Assessment of Challenges Facing the Implementation of Electronic Fiscal Devices (EFDs) in Revenue Collection in Tanzania

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Abstract- *This study aimed to assess the challenges facing the implementation of using Electronic Fiscal Device (EFD) in tax collection in Tanzania. The system to a great extent assisted in sealing loopholes of tax evasion in Tanzania. The system had also assisted in improvement on tax compliance. It was however established that the system is yet to be fully institutionalized in the TRA system. The study established that the Authority is still experiencing some resistance to change from both internal and external customers. Thus, through major findings of the study; it has been indicated that EFD system had a lot of challenges which hinder the implementation of using the machine though the system enhanced tax collection in business premises in Tanzania. Those challenges include regular break down, fairness of tax estimated from tax payers, lack of education on the use of EFDs machines, maintenance of machines and under pricing of tax from traders. The study recommends that stakeholders need more awareness of the system and friendly environment of using EFD machines in which they suggest strongly strategies for improvements of the system.*

Key Words- *Electronic Fiscal Device; challenges facing EFD; Strategies of change*

1. INTRODUCTION

1.1 An Overview of the Study

Electronic Fiscal Device (EFD) is a machine designed for use in business for efficient management controls in areas of sale analysis and stock control system which conforms to the requirements specified in the regulation and dully registered. Under section 5 of the revenue collection in Tanzania includes Electronic Fiscal Printer (EFP) and Electronic Signature Device (ESD). The device is called fiscal device due to the fact that it is intended to trace the economic activities of every business organization for tax purposes and report to TRA, thus ensuring accurate approximation of tax returns. Many countries in the world today including Tanzania have special laws in place that make it obligatory for anyone who is selling goods or services to consumers to use cash registers (approved by tax authorities) that have special security features that enable the authorities to check in the reliable way of tax that the retailer has to pay (Mmanda, 2010).When dealing with fiscal devices, there are three types of EFDs Machines, namely: Electronic Tax Register (ETR), Electronic Fiscal Printer (EFP) and Electronic Signature Device (ESD).The ETR are appropriate and commonly used by retail businesses that issue receipts manually while the EFP are used by computerized retail outlets and are mostly suitable for business group such as supermarkets and petrol stations among others. The ESDs are used by computerized businesses that issue receipts or invoices via special accounting software. They can be easily used by manufacturers and wholesalers (Mmanda, 2010).

Developments of Information and Communications Technology (ICT) have had the greatest influence on society in recent times. Beyond the Global System for Mobile Communications (GSM), the advent of the Internet and its related infrastructures in the last two decades has driven significant shifts and restructuring in the way business is done across the globe - where a sizeable percentage of commercial activities are now being conducted electronically. While globalization has generally fueled the tempo of world trade, the Internet has particularly accounted for its recent exponential growth. The internet has not only changed the way firms, customers, suppliers and tax authority interact, it has also restructured the internal workings of firms, and affected the nature, basis and intensity of competition across industries globally (Wheelen and Hunger, 2012). This growth however has manifold implications for tax administration - as it does for just about everything else. The increase in electronic commerce (e-commerce) presents a daunting challenge to tax authorities' traditional approaches to both direct and indirect taxation. Unlike in traditional commercial activities where such details of transaction as the amount involved, parties to the transaction and the place in which the transaction was carried out can easily be established, e-commerce, in contrast, mainly occurs in the virtual and borderless world of the Internet, with the aid of a network of computers, within which untraceable trade can be carried on from obscurer even unidentifiable locations (Rosenberg, 2008). This virtual nature of the Internet makes e-commerce intangible in many ramifications, multi-jurisdictional and susceptible to shielding in tax havens (Doernberg et al, 2001). It also poses serious challenges to the effectiveness of tax authorities. Although the magnitude and true effect of e-commerce on tax revenue has not been fully ascertained, and may appear relatively small as at yet, its longer-term implications and influence on fiscal policy administration demands early and close attention (Tanzi, 1998). The ability to respond, by adjusting and adapting to the demands of e-commerce, remains the greatest threat to tax regimes (Deloitte & Touché, 1997)

According to Weru et al, (2013) he revealed that when the ETR machines were introduced by KRA most of the businessmen and service providers rejected them. They were all up in arms as human beings operate in a state of equilibrium and they do not want to learn new things. In Mombasa town, at the Coast of Kenya, the Asian businesses came to a halt as the owners protested on the streets. To date, there are many people who continue to reject the ETR machines and even those who have them use fraudulent methods to evade paying taxes by not issuing receipts after sales or offering a service. Some cases are still pending in court. The reasons for resistance to change as described by Swanson (2000) include among others: lack of conviction of need for change; dislike of imposed change/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 change

