving the ease of use as a crucial factor influencing their compliance with tax laws (Table 3).

The findings were consistent with existing literature in various regions, including Sub-Saharan Africa (Eilu, 2018) [10], Tanzania (Siraju, 2015; Kapera; Kira, 2016), and Zimbabwe (Nyasha *et al*., 2012). This alignment with literature supports the Technology Acceptance Model (TAM) theory, emphasizing the importance of making EFDs user-friendly to promote tax compliance. However, challenges related to the ease of use were also highlighted, suggesting the need for improvement in this aspect (Table 3).

Conversely, EFD responsiveness did not show a significant effect on tax compliance among SMEs in Lusaka (B-value= 0.038, $p > 0.05$), contradicting previous literature in Sub-Saharan Africa (Eilu, 2018) [10], Tanzania (Siraju, 2015; Kapera; Kira, 2016), and Zimbabwe (Nyasha *et al*., 2012). The study argued that the low responsiveness of EFDs in developing countries, as highlighted by some authors (Prichard *et al*., 2019 [14]; Lyimo and Makilully, 2022; Muhammed and Gela, 2014), might explain the lack of influence on tax compliance in the Zambian context. This result deviated from theories like social exchange and political legitimate theory, which posit that providing effective tools supports government reforms and encourages compliance. Lastly, EFD reliability was found to have a positive and significant impact on tax compliance (B-value= 0.367, $p < 0.05$), in line with literature and TAM theory (Table 5.5 and 5.6). The study recommended a focus on enhancing the reliability of EFDs to further improve tax compliance among SMEs in Lusaka.

Table 4 provides a summary of the hypotheses tested. The results are an extraction from Table 5.5. The results show that two out of the three tested hypotheses were supported. It is shown that the hypotheses relating to EFD ease of use and reliability were supported ($p < 0.05$) at 5% significance level.

Table 4: Summary of Results

Hypotheses	B-value	P-value	Confirmed?
H1; EFD ease of use has a positive and significant effect on tax compliance	0.138*	0.004	Yes
H2; EFD responsiveness has a positive and significant effect on tax compliance	0.043	0.375	No
H3; EFD reliability has a positive and significant effect on tax compliance	0.371*	0.000	Yes

Conclusion

In conclusion, the study shows the factors influencing tax compliance among Small and Medium Enterprises (SMEs) in Lusaka through the lens of Electronic Fiscal Devices (EFDs). The positive and significant effect of EFD ease of use on tax compliance reveals the role of user-friendly technologies in fostering adherence to tax laws, aligning with existing literature and the Technology Acceptance Model (TAM) theory.

However, the lack of a significant effect from EFD responsiveness challenges prevailing theories and highlights the unique contextual factors influencing technology adoption in developing countries. Moreover, the substantial positive influence of EFD reliability on tax compliance highlights the importance of technical aspects. The identified challenges, including recurrent breakdowns and malfunctions, inadequate training, and concerns about accuracy, call for targeted interventions to enhance the efficacy of EFDs. As policymakers consider strategies to improve tax compliance, addressing these challenges and promoting user-friendly, reliable EFDs tailored to diverse business needs emerge as key priorities for fostering compliance among SMEs in Lusaka.

GRZ has made numerous efforts to combat tax evasion and one of them is the use of EFDs. In this study, it is found that ease of use and reliability influence tax compliance. On other hand, the challenges detail that EFDs frequently have breakdowns, produce errors and are not easy to use. The results educate the government and ZRA that trainings relating to new tax technology is important. Also, the frequent malfunctions speak to the source or supplier of EFD machines. On the other hand, the results imply that ZRA is doing well on responsiveness availability of EFDs. Based on the above implications, the following are the recommendations

- There is need for government and ZRA need to strengthen on providing tax payers with education and training on the use of EFDs. To improve the capacity use of EFDs, memorandum of understandings can be signed with media houses that focus on creating awareness and training users. At the moment, the focus is more on awareness than training. This needs to change as indicated in the challenges of the results. More users need to be trained so that they find it easy to use the EFDs. Education institutions can also be engaged to prepare training materials.
- To improve reliability which relates to the number of errors and breakdowns, there is a need to look into two things: First, the quality of the EFDs machine. There is need to do a pilot study of engaging other supplies to see if the frequency of break downs will be the same. Second, the users could be abusing the machines and therefore training can help improve this problem.
- Lastly, the study found that responsiveness, availability and usability of the EFDs had no impact on tax compliance. Therefore, ZRA need to maintain the levels on the three variables.

Limitations and future research

There were two limitations in this study. First, the study was only conducted in Lusaka and this limits the results to Lusaka SMEs. Secondly, the study focused on only respondents that were using EFDs in Lusaka. Therefore, variables such as availability were not of concern. Therefore, results on availability of EFDs and tax compliance need to accepted with caution. Furthermore, no qualitative data was collected therefore the results lacks an in-depth analysis. However, even in the presence of the limitations, the study was deemed successful because it provided answers to the research questions. Future research can be done to compared the application of EFDs between two different cities such as Lusaka and Kitwe. Also, other methodologies such as qualitative approach can be used to conduct future research to see if the results would be the same.

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