International Journal of Economics, Commerce and Management

United Kingdom http://ijecm.co.uk/ Vol. III, Issue 12, December 2015 ISSN 2348 0386

# EFFECTS OF ONLINE TAX SYSTEM ON TAX COMPLIANCE AMONG SMALL TAXPAYERS IN MERU COUNTY, KENYA

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# Abstract

The Objective of this study was to establish the effects of online tax system on tax compliance among small taxpayers in Meru County, Kenya. This objective was answered using three research hypotheses which revolved around online tax registration, online tax filing and online tax remittances. The review of the past research studies were carried out. The study adopted a descriptive research design. Data was collected using structured guestionnaire, which covered all the variables of the study from 60 sampled taxpayers from Meru county tax District. Data obtained were subjected to quantitative methods of data analysis using SPSS (version 20). In addition to descriptive statistics, both correlation and regression analyses were done and summaries presented. The findings of the study were that online tax system does affect tax compliance level among small taxpayers in Meru County. The study recommends that a further study should be done to establish other factors that affect tax compliance among small tax payers.

Keywords: Online Tax Registration, Online Tax Filing, Online Tax Remittance, Online Tax System and Tax Compliance



# INTRODUCTION

For any government to match in performance with the growth and expectations of its citizenry, it must dramatically increase its fiscal depth without incurring costly recurring overheads. Automated systems have been proven to be capable of introducing massive efficiencies to business processes that can result in increased revenue. Applying technological solutions towards the strategic goals for government will be a key step towards transforming government into an entity that can keep abreast of the needs, requirements and expectations of today's modern world. (Wasao 2014)

Governments today are under an increasing pressure to improve the delivery of public services in cost-effective ways. To meet this challenge for example tax authorities are turning to e-government led solutions like electronic tax filing (e-filing) (Amitabh et al., 2008). To date, the use of ICT is prominent in business and tax settings. Notably, tax authorities around the world are using electronic tax administration systems to interact with taxpaying public in tax collection, administration and compliance settings. Technology has influenced the way we work, play, and interact with others. The use of technology to improve the effectiveness of tax administration, expand taxpayer services, and enhance tax compliance has come to attract increasing attention in developed and developing countries (Dowe, 2008).

# **Electronic Tax Filing**

Electronic tax filing or e-filing is a process where tax documents or tax returns are submitted through the internet, usually without the need to submit any paper return. The e-filing system encompasses the use of internet technology, the Worldwide Web and Software for a wide range of tax administration and compliance purposes. Electronic taxation differs among countries hence the name of the system differs from country to country. According to Gellis (1991), electronic declaration is named electronic tax filing. It has also been called online taxation payment by UN (2007) or e-tax lodgement by Turner and Apelt (2004).

Electronic tax filing was first coined in United States, where the Internal Revenue Services (IRS) began offering tax return e-filing for tax refunds only (Muita, 2011). This has now grown to the level that currently approximately one out of every five individual taxpayers is now filing electronically. This however, has been as a result of numerous enhancements and features being added to the program over the years. Today, electronic filing has been extended to other developed countries like Australia, Canada, Italy United Kingdom, Chile, Ireland, Germany, France, Netherlands, Finland, Sweden, Switzerland, Norway, Singapore, Brazil, Mexico, India, China, Thailand, Malaysia and Turkey (Ramayahet al., 2006). Equally developing countries have also been embracing electronic filing of tax returns. Some of the countries which



are embracing the electronic filing include Uganda, Nigeria, Rwanda and Kenya (Muita, 2011).Globally, the tax environment is changing rapidly. Electronic filing is the modern way of tax authorities interacting with tax payers.

#### Tax Compliance

Tax compliance is defined as the full payment of all taxes due (Braithwaite, 2009). Tax noncompliance is referred to as any difference between the actual amount of taxes paid and the amount of taxes due. This difference occurs because of overstating expenses or deductions and understating income. Non-compliance comprises both intentional evasion and unintentional non-compliance, which is due to calculation errors and an inadequate understanding of tax laws (Robben et al., 1990 and Webley, 2004). According to Robben and Antonides (1995), taxpayer's mistakes can be unintended and thus, do not necessarily represent attempts to evade or may even lead to tax over reporting.