The Government through the Tanzania Revenue Authority (TRA) has introduced Electronic Fiscal Devices (EFDs) with the main aim of enhancing VAT compliance. This was introduced in the (Finance Act, 2010) to replace Electronic Cash Registers that seemed ineffective to meet the objectives. With the use of EFDs machines TRA expects to obtain tax information automatically from the tax payers. Before, TRA used to get sales information of various business organizations manually by checking the invoices. Manual checking was subjected to high risk of fraud, and it was hard to obtain complete and reliable information because of issues like double bookkeeping, and other means of tax avoidance.

Moreover, TRA through implementation of EFDs machines expected result of efficient time management for compliance, monitoring and adequate information for other taxes administration, minimization of tax disputes and simplification of tax refunds as well as increased tax revenue collection. Legally in order to enhance customer services, the devices shall be used by all VAT registered traders including manufacturers, whole sellers, retailers of each category and Other traders appointed by the Commissioner to be eligible persons for registration as EFD users (Mmanda, 2010).

Other scholars who have done similar studies include Horn, (2003),Mmanda, (2010), Clive, (2011),Weru at el,(2013) and Duke, (2013), on their studies have tried to describe the principles, benefits, advantages and disadvantages, as well as strategies of implementing the use of EFDs machines. But this study under investigation is not only discussing principles, benefits, advantages and disadvantages, as well as strategies, it going father in discussing the challenges facing the implementation of using the EFDs machines in the tax revenues collections

1.2 Statement of the Problem

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. However, concerns have been raised from stakeholders on whether these machines will reach the objectives of their establishment. 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 at al, 2013). The government requires all the business conducted to pay tax, but there has been tax avoidance by many people; due to this the government had to take several measures to ensure that all tax information reaches TRA. The introduction of Electronic Fiscal Devices (EFDs) is aimed at enhancing voluntary compliance and ease operation of the VAT and Income Tax laws by TRA tax officials (Mmanda, 2010). This study therefore, intended to examine the challenges facing the implementations of using the EFDs machines specifically phase one.

1.3 Objectives of the Study

The main objective of the study was to assess the challenges facing the implementation of using EFD machines in the tax revenue collections process in Tanzania. For this objective to be achieved, the following hypotheses were examined and tested:

Ha1**:** There is a significant relationship between resistance to change and tax revenues collection.

Ha2: There is a significant relationship between network and power supplies problems and tax revenue collection.
Ha3: There is a significant relationship between poor honesty and integrity to tax officials and tax revenue collection.
Ha4: There is a significant relationship between bureaucratic monitoring and enforcement procedures and tax revenue collection.
Ha5: there is a significant relationship between non accessibility and reliability of the devices and revenue collection.

1.4 Significance of the Study

Little attention has been made to generate information regarding challenges facing the implementation of using EFDs in revenue collection in Tanzania. This study may therefore, through its findings and recommendations enhance TRA reverse those attributed challenges. Furthermore, the results of this study may be used to develop better service delivery on EFDs machines which may increase revenue collection in Tanzania. The study may also give feedback to TRA in promoting the performance of TRA in building institutional capacity of TRAs in Tanzania and other developing countries in the world. Besides the study may be a basis for dialogue between policy makers and TRA stakeholders on the role of EFDs machines in enhancing the empowerment and sustainability of TRAs which play a vital role improving revenue collections in Tanzania.

2. LITERATURE REVIEW

2.1 Theoretical Framework of the Study

The understanding of taxpayers 'compliance towards effective implementation of EFD machines is an important stage to consider in describing how traders behave toward the institution and implementation of EFD machines. Taxpayer behavior in response to tax compliance can be described through five theoretical foundations 'schools of thought' referred to as: (1) economic deterrence; (2) fiscal exchange; (3) social influences; (4) comparative treatments; and (5) political legitimacy (Fjeldstand, Schulz-herzenberg and Sjursen, 2012).

Economic Deterrence: The basic point advanced by theorist of this model is that, taxpayer's compliant behavior is influenced by factors such as the tax rate, the probability of being detected and penalties imposed by the state(Backer, 1968).The economic analysis thus concludes that since compliance decisions are based on an assessment of costs and benefits, high probabilities of detection for non-compliance and large penalties for discovered violators would encourage greater compliance, hence maximizing tax revenue streams.

