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Challenges Faced by Taxpayer on Using Electronic Fiscal Devices: A Case Study of Kigoma Region

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Abstract

This study was carried out to assess the challenges faced by taxpayers in using EFDs in Tanzania. The study used descriptive case study design while sampling technique used was simple random sampling technique. The technique led to selection of 96 respondents. Data collection methods used in the study were questionnaire method and documentary review. Descriptive statistics and inferential statistics were used in analyzing data in the study. Firstly, the findings show that individual related challenges include: low level of education and lack of experience in using EFD machines has perceived negative effect on the usage of EFDs among taxpayers. Secondly, are the findings regarding EFDs related challenges like: high price of the devices, lack of availability; difficult to use and network problem) have negative effect on the usage of EFDs among taxpayers. Further findings revealed that business location and size of business-related challenges have negative effect on the usage of EFDs among taxpayers. It is recommended that there is a need for reviewing prices of electronic fiscal devices, there is a need for the Tanzania Revenue Authority to establish education programs to taxpayers on using EFDs and there is a need for providing education to taxpayers on using EFDs.

Keywords: *Tax Revenue; Taxpayer; Electronic Fiscal Devices; Tax Collection; Kigoma; Tanzania*

1. Introduction

Collection of tax is an important activity which is undertaken by almost all countries around the world with the idea of assisting governments in raising revenues from individuals and business entities. Different countries around the world have implemented rules and regulations to facilitate the process of tax collection (Ashington, 2017). In recent years, there has been an increased adoption of information communication technology (ICT) systems and tools in order to increase effectiveness and efficiency in tax collection among developed and developing countries. Among the commonly adopted ICT tools are Electronic Cash Register (ECR) which has been adopted in European region and Electronic Fiscal Device (EFD) which has been adopted in East Africa (Shao and Dida, 2020).

Sub-Saharan African countries also rely on tax revenue as a pillar towards economic development of these countries. Majority of countries located in Sub-Saharan Africa (SSA) adopted value added taxes (VATs) as an attempt to increase tax revenue in these countries. In order to ensure that there is reduction in VAT non-compliance, most of countries in SSA came up with the decision of adopting electronic fiscal devices (EFDs). These are computerized devices which were introduced in Sub-Saharan African countries and used by tax bodies to monitor the business transactions of each business (Casey & Castro, 2015). The first country in SSA to adopt EFDs was Kenya in 2005, followed by Tanzania in 2010 and later on the EFD was adopted in Rwanda in 2014 (Eilu, 2019).

One of the countries in East Africa to have implemented EFD is Kenya. EFD in Kenya was mandated by the Gazette Notice No.47 of October 22, 2004. During the initial stages of implementing EFD in Kenya, there emerged questions on what could be the value of EFD. However, EFD was later on successful implemented in Kenya. Ever since its implementation, there are still no improvements in tax revenue especially increase in tax revenue. This symbolizes that there had been ineffective implementation of EFD in Kenya to the extent of making it less potential in increasing tax revenue (Eilu, 2019).

In case of Tanzania, Electronic Fiscal Device (EFD) was introduced by the government through Tanzania Revenue Authority (TRA) in the year 2010. The general objective of introducing EFD in Tanzania was enhancement of VAT compliance. Electronic Fiscal Device was introduced in the Finance Act of 2010 and was considered as an alternative to the previous electronic cash registers (ECR) which failed to meet the objectives of tax revenue collection. The expectations of TRA after introducing EFD were obtaining information of all tax payers in the country automatically. Other expectations were increased tax revenue collection, efficient compliance monitoring, adequate information for tax administrators as well as minimizing tax disputes (Siraji, 2015). The second phase of implementing EFD in Tanzania began in 2013 with the purpose of expanding the number of traders who will be using the EFD system in issuing receipts or tax invoices for any transaction made. The groups included during the second phase of implementing EFS included the group of persons who are not VAT registered particularly those who had turnover ranging from Tsh 14 million and above per year. The other targeted group in this second phase was traders who deal with selected business sectors while the final targeted group being traders who trade in region's prime areas (TRA, 2015). The government of Tanzania has been keen in ensuring that there is increased VAT compliance through EFD as this could lead to increased government revenue collection. In order to ensure EFD is effectively implemented, the government enacted the Income Tax Act (Electronic Fiscal Devices Regulations) of 2012. Initiation of these regulations was for the purpose of regulating implementation of EFDs in all parts of the country (URT, 2012). This could lead to increased VAT compliance among taxpayers and later on increase in revenue collection.