Getting citizens to pay their taxes painlessly without hissing has been the dream of all governments. The task has however, never been simple, until the introduction of the modern information technology. Since the early 1980s the world has experienced an unprecedented pace of advancement in the field of information technology. These technological innovations are having a profound impact on the administration of fiscal systems and the way in which taxation is administered (Teltscher, 2002). Tax compliance is mainly achieved when majority of taxpayers voluntarily file their tax returns and pay resultant tax liabilities as stipulated in the tax laws, without the intervention of the tax authorities through enforcement. However, if the voluntary compliance is low, then enforcement measures like audit and collection are resorted to.

#### **Electronic Tax Filing and Compliance**

Paper returns are tedious to file on the part of the taxpayer and in the same magnitude to reconcile on the part of KRA (Muita, 2011), hence the use of electronic filing, which is aimed at ensuring accuracy and timely reconciliation of the data contained, since KRA's iTax systems does automatic reconciliation and validation of the returns.

The aim of tax reforms in many countries is therefore, to achieve higher voluntary compliance and one way to do this is by introducing electronic filing system (Khadijah, 2013). In Kenya, various taxes are filed and remitted by due dates, which are mandatory dates for either tax return or payment thereon, to be remitted to Kenya Revenue Authority (KRA), failure of which leads to non-compliance and attract penalties. For example, the table below shows such due dates.



Tax or return of income	Due Date			
Pay as you earn (PAYE)	9th day of the month following the payroll month			
Value Added Tax (VAT)	20th day of the month following the month of transaction			
Income Tax Return (ITR)	30th June following the calendar year of Jan – Dec preceding the payroll deductions			

Table 1: Tax or Return of Income

# Small Taxpayers and Meru county Tax District

Small taxpayers in Kenya were brought to tax bracket in the year 2006 through the Finance Bill of 2006 which introduced Turn over Tax (TOT), before then small taxpayers would voluntarily register as tax payers. According to the speech read by KRA's Commissioner-General during the Kenya Institute of Management annual dinner in 2010, KRA collects 95% of the total Government revenue and over the last ten years of its existence, KRA has increased revenue collection from Kshs. 122 billion in the Financial Year 1995/1996 up to Kshs. 937.8 billion in Financial Year 2013/2014. One way of meeting its objective is to improve tax compliance by enhancing tax collection, compliance with filing of tax returns and bringing more taxpayers into the tax bracket through recruitment and registration of taxpayers. In order to enhance tax compliance, KRA has heavily invested in technology since 2003. To achieve this KRA has categorized its taxpayers as small, medium and large and has created separate tax department for each category (KRA, 2009).

Most of the taxpayers in Meru County fall under the small tax payer bracket. According to (Kamleitneret al., 2010), this group of taxpayers are characterised by low business turnover (annual turnover < sh 5 million), small capital, unspecialized merchandize, sole employee structure (in most cases the proprietor runs the business with assistance of one or two assistants), poor records keeping and generally non-compliance with tax matters.

# **Research Problem**

Worldwide, taxpayers' resistance, underutilization and reluctance to use electronic filing system remain a great concern and still plague various tax agencies which are embracing electronic tax administration systems (EATAAC, 2002). The importance of understanding and influencing taxpayer's acceptance of electronic filing system is critical, given the investment in technology and the potential for cost saving. Despite the increasing need to increase revenue collection and enforcement so as to provide public services, developing countries still face the challenges of low tax compliance and tax administration.

Muita (2011), studying the factors influencing the adoption of e-filing in Kenya, found out that by use of electronic filing will lead to managerial benefits and savings of costs. For



example, on-line lodgment and transfers and the greater use of electronic submission are likely to reduce compliance costs for small businesses.

From the existing empirical studies, it appears no study has been done in Kenya on the effect electronic filing on small taxpayers as far as tax compliance is concerned. The assumption has been that it is a new initiative by Kenya Revenue Authority, which has been done world over, so it will improve compliance. The study therefore, seeks to fill this gap in knowledge.

#### **Research Objective**

The objective of the study was to examine the effect of online tax system on tax compliance among small taxpayers in Meru County.