This theoretical principle of economic deterrence has been widely adopted by tax administrations in developing countries where good governance has not fully been established when developing strategies that relay principally on penalties and the fear of getting caught when not paying the required tax (Fjeldstand, Schulz-herzenberg and Sjursen, 2012).

Fiscal Exchange: The fiscal exchange theory suggests that, the presence of government expenditures may motivate tax compliance from the tax payers (Moore, 1998).According to Moore (1998), tax compliance among society increases with perception of the availability of public goods and services being developed in relation to the tax paid. They suggests that government can increase tax compliance by providing goods and services that citizens prefer in a more efficient and accessible manner, emphasizing that taxes are necessary for the receipt of government services. Accordingly, taxpayers are concerned with what they get in return for their tax payments in the form of public services. In this perspective, taxation and the provision of public goods/ services become catalysts to taxpayer in compliant to the tax paid (Fjeldstad and Semboja, 2001). This theory is more practical and acceptable than the previous one (economic deterrence) because, it advocates individual's willingness to comply without direct coercion. Furthermore, it serves the government from high collection costs resulting from enforcement measures. The main argument of this theory is that bargaining over taxes is central point to building relationships of accountability between state and society, based on mutual rights and obligations, rather than on coercion (Fjeldstad, at el., 2012).

Social Influences: It is said that, human behaviour in the area of taxation is influenced by social interaction in much the same way as other forms of behavior (Snavely, 1990). Compliance behavior and attitudes towards the tax systems may therefore be affected by the behaviour of an individual's reference group such as relatives, neighbors, and friends. If a taxpayer knows many people in his group who evade taxes, his commitments to comply will decline. On the other hand, social relationships may also help motivate individuals to comply and shy away tax evasion behaviour in fear of the social sanctions imposed once discovered (Grasmick, 1982).

This theory to a large extent, support the fiscal exchange theory and negate the economic deterrence theory. The society with government advocating good governance has better chances to comply with laws and orders including tax laws and vice versa.

Comparative Treatment: This theory suggests that, individuals are more likely to comply with rules if they perceive that the system determining those rules is impartial (McKerchar, and Evans, 2009). Citizens may not consider their relationship with the state in a vacuum where both parties are actors. Likewise, they may not think about their fellow citizens without considering their own relationship with the state (D'Arcy, 2011). If the state treats certain groups preferentially, this may distort the citizen's relationship with the state and the group receiving favours. This theory is more related with the exchange theory as well because, it addresses inequities in the exchange relationship between the government and taxpayers that results in improved compliance behaviour.

Political Legitimacy: Legitimacy is described as belief or trust in the authorities, institutions, and social arrangements to be appropriate, for the common good (Tayler, 2006). According to the political legitimacy theory, tax compliance is positively related to perceptions about the government's trustworthiness. Researchers have suggested that, the group identification deriving from national pride fosters cooperative behavior and willingness to pay taxes (Torgler and Schneider, 1984).Political legitimacy theory is also related to social influence theory and comparative treatment theory and, all support fiscal exchange theory while negate the economic deterrence theory. With exception of the first theory, the remaining four theories work towards enhancing individual's freedom and willingness to pay taxes voluntarily.

2.2 Empirical Literature Review

2.2.1 Related Studies on EFDs Done in Tanzania

Yonazi, (2013) has noted the ways in which adoption of transactional level e-Government initiatives can be enhanced in Tanzania and establish existence and issues related to the adoption of transactional level e-Government initiatives in Tanzania. The study used exploratory approach and case studies strategy was adopted on the study, Data was collected from various sources include ICT experts, potential users, and from the academia Interviews were administered to ICT experts for the purpose of obtaining their understanding, experience and suggests as related to the adoption of transaction level e-Government initiatives, Focus Group Discussions (FGD) were organized for various groups of respondents. At the beginning of each FGD, participants were introduced to the research purpose and information required from them .Then Straus and Corbin's (1990) data analysis framework was used to guide data analysis in this study . The findings of the study revel that it is possible to achieve higher degree of citizen adoption of e-Government in Tanzania. However, the government needs appropriate strategies to overcome challenges posed by the issues identified in their study. Mmanda, (2010) in his study, "Introduction of Electronic Fiscal Device (EFD) machines" is good in that once you enter information TRA gets information after 24 hours and if one tampers with the information, the machine reports everything. In addition, the machines keep the information for not less than five years. After all, it is the government that pays for the machines. However, the VAT registered businesses have to buy them first but when they install them, the costs are deducted from the VAT the businesses are supposed to pay to TRA. It is only when the amount is paid that the businesses start paying VAT.