Also, TRA undertook several measures to ensure that EFD is implemented effectively by its users. One of the strategies initiated by TRA was appointment of manufacturers and suppliers who manufactured and distributed devices according to specification. TRA further registered all devices before they are put into use by taxpayers. There were also trainings provided to staff of TRA in order to make them capable of assisting customers in implementing EFD. Furthermore, TRA initiated trainings to taxpayers before starting using EFD (Godfrey, 2013). All these efforts by Tanzania Revenue Authority were for the purpose of ensuring effective implementation of using EFD. Despite of government efforts as well as efforts by TRA to ensure that there is increased implementation of electronic fiscal device, its implementation is still ineffective. Shao and Dida (2020) reveal that there are still reported cases of tax evasion among taxpayers in Tanzania. Furthermore, Tanzania Revenue Authority could still not be able to meet its fiscal year revenue collection target. In the fiscal year of 2020/21, TRA collected Tsh 9.983 trillion which is 50% of the set target of Tsh 20.3 trillion (Zacharia, 2021). However, the influence of theories on usage of EFD among taxpayers is yet to be studied. This raised the need for assessing the challenges users of EFD face in implementing the device. Therefore, this study was carried out in order to

assess the challenges faced by taxpayers in using EFD particularly at Kigoma region. The study was guided by Technological Acceptance Model in determining challenges related to perceptions of users on ease of use and usefulness of EFD.

2. *Related Literature Review*

All governments around the world are financed through revenues collected in the form of taxes under the existing tax laws (Annuar et al. 2018). The main challenge, however, is achieving the set goal and maintain the highest degree of self-assessment and voluntary compliance by the taxpayers so as to finance public goods (Annuar et al. 2018). This make the tax compliance to be of great important aspect for all the tax administration and their government, since the higher the compliance the more the tax paid by the taxpayers (Nkundabanyanga et al. 2017).

The introduction of EFDs machines to taxpayers has been seen as an effective way to solve the problem of non-compliance and raise government revenues. Also, the machines have in-built Fiscal Memory which cannot be erased by mechanical, chemical or electromagnetic interferences, automatically self-enforcing issuing of daily "Z" report after every 24 hours, transmits tax information to TRA system automatically and has irreversible date mechanism. Moreover, the machines issues fiscal receipts/invoice which is uniquely identifiable and can be used as a standalone and configured into a network has 48 hours power backup, can also use external battery in areas without electricity supply (Ikasu, 2014).

The EFDs machines have got a lot of challenges in the implementation stage due to the new technology inseminated, lack of conviction of need for change; dislike of imposed change or no involvement in the change, dislike of surprises/no information for readiness, fear of the unknown, and uncertainty; reluctance to deal with unpopular issues; fear of inadequacy and failures due to need for new skills; disturbed practices, habits, relations and familiarity; and lack of respect and trust in persons promoting the new system (Weru et al., 2013).

A study by Nyasha et al., (2013) stated that the benefits of automation include a reduction of fraud, remote access to information, improved collection of statistics and uniform application of tax legislation. The introduction of tax automation minimizes direct contacts between tax collection officers and traders or their agents and hence leads to a reduction of corruption. Further benefits achieved through customs automation include improved reporting, control of file transfer, automation reconciliation of tax returns declarations and compliance testing of bank files. Paperless declarations and customs automation save time and make it easier to focus on inspecting high-risk consignments. The possibility of submitting tax returns declarations on-line has in some cases made it possible to reduce the associated fees, in other cases it eliminates the obligatory contracting of customs agents.

Mohammed & Gela (2014) conducted a study on challenges of Electronics Tax Register Machine (ETRs) to businesses and its impact in improving tax revenue. The study was conducted in Addis Ababa City of Ethiopia. The major objective was to assess problems faced by taxpayers during using ETRs. A total of 363 tax payers were randomly selected and accessed for primary data. The study found that the major problems faced by the more than 50% of tax payers are unallowable expenses 15 due to the problem of ETRs suppliers and the lack of consistency and transparency in imposing penalty for tax personnel. Maintenance cost and time, higher compliance costs were also found to be among the major problem of the tax payers.