# **Research Hypotheses**

- H<sub>o</sub>: There is no effect of online tax registration on tax compliance among small tax payers in Meru County.
- H<sub>o</sub>: There is no effect of online tax filing on tax compliance among small tax payers in Meru County.
- H<sub>o</sub>: There is no effect of online tax remittance on tax compliance among small tax payers in Meru County.

# Rationale of the Study

The Kenyan government relies heavily on taxes to fund its development expenditure. An increase or decline in tax revenues has a direct bearing on the economy of Kenya as a country. The study is likely to reveal the strengths or weaknesses associated with implementation of new technology and its benefits not only to the authority but also to taxpayers thereby, enriching knowledge to other government institutions planning to embark on similar modernization programs.

The research will also contribute to the existing body of knowledge and may form the basis for further research in the area of technology and tax compliance in Kenya. Finally, the recommendations made will be of great help to KRA and the small taxpayers in carrying out a cost-benefit analysis on the use of technology in efficient tax administration. This may aid in future policy formulation on the same.



## THEORETICAL REVIEW

# Ability to Pay Theory

This theory was developed by Smith and Pigou (1903) "The subjects of every state ought to contribute towards the support of the government, as nearly as possible, in proportion to their respective abilities; that is, in proportion to the revenue which they respectively enjoy under the protection of the state." The ability-to-pay principle requires that the total tax burden will be distributed among individuals according to their capacity to bear it, taking into account all of the relevant personal characteristics. This is the most popular and commonly accepted principle of equity or justice in taxation as citizens of a country pay taxes to the government in accordance with their ability to pay. It seems that if the taxes are levied on this principle as stated above, then justice can be achieved. The most suitable taxes from this standpoint are personal levies (income, net worth, consumption, and inheritance taxes).(Wasao 2014). The economists are not unanimous as to what should be the exact measure of a person's ability or faculty to pay. The main viewpoints advanced in this connection are as follows:

Income as the Basics: Most of the economists are of the opinion that income should be the basis of measuring a man's ability to pay. It appears very just and fair that if the income of a person is greater than that of another, the former should be asked to pay more towards the support of the government than the latter. That is why in the modern tax system of the countries of the world, income has been accepted as the best test for measuring the ability to pay of a person.

# **Benefit Theory**

The benefit approach was initially developed by Knut Wicksell (1896) and Erik Lindhl (1919). According to this theory, the state should levy taxes on individuals according to the benefit conferred on them. The more benefits a person derives from the activities of the state, the more he should pay to the government. This principle has been subjected to severe criticism on the following grounds:

The state maintains a certain connection between the benefits conferred and the benefits derived. It will be against the basic principle of the tax. A tax, as we know, is compulsory contribution made to the public authorities to meet the expenses of the government and the provisions of general benefit. There is no direct quid pro quo in the case of a tax. Most of the expenditure incurred by the state is for the general benefit of its citizens and it is not possible to estimate the benefit enjoyed by a particular individual every year. If we apply this principle in practice, then the poor will have to pay the heaviest taxes, because they benefit more from the services of the state. If we get more from the poor by way of taxes, it is against



the principle of justice? The implication of this theory is that small tax payers may have to pay more taxes than medium and large tax payers. (Wasao 2014)

## **Determinants of Tax Compliance among Small Tax Payers**

Tax Compliance has been dependent on a number of factors according to a study done by Batranceaet al., (2012). Accordingly they argued that Tax Compliance is influenced by three factors namely, Socio Psychological factors, Political Factors and Economic Factors

### **EMPIRICAL LITERATURE**

A number of studies both locally and internationally have been done on the role Information Technology plays in Tax compliance. For instance Amitabhet al. (2009) did a study on the antecedents of paperless income tax filing by young professionals in India. The objective of this study was to study how young Indian professionals will adopt or behave towards paperless or online filing of tax returns with the aim of enhancing compliance. The regression analysis carried out found that the antecedents of young Indian professionals depended on the perceived ease of the tax system, personal innovativeness in information technology, relative advantage, performance of filing service, and compatibility. The implication of the findings to the current study is that for any online system to succeed whether for small, medium or large taxpayers' category there must be the ease of use, innovativeness and accessibility.