2.2.2 Related Studies on EFDs Done Outside Tanzania

Nyasha, et al (2012).in their study delt with attitudes of employees towards the use of fiscalised electronic devices in calculating value added tax (VAT) This was. A case study of motor industry in Zimbabwe, the research sought to find the attitude of motor industry employees in Zimbabwe towards the use of fiscalised electronic device. The findings of the study revealed that fiscalised electronic devices had positively impacted on the motor industry through improvements in tax collection, saves time in tax collection, reduces direct contact between tax collectors and hence minimizes corruption. Moreover, the study found out that employees with low educational level find it difficult to use fiscalised electronic devices because they lack know how on how best to use them. Employees also negatively perceived the use of fiscalised electronic devices because they are not aware of the method and some are just resistant to change that is given all the resources they will reject to use the advanced method.

Naibei, et al (2011) in their research work "Impact of Electronic Tax Registers on VAT Compliance" had the purpose of assessing the impact of use of Electronic Tax Registers (ETRs) on Value Added Tax (VAT) compliance among private business firms in Kisumu city, Kenya. A sample of 233 private firms was selected from a population of 590 private firms using stratified sampling technique. The data was gathered by use of questionnaires and analyzed by use of correlation and descriptive statistics. Empirical results reveal that effective and regular use of ETR has a significant impact on the Value Added Tax (VAT) compliance. Based on the research findings the study concludes that use of ETR has a significant impact on VAT compliance in Kenya.

Magutu, (2010) in his study "the Effectiveness of Electronic Tax Registers in Processing of Value Added Tax Returns, Perspectives from Registered VAT Taxpayers in Kisii Town, Kenya," aimed to assess the effectiveness of Electronic Tax Registers (ETRs) in the processing of Value Added Tax returns. The study intend to determine the extent to which the Electronic Tax Registers are being used by the taxpayers, the problems encountering in using them as well as get possible solutions to the problems. The study sought to establish if the Electronic Tax Registers had increased the speed at which taxpayers processed their VAT returns and if there were any associated costs in the processing of VAT. The population under study comprised of 98 VAT registered taxpayers in Kisii town according to the regional KRA office's records which was stratified into; service providers, wholesalers and large scale retailers and supermarkets. The study findings revealed that Kenya has witnessed significant changes in many aspects of its economy over the last four decades, but like most developing countries, it has had to contend with the common problems that plague tax systems of developing countries. Secondly, the timely billing of the monthly VAT returns is attributed to many factors.

Gray (2001) in his research report 'Enhancing transparency in Tax administration in Madagascar and Tanzania' addressed the following: Company tax is perceived as a single most evaded tax followed by VAT and personal income tax, complicity of tax officials is seen as the biggest single factor in tax evasion, coming ahead of excessive tax rates, political intervention, and administrative weakness, respectively. Cited in this connection is a law authorizing defaulters to negotiate their penalty up to a ceiling of 4 times the evaded tax; the Treasury receives only 25%, the remainder being divided among officials involved in a case. Such arrangements are seen as epitomizing the system's lack of transparency. Moreover the principal factor in tax evasion is seen to be deficient information and education of taxpayers, ahead of "taxpayer mentality" and inadequate service equipment (e.g. means of transport). The main practices of noncompliance are considered to be sales without bills or receipts, and under invoicing, ahead of understatement of turnover and fraudulent deductions against VAT. Duke, et al (2013) in their journal of Impediments of Electronic Commerce as a Tax Revenue Facilitator in Nigeria, the study measured the contributions of e-commerce activities to the national tax revenues in Nigeria, against the background of some country-specific problems. Using a data set spanning between 2008 and 2011 they develop a model that measures the statistical significance of indirect taxes sourced from four proxies of e-commerce: Automatic Teller Machines (ATM); Point-of-Sale (POS); On-line Purchasing (Internet Purchasing); and, Mobile Phone Payment (GSM). They found that e-commerce transactions have a very low overall contribution to the national tax revenue, also find that while tax revenue contributions from ATM and POS are relatively significant, those from Internet Purchasing and GSM are insignificant. They recommend Public-Private-Partnerships between government and firms in developing the infrastructures required for improving the current level and depth of Internet and telephony usage. Consumer education is also recommended for improving awareness of the benefits of e-commerce transactions. Further research into the behavioral and infrastructural causes of the current low level of tax remittance from e-commerce transactions by sellers is recommended.