Mativo et al., (2015) conducted a study on Factors Affecting Utilization of Electronic Tax Registers (ETRS) In Small & Medium Enterprises in Kenya. The study was an endeavor to evaluate factors that affect taxpayers' utilization of electronic tax registers with a main focus on small and medium enterprises in Kenya. The researcher employed a survey research design where 78 registered taxpayers were selected using stratified sampling method. This was only 10% of the total population which however

was not justified by the researcher. Mean, percentage, standard deviation and correlation analysis were used. The findings of the study revealed that lack of training, poor enacted tax laws and costly adoption requirements were the major factors affecting utilization of EFDs (Mativo et al., 2015).

3. Theoretical Framework

The study was guided by two theories which were Technological Acceptance Model and revenue diversification theory. Technological Acceptance Model was proposed by Davis in 1989. The model came up with two factors which are influential in enhancing adoption and usage of technology. These factors are perceived usefulness and perceived ease of use. Perceived usefulness is described as subjective probability of users to use a particular system and that it will enhance performance (Surendran, 2012). Perceived ease of use (EOU) is described as the degree to which the perspective users expect a target system to be free of effort. In relation to the study, perceived usefulness and perceived ease of use influence adoption and usage of system. In case of electronic fiscal device, tax payers will be motivated to use this electronic device if they perceive it to be useful and if they perceive it to be easy to use. Revenue diversification theory relates to this study given that diversification in springs of income is that has led to introduction of EFDs for the purpose increasing financial permanence. The devices were expected to impact how well revenue collection organization operates in revenue collection. However, challenges such as those related to taxpayers, those related to EFDs and those related to businesses are the ones hindering taxpayers' use of EFDs.

4. Research Methodology

This study was conducted in Kigoma, Tanzania targeting the tax payers using EFDs in revenue collection. The researcher uses data obtained from wholesalers and retailers to represent the total population. The study adopted a cross sectional research design; the adoption of cross-sectional research design is justifiable on the basis that it is the most common design used in survey research for producing good results. The study targeted a population of 2439 taxpayers including 1059 wholesalers and 1380 retailers. The sampling technique which was used is simple random sampling technique. The technique was used in order to ensure equality in participation as well as avoiding bias during selection of respondents of the study. Sample size of this study was computed from the population. Therefore, the study used a sample size of 96 which was obtained using sample size formula proposed by Yamane (1967) shown below:

$$n = \frac{N}{1 + N(e)^2} = \frac{2{,}439}{1 + 2{,}439(0.1)^2} = 96$$

Where by n = sample size, N = Total number of population (whole sellers and retailers in Kigoma) e = marginal of error with confidence level of 10%. Hence the sample size will be 96.

Under probability sampling technique a simple random sampling were employed to obtain the respondents from different groups of tax payers who use EFDs in different areas of Kigoma municipality. Under non probability sampling purposive sampling technique were adopted to obtain respondents from whole sellers and retailers within the area under the study. This technique was adopted because it saves time and provides an equal opportunity for the tax payers participate. Also, this was necessary in order to avoid the problem of sample selection bias. Data from respondents was collected by using questionnaire method and documentary review depending on business location. Whole sellers and retailers` views and information were considered to be important in determining the perceptions of tax payers on the use of electronic fiscal devices (EFDs) in revenue collection in Tanzania.

Regression Model

Multiple liner regression was used for inferential statistics to look at the magnitude and direction of influence among of factors such as individual related challenges; EFD specific challenges and business-related challenges on the EFD use among taxpayers at Kigoma region. The dependent variable is EFD use while independents variables are individual related challenges; EFD specific challenges and business-related challenges.