In Malaysia, Ling and Nawawi (2010) carried out a survey on Integrating ICT Skills and tax software in tax education. The respondents were the tax practitioners and the study aimed at establishing the necessary skills required by taxpayers to fully utilize a tax online system. The study found that three skills are needed by a taxpayer to interact well with technology based tax system namely, spread sheet software, word-processing software and e-mail. The findings of this study has got implications on the current study in that in analysing the effectiveness of electronic filing system, one must not ignore the mandatory skills that would be users of the system need to have. Failure to consider such skills may make the intention of the system not to be realized as confirmed by Maede (2002). He confirmed that despite the heavy investment that the Malaysian tax authority put in new online system, only 20% of the targeted taxpayers were able to use it after three years of implementation. This was mainly attributed to lack of necessary user skills like computer literacy; however, taxpayer's behaviour also played a role.

In Kenya, especially in Kenya Revenue Authority, different studies have been done on the subject of technology and tax compliance with specific reference to tax filing. Muita (2010) and Makanga (2010). Makanga (2010) did a study on the adoption of technology as a strategic tool for enhancing tax compliance in Kenya. The case study was based on Large Taxpayers



which included companies with a turn over Kshs. 750 million and above, or government ministries and corporations. The objective of the study was to evaluate the role Technology would play in Kenya to enhance tax compliance among large taxpayers. The study found that in the fast changing business world, technology has become part and parcel of any business growth. Either KRA or Large Taxpayers must embrace modern technology to enhance efficiency in tax compliance. Muita (2010) in her MBA thesis has also done a related study on the factors that influence adoption and use of e-filing system among Large Taxpayers in Kenya. The study examined the skills required by the users of e-filing, the technology required and the tax authority's preparedness in enhancing the adoption of tax compliance based technology. The study found that for e-filing to effectively take off in Kenya skills, infrastructure and a conducive business environment are needed.

### **RESEARCH METHODOLOGY**

### **Research Design**

The research problem was solved using descriptive study design. This design enabled an analysis of the relationship between technology and levels of tax compliance in terms of on-line filing of tax returns and on-line remittance of taxes due. According to Doyle (2004), a descriptive study research refers to a body of techniques for collecting data and obtaining responses from individuals to a set of prepared questions. Descriptive study technique with self-administered questionnaires as the survey instrument is considered appropriate for this study.

# **Study Population**

The population of the study consisted of Small Taxpayers in Meru county Tax District in Kenya which currently is approximated to be 300,000 taxpayers (Domestic Taxes Report, 2013). Small taxpayers as opposed to medium and/or large taxpayers were suited for the study because of their peculiar characteristics. This category of taxpayers is characterised by rapid business expansion, unstructured management hierarchy and poor record keeping, hence adopting electronic filing may be a blessing in disguise to them.

# Sample Design

The stratified random sampling method was used in the study. Stratification was done for the taxpayers based on their sectors, i.e. (Transport, Manufacturing, Agriculture, Hospitability, Energy, Real estate) resulting in seven strata. A 0.02% of each stratum was then randomly picked for the study sample, resulting to 60 respondents. Further analysis of the impact of



technology on each stratum was then done based on tax returns filed, tax collected over the years and major challenges experienced with interaction with technology and taxation.

### **Data Collection**

The study used both primary and secondary data. Primary data was obtained by use of structured questionnaire containing both open-ended and close-ended questions. The questionnaire was administered to the Finance Managers/Directors of the sampled taxpayers and in case of sole proprietorship businesses to the proprietor. Secondary data to support the growth of tax compliance behaviour in Kenya among small taxpayers together with the trend was obtained from revenue reports of KRA's (Research & Corporate Affairs Department, 2013).

# Data Validity and Reliability

Triangulation may include multiple methods of data collection and data analysis, but does not suggest a fix method for all the researches. Triangulation is typically a strategy (test) for improving the validity and reliability of research or evaluation of findings Mathison (1988). Patton (2001) advocates the use of triangulation by stating "triangulation strengthens a study by combining methods." This can mean using several kinds of methods or data, including using both quantitative and qualitative approaches. In this study, multiple data collection and analysis like use of structured questionnaire containing both open and close-ended questions, Correlation and regression analysis, F and T tests and partial F test to enhance data validity and reliability were used.

