

The Perceptions on Usage of Electronic Fiscal Devices among Small Business Owners in Tanzania

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Abstract— the use of Electronic Fiscal Devices (EFDs) appears to be a current innovation that is broadly promoted for effective revenue collection not only in Tanzania but also in worldwide. This study examined the perceptions on usage of electronic fiscal devices among small business owners in Tanzania. The study adopted cross-sectional survey research design whereby primary and secondary data were used. The population applied on the 152 small business owners (small restaurants owners). The sample size of the study was 110 small restaurants owners. Dodoma City was purposively sampled to be used as a study area of this research and random sampling procedure was used to pick small restaurants owners in Dodoma City. Results revealed that EFDs usage in term of number of years among small restaurants owners was positively and significantly influenced by perceived usefulness of EFDs and perceived ease of use respectively; with P- Value of 0.0439. The study recommends that the government is advised to resolve the dependence challenge of EFDs on electricity, to develop sustained training and taking required measures for the learner restaurants to ensure that they observe rules and regulations mostly on the use of EFDs but not limited to tax compliance only.

Keywords— Electronic Fiscal Devices, Small Business Owner, Tanzania

I. INTRODUCTION

The usage of EFDs improves the tax collections to most of the developing countries in the world [13]. The importance of using EFDs to any country is to enhance tax collection and government can increase its public revenues in order to finance economic activities. Additionally, the importance of taxpayers in using EFDs includes keeping proper business records for correct tax returns, improving business records keeping, fostering the transfer of sales information to Tanzania Revenue Authority (TRA) and enhancing transparency and accountability between taxpayers and tax authority, to minimize tax disputes. The other four importance of using EFDs to the taxpayers are to enhance tax evaluation fairness among taxpayers and to enhance voluntary tax compliance among traders [5]. Additionally, the most of the nations with advanced economies benefit from strong and reliable systems of collecting revenues [3] [11] [16] [18].

The good advantages of EFDs learned from Europe attracted African countries to adopt EFDs. For example, at first, EFDs in Africa were established in Kenya in the year 2005, followed by Tanzania in the year 2010, Rwanda in the year 2014 and Malawi

in the year 2015 [9]. Moreover, the developing countries including Tanzania adopted the system by receiving the benefits that have

been shown from European countries in using EFDs [4]. Although the success resulting from the EFDs usage, various weaknesses are observed by different scholars [9]. According to [17] criticized that there is an insignificant enforcement in tax collection and innovative skills. Regardless of the different measures taken by the government to increase tax revenue collections by attractive tax compliance, still the response for taxpayers in using EFD is still stagnant [10]. The slow rapid of usage of EFDs is highlighted to be sensitive especially in restaurants as revealed in TRA report which was by 5% contrasts to other sectors, such as trade 7.5%, electricity and water 7.5%, manufacturing 23%, communications 17.5%, and other sectors 33.5% [2]. Nevertheless, it is not Tanzania alone which suffers from this restriction but the characteristics of sub-Saharan African countries. Empirical evidence available shows that in sub-Saharan African countries; the revenues collected array from 30% to 40% of their total government budgets and the rest depend on partners and donors [8]. Empirical evidence reported that the sub-Saharan Africa alone received the grants of about \$ 40.1 Billion from the World Bank [4]. What is emphasized here is that revenue collection in these nations is still low and could be augmented if there are effective strategies laid down to collect revenues.