The regression model is as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \mu_i$$

Where: Y is the dependent variable (EFD use), β_0 is the regression coefficient/constant/Y-intercept,β_1,β_2,β_3 are the slopes of the regression equation,

$X_1$is individual related challenges

X_2 is EFD related challenges

X_3 is business related challenges questionnaire method and documentary review

Model Assumptions

The Gauss Markov theorem tells us that if a certain set of assumptions are met, the ordinary least squares (OLS) estimate for regression coefficients gives you the best linear unbiased estimate (BLUE) possible. Thus, in data analysis one has to be aware of ideal conditions and their violation to be able to control for deviations from these conditions and render results unbiased or at least consistent as suggested by Greene (2011); Wooldridge, (2010). Those assumptions are as follows;

First assumption is linearity in parameters or coefficient estimated (i.e., alpha and beta): the dependent variable is a linear function of a set of independent variables and a random error component. The violation causes the problems of non-linearity, wrong determinants, wrong estimates; a relationship that is actually there cannot be detected with a linear model.

Second assumption is the expected value of the error term is zero for all observations. That is $E(\mu_i) = 0$. The violation causes problem of intercept is to be biased. That is value of dependent variable is biased when independence is zero.

Third assumption is homoskedasticity: The conditional variance of the error term is constant in all independent variables and over time: the error variance is a measure of model uncertainty. Homoskedasticity implies that the model uncertainty is identical across observations.

$$var(\mu_i) = E(\mu_i^2) = \sigma_i^2 = Constant$$

The violation causes the problem of heteroscedasticity that is variance of error term is different across observations. Thus, model uncertainty varies from observation to observation often a problem in cross-sectional data, omitted variables bias.

Fourth assumption is error term is independently distributed and not correlated, no correlation between observations of the dependent variable.

$$Cov(\mu_i, \mu_j) = E(\mu_i \mu_j) = 0, i \neq j$$

The violation causes the problem known as spatial correlation (panel and cross-sectional data), serial correlation/ autocorrelation (panel and time-series data).

Fifth assumption is independent variable (X's) is deterministic: that is independent variable (x) is uncorrelated with error term.

$$Cov(X_i, \mu_i) = 0$$

The violation causes the problem of omitted variable bias, endogeneity and simultaneity

Sixth assumption is multicollinearity: There is no exact collinearity between the X variables. This means that, independent variable (individual related challenges; EFD specific challenges and business-related challenges) shouldn't influence themselves. The variance inflation factors will be used to measure the and how to a great extent the variance is inflated. VIF need to be less than 10 for no exactly multicollinearity (Kumar, 2011).

In order to test these assumptions, normality test was performed. The test for normality of dependent variable; EFD usage was done using Kolmogorov-Smirnov and Shapiro-Wilk tests. Also, multicollinearity test was conducted for the purpose of checking whether there are correlations among variables. Within this study, Variance Inflation Factor (VIF) analysis was used to test the degree of possible multicollinearity of the dependent variables in the regression model. Furthermore, heteroskedasticity test was performed in the study. In testing heteroskedasticity, the Breusch-Pagan or Cook-Weisberg test was used.

5. Results and Discussion of Study's Findings

5.1 Demographic analysis

5.1.1Personal information

Table 5.1 Personal information of respondents

Personal information	Category	Frequency	Percent
Age	18-25	12	12.5
	26-33	18	18.75
	34-41	30	31.25
	42-49	25	26
	50 and above	11	11.5
Sex	Male	60	62.5
	Female	36	37.5
Education level	No education	6	6.25
	Primary	19	19.8
	Secondary	34	35.4
	College/diploma	21	21.9
	University	16	16.7
Business experience	0-5 years	23	24
	6-11 years	56	58.3
	12 years and above	17	17.7

Source: Field data, 2022 **Age**

The findings in Table 3.1 show that 12(12.5%) of the respondents were aged between 18-25 years while 18(18.75%) of the respondents were aged between 26-33 years. Also, the findings show that 30(31.25%) of the respondents were aged between 34-41 years, 25(26%) of the respondents were aged between 42-49 years while 11(11.5%) of the respondents were aged 50 years and above. These findings show that most of respondents participated in the study were aged between 34-41 years. The implication of the findings is that most of taxpayers at Kigoma region are aged above 30 years.

Sex

The findings in Table 3.1 show that 60(62.5%) of the respondents were males while 36(37.5%) of the respondents were females. The findings show that majority of taxpayers participated in the study were males. This implies that Kigoma region has majority of taxpayers who are males. However, the study used taxpayers from both genders something which was crucial in determining their perceptions on challenges facing taxpayers in using EFDs.