#### Data Analysis

Data analysis was done using Statistical Package for Social Scientists (SPSS 20) where the hypothesis of the study was tested. Regression analysis was used to test the effect of technology on tax compliance among the small taxpayers in Kenya.

# **RESULTS AND DISCUSSION**

This chapter discusses the interpretations and presentations of the findings obtained from the study on the effect of online tax system on tax compliance in Meru County. The study used correlation and simple linear analyses to analyse the data. A multiple linear regression model was also used for this investigation putting into consideration three independent variables hypothesized to have tangible effects on the tax compliance. The model was made up percentage changes in tax compliance as the dependent variable while online tax registration, online tax filing and online tax remittance were the independent variables.



## **Descriptive Statistics**

#### Extent to which taxpayers use filing system

Table 2 below shows the extent to which the small tax payers utilize the online filing service offered by the Kenya Revenue Authority. It is clear from the table that the majority of the small tax payers use the system to a great extent (50%). Further, a significant portion of the sample which accounts to 35%, file their returns online with only 15 % filing tax returns manually.

NO. of tax payers	Frequency	Percentage
Very great extent	21	35%
Great extent	30	50%
Moderate extent	9	15%
TOTAL	60	100%

Table 3 below shows the extent to which small tax payers remit taxes online. It indicates that, out of all the sixty tax payers who have adopted the online tax system, 26% use the online tax remittance system moderately in making tax remittances. 42% of the small tax payers indicated that they pay their taxes online to a great extent while 32% of respondents rely on online tax remittance to a very great extent.

Frequency	Percentage	
19	32%	
25	42%	
16	26%	
60	100%	
	19 25 16	

Table 3: Extent to which Tax Payers use Online Tax Remittance System

# Effects of Online Tax Registration on Tax Compliance

One of the objectives of this study was to find out the effect of online tax registration on tax compliance. The online tax registration is measured by the percentage increase in the number of online registered tax payers over a period of five years while the tax compliance is measured as percentage change in tax compliance over the same period. In Table 4 below, 58.4% (R squared = 0.584) of variations in the dependent variable (tax compliance) can be explained by changes in tax registration (the independent variable). The correlation coefficient (R=0.804) indicates a strong positive correlation between these two variables. On the basis of correlation analysis, this result implies that online tax registration causes tax compliance among small tax payers in Meru County.



		Table 4:	Model Summary	,		
Adjusted R Std. Error of the						
Model	R	R Square	Square	Estimate		
1	.804(a)	.646	.584	.02393		
	-					

a Predictors: (Constant), Online Tax Registration

Analysis of variance (Table 5) for this model revealed that the relationship that exists between online tax registration and the tax compliance in Meru County is statistically significant (p=0.002<0.05) and thus this model can be considered a sufficient tool to explain the tax compliance trend. The hypothesis that there is no effect of online tax registration on tax compliance is there rejected at 5% level of significance.

	Table 5: Analysis of Variance					
		Sum c	of	Mean		
Model		Squares	df	Square	F	Sig.
1	Regression	.026	1	.026	13.000	.002(a)
	Residual	.116	58	.002		
	Total	.142	59			

a Predictors: (Constant), Online Tax Registration.

b Dependent Variable: Tax Compliance

From the model coefficients (Table 6), we obtain the regression equation:

Y = 0.253 + 0.239X1.

The constant of 0.253 represents a collection of factors which have not been explained by the model used in this study. Therefore, results imply that there are other factors that contribute significantly to tax compliance. From table 6 below, it was revealed that holding online tax registration constant; the tax compliance would be 0.253. Similarly, a unit increase in the online +tax registration would result to 0.239 increase in tax compliance.

Further, the linear coefficient (B=0.239) between online tax registration and tax compliance indicates by what linear proportion does the independent variable determines the tax compliance values. In this case therefore, tax compliance trend observed is caused by some hidden factors and online tax registration. The study also found that the p-value (p=0.035<0.05) was less than 0.05 an indication that the predictor variables was statistically significant in influencing tax compliance among small tax payers in Meru County.