Weru ,et al(2013). In their study of Impact of strategic change: Introduction of electronic tax register for enhancement of tax collection at Kenya Revenue Authority addressed that, the effect of the change caused by implementation of the ETR project and if the ETR system enhanced the tax collection in Nairobi. The research study used quantitative and qualitative approaches. Quantitative approach applied in statistical data which was verified on the ground and computed in numbers and percentages. While qualitative research method was used to give opinions and more details about the respondents, the target population was 500 VAT holders on Luthuli Avenue in Nairobi who were using the ETR machines and Ninety eight (98) KRA managers in the Department of Domestic Taxes. In addition, the study applied probability sampling that involved simple random sampling technique to identify the sample size of the study. The major findings indicated that ETR system had enhanced tax collection in business premises in Nairobi and that the system had to a great extent assisted in sealing loopholes of tax evasion in Nairobi. It was further found out that the stakeholders were yet to be trained effectively on the use of ETR machines. The system had also assisted in improvement on tax compliance. It was however established that the system is yet to be fully institutionalized in the KRA system. The study established that the Authority is still experiencing some resistance to change from both internal and external customers. Also the researcher found out that tax payers resisted the use of ETR machines due to insecurity, personal attitudes, and lack of trust, financial reasons, misunderstanding, and fear of the unknown, disturbance of the routine systems of the businesses, inconvenience and group norms.

3. RESEARCH METHODOLOGY

The study employed quantitative research approach. The quantitative approach was applied in order to test the theories and hypothesis of the study. Also data were collected through structural questionnaires in testing the quality of services provided by TRA to the VAT registered traders in the course of implementation the use of EFD machines. This is due to the fact that, the study designed mainly to be conducted to all traders who registered for VAT and using EFD machines in Tanzania. A sample size of 80 informants was used to accomplish the study. In this regard, data were analyzed through inferential statistics for the aim of testing theories and hypotheses of the study.

4. RESULTS AND DISCUSSION OF THE FINDINGS

The main objective of the study was to assess the challenges facing the implementation of using EFD machines in the tax revenue collections process in Tanzania. In this part the respondents were asked to indicate their level of understanding of various predicted challenges of EFD machines in the tax collection process. Respondents were requested to rank each of the above items using likert scale of 1,2,3,4 and 5 for strongly disagree, disagree, neutral, agree and strongly agree respectively. The collected data were analyzed by SPSS version 20 software through regression analysis and results are presented hereunder:

Correlation Matrix

		Q_2.2.1 Network	Q_2.2.3 Resistant	Q_2.2.4 Fairness	Q_2.2.7 Education	Q_2.2.8 Maintenance	Q_2.2.9 Underpricing
Correlation	Q_2.2.1 Network	1.000	.656	.582	.174	.204	.007

	Q_2.2.3 Resistant	.656	1.000	.465	.238	.186	-.157
	Q_2.2.4 Fairness	.582	.465	1.000	.267	.176	-.070
	Q_2.2.7 Education	.174	.238	.267	1.000	.452	-.138
	Q_2.2.8 Maintanece	.204	.186	.176	.452	1.000	.238
	Q_2.2.9 Underpricing	.007	-.157	-.070	-.138	.238	1.000