Education Level

The findings in table 3.1 show that 6(6.25%) of the respondents had no education, 19(19.8%) of the respondents had primary education, 34(35.4%) of the respondents had secondary education, 21 (21.9%) of the respondents had collage/diploma education while 16(16.7%) of the respondents had university education. These results show that most of respondents participated in the study had secondary education. Also, it is shown that the number of collage/diploma and university education owners was smaller than primary and secondary education holders. Ability to use EFDs by taxpayers can sometimes be affected by their levels of education.

Business Experience

The findings in Table 3.1 show that 23(24%) of the respondents had experience of 0-5 years, 56(58.3%) of the respondents had experience of 6-11 years while 17(17.7%) of the respondents had experience of 12 years and above. The findings show that most of respondents had business experience of 6-11 years. This experience is enough in making them able to realize the challenges faced by taxpayers in using EFDs.

5.1.2 Business Information

Table 5.2 Information about Business

Business information	Category	Frequency	Percent
Age of business	Less than 2 years	18	18.75
	2-5 years	36	37.5
	6-10 years	28	29.2
	More than 10 years	14	14.6
Nature of ownership	Sole proprietor	44	45.8
	Family	22	22.9
	Partnership	19	19.8
	Others	11	11.4
Location	Urban	76	79.2
	Rural	20	20.8

Source: Field data, 2022

In age of business, findings in Table 3.2 show that 18(18.75%) of the respondents had business aged less than 2 years while 36(37.5%) of the respondents had business aged 2-5 years. Also, 28(29.2%)

of the respondents had business which has 6-10 years in operation while 14(14.6%) of the respondents had business which is aged more than 10 years.

In nature of ownership, the findings that 44(45.8%) of the respondents selected sole proprietor, 22(22.9%) of the respondents selected family, 19(19.8%) of the respondents selected partnership while 11(11.4%) of the respondents selected others.

With business location, the findings show that 76(79.2%) of the respondents selected urban while 20(20.8%) of the respondents selected rural. The findings show that majority of respondents who participated in the study selected urban. The implication of the findings is that most of businesses at Kigoma region are operated in urban areas.

5.2 Main Findings

5.2.1 Normality Test

The test for normality of dependent variable; EFD usage was done using Kolmogorov-Smirnov and Shapiro-Wilk tests. The decision rules state that, "for variable to be normally distributed the probability value of both Kolmogorov-Smirnov and Shapiro-Wilk test supposed to be greater than 0.05". The normality test revealed that data for the variable EFD usage were normally distributed since the p-value for Kolmogorov-Smirnov test was 0.321and Shapiro-Wilk tests was 0.411, both tests were greater than $\alpha = 0.05$ as shown in table 3.3 below.

Table 5.3 Normality Test

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
EFD usage	.277	96	.231	.739	96	.411

a. Lilliefors Significance Correction

5.2.2 Multicollinearity Test

The multicollinearity test was conducted for the purpose of checking whether there is correlations among variables. Findings of multicollinearity demonstrate there was no serious problem of multicollinearity between the independent variables as shown in Table 3.4 with an average of 5.6276 which is tolerable, the maximum VIF of the variables (business challenges) was 8.2335 and minimum of (individual challenges) was 1.849.

Table 5.4: Collinearity Statistics

Variable	**Collinearity Statistics**	
	Tolerance	**VIF**
Individual challenges	0.541	1.849
EFD challenges	0.147	6.799
Business challenges	0.121	8.2335
Average		**5.6276**

Source: Field Data (2022)

5.2.3 Heteroscedasticity

In testing heteroskedasticity, the Breusch-Pagan or Cook-Weisberg test was used where the null hypothesis is that homoscedasticity is present. Tables 3.5 indicate we do not reject the null hypothesis because the p-value is greater than the chosen alpha level (0.05) and conclude that the residuals are homoscedasticity and normally distributed.