Mode	9l	Unstandardized Coefficients		Standardized Coefficients	Т	Sig.
		В	Std. Error	Beta		
1	(Constant)	.253	.134		7.528	.05
	Online tax registration	.239	.184	3.655	.033	.035

Table 6<sup>-</sup> Coefficients

a Dependent Variable: Tax Compliance

# Effects of Online Tax Return Filing on Tax Compliance

In this section the researcher wanted to find out the extent to which tax compliance is affected by online tax return filing. Results (Table 7) show that it is possible on the basis of online tax return filing to explain 81.6% (R<sup>2</sup>=0.816) of the tax compliance trend observed. The simple correlation coefficient (R=0.903) reveals a very strong positive relationship between the independent and dependent variables.

# Table 7: Model Summary

			Adjusted	Std. Error of		
Model	R	R Square	R Square	the Estimate		
1	.903(a)	.816	.755	.04402		
a Predictors: (Constant). Online tax return filing						

redictors: (Constant), Online tax retur а

The ANOVA (Table 8) gives the findings for the significance test of this model. According to the analysis, the model significantly assesses the effect of online tax return filing on tax compliance. The significance (p = 0.024<0.05) means that the online tax return filing significantly positively affects tax compliance. Therefore, the hypothesis that there is no significant effect of the online tax return filing on tax compliance is rejected at 5 % level of significance.

# Table 8: Analysis of Variance

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.26	1	.26	13.000	.024(a)
	Residual	1.184	58	.02		
	Total	1.444	59			

a. Predictors: (Constant), online tax returns filing

b. DependentVariable: Tax compliance

The regression equation for estimating tax compliance based on the online tax return filing can be expressed as;

# Y = 0.445 + 0.034X2



Model		Unstandardized Coefficients Standardized Coefficients			т	Sig.
		В	Std. Error	Beta	-	
1	(Constant)	.445	.320		4.520	.020
	Online tax return filing	.034	.009	.903	3.649	.035

Table 9. Coefficients

a Dependent Variable: Tax Compliance

Results further indicate that both the constant and the online tax return filing significantly contribute to the value of tax compliance observed. This means that besides online tax return filing, there are other factors that have significant effect on tax compliance among small tax payers in Meru County. If online tax return filing was to be held constant, tax compliance would be at 0.445 (the value of the constant in table 9 above). Similarly, increasing online tax return filing by one unit, the tax compliance would increase by 0.034. All the p values are less than 0.05 indicating significant effects of the constant on the online tax return filing on tax compliance.

# Effects of the Online Tax Remittance on Tax Compliance

This section was meant to assess the nature of effect of the online tax remittance on the tax compliance by small tax payers in Meru County. The model summary (Table 10) shows that the online tax remittance explains 86.9% (R<sup>2</sup>=0.869) of the tax compliance observed in Meru County. Further, there exists a very strong positive correlation (R=0.932) between the two. Significance test under the analysis of variance (Table 11) affirms that the effect of online tax remittance on tax compliance is statistically significant (p=0.025<0.05) at 5% level of significance. The hypothesis that there is no effect of the online tax remittance on tax compliance is rejected.

	Table 10: Model Summary						
Model	R R Square Adjusted R Square Std. Error of the Estimate						
1	.932(a)	.869	.825	.03722			
a Predictors: (Constant), Online Tax Remittance							

Table 11: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.370	1	.37	19.474	.025(a)
	Residual	1.13	58	.019		
	Total	1.500	59			

a Predictors: (Constant), Online Tax Remittance; b Dependent Variable: Tax Compliance



The linear regression coefficients (Table 12) indicates that online tax remittance has a positive linear effect on the values of tax compliance observed in Meru County (B= 0.044). This effect is statistically significant while that of the constant is also significant. Using these coefficients, the linear regression model,

Y = .259 + 0.044(online tax remittance)

The standardized coefficient (R = (0.932)) is the Pearson correlation coefficient that defines the nature of linear relationship between variables. In this case, online tax remittance has a positive linear relationship with the tax compliance.