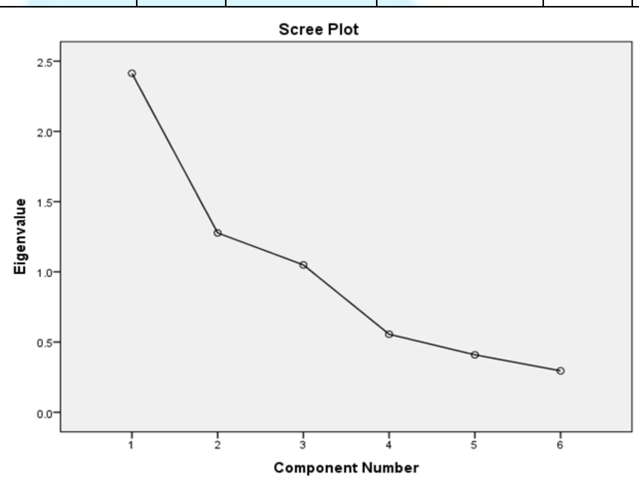
From the correlation matrix presented above, there is a positive relationship between breakdown of network , resistance to change , fairness in revenue collection, proper education to tax payers, maintenance of EFDs machines and under pricing of tax from traders in the country.
From the Kaiser Meyer-Olkin presented above, the sampling adequacy is significant because the KMO has been represented by 61 percentages, while the Bartlett's Test of Sphericity is significant at 0.000 at ($P \leq 0.05$) and 95 percentage of confident level. This also is explained by the validity of the model as the variance explained has been achieved at 80 percent from the rotation of the variables whereby three variables were extracted from the rotation. In addition, in the scree plot; the eignevalue has a positive linear of 0.5 to 2.5 components.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.613
Bartlett's Test of Sphericity	Approx. Chi-Square	127.063
	Df	15
	Sig.	.000

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.414	40.225	40.225	2.414	40.225	40.225	2.143	35.718	35.718
2	1.277	21.286	61.512	1.277	21.286	61.512	1.448	24.142	59.860
3	1.049	17.491	79.003	1.049	17.491	79.003	1.149	19.143	79.003
4	.556	9.260	88.263						
5	.409	6.818	95.081						
6	.295	4.919	100.000						



Regression output of various dimensions on the challenges facing the implementation of using EFD machines in revenue collection in Tanzania

Model Summary[b]				
Model	R	R^2	Adjusted R^2	Std. Error of the Estimate
1	.975[a]	.951	.948	.211

[a] Predictors: (Constant), Q_2.2.9Underpricing, Q_2.2.1Network, Q_2.2.7Education, Q_2.2.8Maintanece, Q_2.2.4Fairness
[b] Dependent Variable: Q_2.2.0Challanges

From the model summary, the simple determinant of regression has been explained at 98% while the coefficient of determination has been explained at 95%. Thus, both the simple determination (R) and coefficient of determination (R Square) reveal significant relationship between challenges facing EFDs machines in revenue collection and under pricing, break down of network, lack of education to tax payers, machines maintenance and fairness in revenue collection. This also has been depicted in the ANOVA which reflects significant relationship among those variables as the significance (Sig Value) is 0.000 at (P≤0.000) and 95% confident level.

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	70.739	5	14.148	317.765	.000[b]
	Residual	3.606	81	.045		
	Total	74.345	86			

ANOVA[a]

Model		Unstd. Coeff.		Std. Coeff.		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.579	.209		2.772	.000
	Q_2.2.1 Network	.907	.030	.919	30.294	.000
	Q_2.2.4 Fairness	.096	.033	.089	2.890	.005
	Q_2.2.7 Education	-.193	.047	-.121	-4.140	.000
	Q_2.2.8 Maintanece	.095	.032	.087	2.954	.000
	Q_2.2.9 Underpricing	-.050	.021	-.062	-2.357	.001

Results from regression reveal regular break down of network (0.000), fairness of tax estimated from tax payers (0.005), lack of education on the use of machines and tax compliance (0.000), maintenance of machines (0.000), and under pricing of tax from traders (0.001) at (P≤0.000-0.05) and 95% confident level are among the challenges which hinder the implementation of EFDs machines in Tanzania. Both spearman correlation and linear regressions provide similar findings on the challenges which hinder the implementation of EFDs machines in Tanzania. These findings are consistent with the findings in studies conducted by Peikari (2010) who found various challenges in the implementation of EFDs machines in developing countries. The study recommended that revenue authorities in developing countries need to embark on sensitization, education and training programs in order to address the challenges still affecting the ETR system, Thus, TRA in Tanzania needs to strengthen the department dealing with tax collection by ensuring that the officers are well trained to monitor and evaluate the ETR system, the Government of Tanzania should consider revising the law on the requirements of ETR registration. In addition, TRA needs to further institutionalize the ETR system by making it part of the revenue system in the authority.

From discussion of the findings presented, the study concludes that regular break down, fairness of tax estimated from tax payers, lack of education on the use of EFDs machines, maintenance of machines and under pricing of tax from traders are the challenges facing the implementation of EFDs in revenue collection in Tanzania. Thus, the study recommends that Public-Private-Partnerships between government and firms in developing the infrastructures is required for improving the current level and depth of Internet and telephony usage. Also, consumer education is also recommended for improving awareness of the benefits of e-commerce transactions. Furthermore, further research in the behavioral and infrastructural causes of the current low level of tax remittance from e-commerce transactions by sellers is highly recommended.