Table 5.5: Heteroskedasticity test

Test	chi2	Prob> chi2
Breusch-Pagan / Cook-Weisberg test for heteroskedasticity	12.84	0.311

5.2.4 Model Summary

From table 3.6 shows the model fit, the results indicate that, the value of R-square was 0.700 this implies that, 70.0% of the dependent variable (EFD usage) is explained by all independent variable in the model namely: individual related challenges; EFD specific challenges and business-related challenges. The result of R-square demonstrates the model explains the variability in dependent variable by 70.0%. The implication of this is that the model used in the study is considered to be an appropriate indicator.

Table 5.6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.837[a]	.700	.691	.55614205

a. Predictors: (Constant), Business challenges, Individual Challenges, EFD challenges
b. Dependent Variable: EFD usage

5.2.5 ANOVA Results

Further, the analysis of variance (ANOVA) results indicated in Table 3.7 below confirm that the model goodness of fit is appropriate for this data since F = 71.17 and the p-value of 0.000 is less than significant level of 0.05 with df = 95. Hence, the model is statistically significant to predict relationship between EFDs usage. As per the arguments provided by Sidola, Kumar and Kumar (2012) goodness of the model used in the study means the extent to which such model fits the data something which makes it an important indicator of accuracy.

ANOVA Results

Table 5.7

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	66.545	3	22.182	71.717	.000[b]
	Residual	28.455	92	.309		
	Total	95.000	95			

a. Dependent Variable: EFD usage

b. Predictors: (Constant), Business challenges, Individual Challenges, EFD challenges

5.2.6 Parameter Estimates

From the table 4.8, results show that, three explanatory variables (business, individual and EFD challenges) included in model are negative and statistically significance at different level of significant. That is individual related challenges that hinder EFDs usage is statistically significant at 10% (p=0.064). Further, EFDs related challenges that hinder EFDs usage is statistically significant at 5% (p=0.052) while business related challenges that hinder EFDs usage is statistically significant at 1% (p=0.006). The statistically significance mean the variable has influence or have effect on EFD usage.

Table 5.8: Parameter Estimates

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.019	.058		-.327	.745
	Individual Challenges	-.145	.078	-.145	-1.872	.064
	EFD challenges	-.270	.137	-.293	-1.972	.052
	Business challenges	-.455	.163	-.457	-2.789	.006

a. Dependent Variable: EFD usage

5.3 Individual Related Challenges Hindering EFD Use among Taxpayers at Kigoma Region

The coefficient for individual related challenges that hinder usage of EFDs was found to be -0.145. This coefficient was statistically significant at 10 percent level of significance (P-value 0.064). The coefficient tells us that, a unit increase in individual related challenges is associated with decrease EFDs usage by 0.145 unit's other factors (explanatory variables) remain constant. Also, this can be interpreted in terms of percentage as follow; if the taxpayers at Kigoma region associated with individual related challenges, then the usage of EFDs decrease about 14.4% points. That is to say, the more individual related challenges, the less usage of EFDs among taxpayer. These findings show that individual related challenges (i.e., low level of education and lack of experience on use) have negative effect on the usage of EFDs among taxpayer. The findings relate to those in the study by Siraji (2015). The findings revealed that challenges faced taxpayers in using EFDs included limited education to taxpayers and lack of enough technical expertise. The findings further relate to those in the study by Ikasu (2014) whose study revealed that one of challenges facing EFD use was lack of awareness among users.

The findings further relate to those in the study by Faustine (2020), which asserts that the challenges that reduce usage of EFDs included little knowledge among tax payers on EFD machines and negative perception among tax payers regarding the devices. The findings are further in line with arguments provided by the Technological Acceptance Model. The theory provides that perceived usefulness and perceived ease of use influence adoption and usage of system. Hence, poor perception on usefulness of EFDs and ease of use of EFDs limits usage of EFDs among tax payers. In this study, it has been shown that increased individual related challenges such as poor perception on devices lead to decrease in usage of EFDs at Kigoma region.

5.4 EFD Specific Challenges Hindering EFD Use Among Taxpayers at Kigoma Region

Multiple regression indicates that the coefficient for EFDs related challenges that hinder usage of EFDs was found to be -0.270. This coefficient was statistically significant at 5% level of significance (P-value 0.052). The coefficient tells us that, a unit increase in EFDs related challenges is associated with decrease EFDs usage by 0.270 unit's other factors (explanatory variables) remain constant. Also, this can be interpreted in terms of percentage as follow; if the taxpayers at Kigoma region associated with EFDs related challenges, then the usage of EFDs decrease about 27.0% points. That is to say, the more EFDs related challenges, the less usage of EFDs among taxpayer. These findings show that EFDs related challenges (i.e., high price of device; lack of availability; difficult to use and network problem) have negative effect on the usage of EFDs among taxpayer.