Table 12: Coefficients							
Model		Unstandardized Coefficients		Standardized Coefficients	Т	Sig.	
		В	Std. Error	Beta			
	(Constant)	.259	.349		3.039	.046	
	Online tax remittance	.044	.010	.932	4.452	.021	

a Dependent Variable: Tax Compliance

# Effects of Online Tax System on Tax Compliance in Meru County

This section was designed to investigate the combined effect of the variables analyzed as single items in this study. The effect of online tax system is considered to be an aggregation of the effects resulting from online tax registration, online tax return filing and online tax remittance. A multiple linear regression model used to assess the combined effect of these variables gave results (R = 0.805) and ( $R^2 = 0.648$ ). The finding R=0.805 indicates a high perfect positive correlation of the tax compliance and the independent variables. Additionally, the three variables under investigation provide information sufficient to account for 64.8%% of the tax compliance trends observed in Meru County (Table 13). This model is statistically significant at 5% significance level. Table 14 provides the significance of this model as P=0.025<0.05. Accordingly, the variables included in this model provide sufficient information to significantly explain the behavior of the tax compliance trends.

# Table 13: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.805(a)	.648	.602	.01696

a Predictors: (Constant), online tax registration, online tax return filing and online tax compliance



Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.631	2	.316	21.067	.025(a)
	Residual	.864	58	.015		
	Total	1.495	60			

Table 14: /	Analysis of	Variance
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a Predictors: (Constant), Online Tax Registration, Online Tax Return Filing and Online Tax Remittance. b Dependent Variable: Tax Compliance

Table 15 presents the coefficients of the variables in the multiple linear regression function.

# $Y = 0.589 + 0.029X_1 + 0.034X_2 + 0.044X_3$

The function includes the three variables. All the variables contribute significantly to the tax remittance trend observed for the small tax payers in Meru County (Table 16).

Model		Unstandardized Coefficients		Standardized Coeffic	ients T	Sig.	
		Std.					
		В	Error	Beta			
1	(Constant)	.589	.296		1.991	.296	
	Online tax	020	.018	1.296	2 200	.0252	
	registration	.029			2.390		
	Online tax	024	007	717	2 656	.0170	
	return filing	.034	.007	.717	3.656		
	Online tax	044	.022	1.624	2 409	.0177	
	remittance	.044	.022	1.024 3.49	3.498	.0177	

# Table 1: Coefficients

a Dependent Variable: Tax Compliance

# SUMMARY

The main objective of this research was to find out whether the online tax registration, online tax return filing and online tax remittance affect the tax compliance in Meru County. It was found out that these three metrics of online tax system significantly positively affect the tax compliance among the small tax payers in Meru County. Partial correlation analysis shows that individually, each of these independent variables had strong positive correlation with the tax compliance, the independent variable. In addition, a multiple linear regression and correlation analysis reveal a strong linear relationship between online tax system and tax compliance. This implies that the combined effect of the three independent variables on tax compliance is positive and significant.



# CONCLUSIONS

The following four conclusions can be made in line with the findings of this study;

Firstly, based on the finding that the Pearson's correlation coefficient(r=.804) between online tax registration and tax compliance was significant and positive, the study concludes that online tax registration has statistically positive significant effect on tax compliance. This implies that online registration significantly improves tax compliance

Secondary, tax compliance among small tax payers in Meru County is significantly positively affected by online tax filing. The study therefore concludes that increase in adoption of online tax return filing increases tax compliance and the reverse is true.

Thirdly, there exists a statistically significant positive effect of the online tax remittance on the tax compliance among small tax payers in Meru County. Therefore, the smaller tax payers remit tax online, the higher the tax compliance.

In general, online tax system has a significant effect on the tax compliance trends among small tax payers inMeru County. Accordingly, there are other underlying factors not investigated under this study that contribute to the tax compliance among small tax payers in Meru County.

# RECOMMENDATIONS

# **Policy Recommendations**

- i). The Kenya Revenue Authority should use effective measures to mobilize and motivate small tax payers to register online for turnover tax, value added tax among other taxes in order to increase tax compliance.
- ii). The Kenya Revenue Authority should enhance internet connectivity in the rural areas to foster growth in online tax filing and online tax remittance. This can be done by use of enterprise collaboration with telecommunication firms.

# **Recommendations for further research**

A further study should be conducted to identify and investigate other factors that affect tax compliance among small tax payers in Meru County. In addition, there is need for a research on the relationship between online tax system and tax compliance among big business firms in Kenya. Finally, a further study is necessary to investigate the factors affecting implementation of online tax system among small tax payers in Kenya.



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