The four groups of EFDs permitted by TRA include the Electronic Tax Register (ETR) used by vendor business that concern with receipts manually, Electronic Fiscal Printer (EFP) used for computerized retail exits and stores all sale transactions or particulars made in its fiscal remembrance, Electronic Signature Device (ESD) uses unique computer programme to produce a unique number (Signature) which is added to and printed to every invoice issued by the user's system and Electronic Fiscal Pump Printer (EFPP) used in petrol stations, usually connected to plumb and print every receipt during the sale transactions [2]. Empirical evidence reported that, African countries do not collect sufficient revenues due to the poor electronic tax administration system hence causes the developing countries to depend a lot on loans and grants [8] [19]. The explanatory reasons for insufficient revenue collection from tax are caused by poor tax system and failure of taxpayers to use EFDs in their businesses [6] [12]. African countries differ with developed countries which sensitize better to those factors

resulting to increase in revenues [7]. Nevertheless, empirical evidence shows that on usage of EFDs firstly prefer to explain adoption rather than usage because adoption of technology is the process of introducing new technology while usage is the continuous process of using technology [14] [19]. Despite the various measures taken by TRA to increase tax revenue by enhancing tax compliance to taxpayers, the response for the taxpayers to use EFDs is so slow [2] [7]. Previous study revealed that there are many taxpayers who have EFDs machines but they do not use them to issue EFDs receipts [1] [7]. That why this study intended to examine the perceptions on usage of electronic fiscal devices among small business owners in Tanzania.

II. LITERATURE REVIEW

According to [8] evaluate the taxpayers' perceptions on the use of EFDs in revenue collection and the perceptions of taxpayers towards the use of EFDs along with the challenges associated with the use of EFDs. The study came up with the findings those taxpayers who had positive perceptions on the use of EFDs with several advantages that have to their business. It was observed that EFDs have diminished the occasion and takes to plan deals report, secure duty data for evaluating reason and exchange; and guarantee charge rate to be paid by the citizens. The difficulties looked by EFDs clients included significant expenses of EFD machines, swoon monetary duty solicitations, EFD's system issue, and absence of people instruction on EFDs applications and hardly any providers of EFDs machines. Though the study was conducted in Dodoma, several limitations of the study necessitate another study. The sample of the study was only 75 respondents; this sample is too small contrast to the number of business performers who should use EFDs in the Country today. In the direction of say that the number of business performers has increased from that time.

A small sample in a study like this could also lead into a biased conclusion of the findings. In addition, the study was limited to quantitative analysis of the survey questionnaire findings. Exclude observations and interviews in such a study may lead into questionable findings because of the effect in which respondents may have adjusted their behavior depending on the perception of the purpose of the research. Subsequently, this research justifies the need for this study to be done using a larger sample of the respondents and different approaches that contain interviews. A new study which is significance mentioning here is that of [13]. This study based for the factors which motivate taxpayers to accept EFDs for tax collection in Tanzania. For the meantime this study provides very useful information on the uptake of EFDs in the nations. Nevertheless, this study is limited to key influencing factor on taxpayers' acceptance to accept EFDs, while facilitating circumstances and intention to use EFDs were key factors for taxpayers' EFDs actual usage behavior. The pointed capacity of the study ended up with a narrowed conclusion and recommendation in that the government needs to increase acceptance of EFDs, tax regulator provide more awareness campaign and online assistance to the use of EFDs users. One could accept that there are more than [4] [9].

According to [8] on research of awareness that affects the usage of EFDs among small restaurants in Tanzania. This research is proposed to make a detailed analysis of these factors for necessary intervention. Electronic Fiscal Device is used to enhance tax compliance of taxpayers. The usage of EFDs was introduced in Tanzania for the first time in the year 2010 to supplant electronic sales enlists that appeared to be not productive to meet the normal goals. With the utilization of the EFDs. TRA hopes to get charge data naturally from the citizens which before TRA used to get data like deals data of different business exercises by checking manually. However, such training is exposed to high danger of misrepresentation and it was difficult to obtain accurate information due to issues like double book keeping [4] [18]. Furthermore, the EFD machine is used by taxpayers to reduce tax collection costs, obtain correct sales information and helping taxpayer to comply with tax laws and regulations among Value Added Tax (VAT) and non-VAT registered taxpayers [3]. According to [17] conducted the study on factors hindering and motivating usage of EFDs to the owners of hotels and restaurants in Dar es Salaam. This study was limited by level of demonstration because they included restaurants and hotels so, came out with generalized reasons to all types of businesses.