The above findings are in line with the findings in the study by Omari (2017) on effectiveness of EFD in tax collection in Arusha City council. It was revealed that one of challenges facing EFD use was high costs of purchasing the device. Similarly, the findings relate to those in the study by Chambi (2020) whose study revealed that one of challenges for usage of EFD was high prices of purchasing the devices.

In this study, it has been revealed that EFD related challenges such as high price of device; lack of availability; difficult to use and network problem have negative effect on the usage of EFDs among taxpayer.

5.5 Business Related Challenges Hindering EFD Use Among Taxpayers at Kigoma Region

Multiple regression indicates that the coefficient for business related challenges that hinder usage of EFDs was found to be -0.455 (See Table 4.8). This coefficient was statistically significant at 1% level of significance (P-value 0.006). The coefficient tells us that, a unit increase in business related challenges is associated with decrease EFDs usage by 0.455 unit's other factors (explanatory variables) remain constant. Also, this can be interpreted in terms of percentage as follow; if the taxpayers at Kigoma region associated with business related challenges, then the usage of EFDs decrease about 45.5% points. That is to say, the more business-related challenges, the less usage of EFDs among taxpayer. These findings show that business (i.e., location of business and size of business) related challenges have negative effect on the usage of EFDs among taxpayer.

These findings are related to those in the study by Kira (2016) on perception of taxpayers on adoption of electronic fiscal device. The findings revealed that one of the challenges which faced usage of EFDs was limited supply of devices. This entails that rural areas are less supplied with EFDs something which make taxpayers in these areas unable to use the devices. In this study, it has been revealed that business related factors such as location of business affects usage of EFDs among taxpayers negatively perceived. This means that there is limited supply of EFDs especially to businesses which are operating in the rural areas.

6. Conclusion and Recommendations

Conclusions

Basing on the findings of this study, it can be concluded that EFD usage among taxpayers at Kigoma region is challenged by individual related challenges. Individual related challenges which face taxpayers in using EFDs include low level of education and lack of experience on using EFDs. Also, it is concluded that usage of EFDs among taxpayers at Kigoma region is challenged by EFD related challenges. EFD related challenges which face taxpayers in using EFDs include high price of services, lack of availability of devices, difficulties in using the devices and network problem. Furthermore, usage of EFDs among taxpayers at Kigoma region is challenged by business related challenges. Business related challenges which negatively affect usage of devices include size of business and location of business. This means that taxpayers fail to use EFDs because their businesses are located in less supportive areas and also, that they have small businesses to support usage of EFDs.

7. Recommendations

This study recommends that there is a need for reviewing prices of electronic fiscal devices. Revision of prices will be helpful in determining whether the prices of devices are affordable among business operators on not. The revision should be done by the government through agency responsible for collection of tax and should also include taxpayers who are primary users of devices. This will in turn lead to placement of affordable price of devices among users and thus leading to increased use of EFDs for an enhanced government revenue collection.

It is also recommended that there is a need for providing education to taxpayers on using EFDs. Provision of education to taxpayers on EFDs use and their benefits on revenue collection will make users change their perceptions towards the devices and also increase their abilities in using the devices. This

will in turn lead to increased rate of usage of EFDs given that majority of taxpayers will have skills on using the devices.

The study further recommends that there is a need to increase supply of EFDs in all business areas. The increase in supply of devices will make even business operators in rural areas access the devices and use them in paying taxes. There should be increased number of suppliers of devices in order to meet the demands of the population of taxpayers. Increasing supply of devices should be associated with knowledge provision of using devices.

8. Areas for Further Studies

The study was limited to a single region ie., Kigoma region. Therefore, the findings of the study cannot be used as conclusion on challenges facing taxpayers in using EFDs in Tanzania. There is a need for more studies in other regions around Tanzania which will base on identifying challenges that face taxpayers in using EFDs.

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