5. REFERENCES

[1] Agola, E. (2010, August 26).Firmlaunches tax-compliant cash register, (Online) Available:http://www.ippmedia.com
[2] Armenakis, A., Harris, S. G., &Mosholder, K. W. (1999), Creating readiness for
[3] Armstrong, M. (2001), A handbook of Human Resource Management Practices; Kogan Page Ltd; London.
[4] Benard, J. (2007). International Finance . New York : Olive .
[5] Bridges, W. (1999). Managing Transitions: Making the most of change. Reading MA:Addison-Wesley.
[6] Clive, G. (2011).Enhancing transparency in Tax administration in Madagascar and Tanzania; Belfer Centre for Science and International affairs
[7] Cooper, R. (2011). Business research Methods, Eleventh edition . McGraw- Hill International edition.
[8] Duke, J.,Sunday, E.,Kechi,K. & Emmanuel, E. (2013). Impediments of Electronic Commerce as a Tax Revenue Facilitato. International Business Research, 1-5.
[9] George, A., Michael, K., & Philip, B. (2000).PerfomanceManagement.Briston: Johns and Sons.
[10] Government of Tanzania (2005) (www.tra.go.tz) Application of VAT to small and medium size Businesses, Mwanza.in Tanzania" Dar es Salaam.
[11] Hall C. Helen, Stewart. B. R. (1998), Beyond Tradition Preparing HRD Educators For Organizational Change. Greenwich, CT: JAI
[12] Horn, P. (2003).Taxation of e-commerce. Journal of American Academy of Business, 2(2), 329
[13] IMF, (2005) VAT Refunds. A review of country experience. IMF Working paper WP/05/218

[14] Israel, M. (2010, June 21). Introduction of Electronic Fiscal Devices to Boost Revenues at Tanzania Revenue Authority. Dar essalaam; Government printer
[15] KRA (2009), A. manual on: Electronic Tax system; Published at KRA, Nairobi
[16] Magutu, O.P, Obongo, B.M, &Onsongo, C.O, (2010). The Effectiveness of Electronic Tax Registers in Processing of Value Added Tax returns African Journal of Business & Management (AJBUMA) Kisii Town, Kenya.
[17] Mgenda, O.&Mgenda, A. (2004). Business Research Methedology .Nairobi : Westland Pubisher .
[18] Mmanda, P. (2010, June 30). A presentation on; Introduction of Electronic Fiscal Device in Tanzania. TRA Journal: Dar es salaam
[19] Nwaolisa, E. F., &Kasie, E. G. (2011). Electronic retail payment systems: User acceptability and payment problems in Nigeria. Arabian Journal of Business and Management Review (OMAN Chapter), 1(5), 66-76.
[20] Odeny P, KRA (2004), A presentation on; Introduction of Electronic Tax registers in Kenya, KICC, Nairobi.
[21] Swanson, R. A. & Holton, E. F. (2000). Fundamentals of Human Resource Development. New York: Macmillan
[22] Tichy N. M. (2000). Managing Strategic Change: Technical, political And Cultural dynamics. New York: Wiley Tomorrow’s Workforce, Columbia, Missouri USA
[23] Wandiga, S. O. (2000): Science for Development’ in UNESCO, Science for the Twenty First Century: A New Commitment. World Conference on Science. London. (pp. 260-263)
[24] Weru, M., Kamaara, M. W. &Weru, N. (2013). Impact of strategic change:Introduction of electronic tax register for enhancement of tax collection at Kenya Revenue Authority. International Journal of Social Sciences and Entrepreneurship, 1 (5), 257-270.
[25] West, D. M. (2004).E-Government and the Transformation of Service Delivery and Citizen Attitudes.Public Administration Review, 64 (1), 15-27.
[26] World Bank Institute (2007); Building Knowledge Economies – Advanced Strategies for Development.WBI Development Studies. World Bank Institute. The World Bank. Washington DC – USA.
[27] Yonazi, J., Sol, H., Boonstra, A. (2010). Exploring Issues Underlying Citizen Adoption of e-Government Initiatives in Developing Countries: The Case of Tanzania, Electronic Journal of e-Government, 8, 2, 176-18