III. RESEARCH METHODOLOGY

Cross sectional survey research design where by primary and secondary data were used. The population applied on the 152 small business owners (restaurants owners). The sample size of the study was 110 restaurants owners by using Yamane formula (1967). Dodoma City was purposively sampled to be used as a study area of this research and random sampling procedure was used to pick restaurants owners in Dodoma City. The Cronbach's alpha value of the 8 items is 0.885 which is extremely acceptable.

Econometric Model Development: Binary Logistic model was used to examine the perceptions on usage of electronic fiscal devices among small Business owners in Tanzania. The reason of selecting the binary logistic Model is due to the fact that the dependent variable of the study is "*categorical data or dummy in a nature*" so that, the binary logistic model is suitable for this study.

$$\pi(x)$$

$$\text{Log} [(x)] = \log (1 - (x) = \beta_0 + \beta_1 x_1 \dots \dots + \beta_p \dots (i)$$

Where, $\pi(x)$ is the possibility of having event of attention; in our case, it is chance of perceiving that EFD is useful or ease to use;

x_i 's are covariates and π_i 's are their respective limitation. The results of the model are obtainable in the form of a regression parameter estimate and estimated Odds Ratios (OR). The estimated OR, determined by taking the promoted of the regression parameter estimates, shows the increase or decrease in the likelihood of having occasion of interest for subjects at a given level of the independent variable as compared to those in the reference category. An estimate of OR > 1 shows that the

likelihood of having event of interest for respondents at a given level of the independent variable is greater than that for the reference category. Similarly, an estimate of OR < 1 specifies that the possibility of having happening of interest for subjects at a given level of independent variable is less than that for the reference group

IV.RESULTS AND DISCUSSION

Table 1 presents the age of the business, the analysis revealed a deviation on the compliance with the usage of EFDs depending on the year which a restaurant established.

Table 1: Influence Age of Business on Perceived Ease of EFDs Usage

Variable	Perceived Ease of Use (%)	Odds Ratio (OR)	[95% C I]	P-Value
Overall Ease of Use	88 (77.9)			
Year of Business Initiation				0.0439
Before 2016	31 (86.11)	3.47	1.100, 0.96]	0.0337
2016-2018	32 (84.21)	2.99	[1.00, 8.88]	0.0492
2019-2020	25 (64.10)	Reference		

Source: Survey Field Data, 2021

This finding is supported by [8]. With deference to year of business commencement, 86.11% of the restaurants started business before 2016 reported that to use EFDs. While 84.2% of participants those from restaurants started business in 2016-2018 and 64.1% from restaurants started business in 2019-2020 shows that to use EFDs. In addition, the results of the fitted logistic regression model revealed that the odds of perceived ease of use of EFDs was significantly higher in restaurants started business in 2016-2018 as compared to those started business between 2019 and 2020 (OR=2.99, P-Value.0492) This result supported by [2]. Similarly, participants from restaurants started business before 2016 were significantly more likely to use the EFDs than those started business in 2019-2020 (OR=3.47, P- Value = 0.0337). This finding of the study is supported by who said that the EFDs usage in term of number of years among small restaurants owners was positively and significantly influenced by perceived usefulness of EFDs and perceived ease of use correspondingly [1] [13] [17].

V.CONCLUSION

The study indicated that the perception of small business owners towards usage of EFDs has positive influence on EFDs usage. The study is supported by different scholars who said that the perception about EFDs influence positively EFDs machine usage [2] [8] [17] [19].

The future researcher suggests that may expand on the study area and sample size in order to define better perceptions in usage of EFDs. Additionally, it is recommended that further studies should include variable like involvement of the stakeholders through adoption processes of new technology, for instance new EFDs.

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