Property Tax And Tax System For Revenue Mobilization

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Abstract:

Purpose: The study aimed to examine factors that improve property tax and tax system for revenue mobilization and accountability.

Methodology: The present study of a simple Random sampling technique was for the study with justification that the population is homogeneous. An instrument adapted (Questionnaires) consisting of a five-points-Likert scale was administered to property owners in their residence or at their workplaces.

Findings: The results of the regression analysis disclosed that based on the results, awareness of tax laws and property tax compliance behaviors have a positive relationship on revenue mobilization while digital systems of property identification and property tax administration systems have negative relationship with revenue mobilization therefore not supported.

Recommendations: The study recommends further education on property tax and its concept to citizens highlighting the importance of property registration and identification using digital systems for taxation in order to augment revenue generation.

Keywords: Property tax, revenue mobilization, tax systems.

1.0 Introduction

The local government system in Ghana was established on the assumption that government must develop the nation as a direct solution to the problems faced by the people which results from a shared responsibility of stakeholders; central government, local governments, parastatals, non-governmental organizations (NGOs) and the people (Adu-Gyamfi, 2014; Government of Ghana, 2008). This study asserts that taxation and revenue

mobilization powers given to the MMDAs authorizes them to generate revenue. Taxation in general is the financial vehicle of every country and local governments rely on property taxation for revenue generation across the world (Gordor, 2017). Property taxes levied by local governments promote local autonomy and accountability and support the provision of services at the local level (for example, schools, roads, transit, parks) and property values(Raju et al., 2021). Where property taxes levied by local governments finance local services, public sector decisions will tend to be more efficient as taxpayers will presumably support those activities for which the benefits received exceed the taxes (Bird & Slack, 2014). Taxes on immovable property have many benefits especially for local governments: thus, it is difficult to evade such taxes because property is immovable; the tax base cannot shift location in response to the tax; and property cannot be hidden (Slack & Bird, 2015).

Property rate is a potentially attractive means of financing municipal governments in developing countries. As a revenue source, it can provide local governments with access to a broad and expanding tax base. However, the yield from property rate in the developing countries and for that matter Ghana is extremely low due to the approach adopted for the tax administration (Muna & Osei, 2007). In most countries, property rate administration is decentralized to local governments and Ghana is not an exception. The local government Act (1993) of Ghana, Act 462 gives the local assemblies the mandate to levy tax on properties within their jurisdiction. In view of this, property rate determination and administration are at the discretion of local assemblies (Gordor, 2017). As a result, developing countries around the globe are undertaking fiscal decentralization and local government reforms to improve property tax economic efficiency and accountability of revenue mobilization (Kelly R., Designing a Property Tax Reform Strategy for Sub-Saharan Africa: An Analytical Framework Applied to Kenya, 2002).

To realize these potential property tax revenue improvements, countries must undertake strategic reform, combining policy and administrative interactions to improve tax base coverage, property valuations, collection, enforcement and taxpayer services. The tax policy reforms must adjust tax base definitions and tax rate structures along with making appropriate policy decisions linked to valuation standards, appeals, collection and enforcement. The tax administrative reforms must focus on improving tax base coverage, valuation, and collection, along with taxpayer services (Kelly R., 2013). The District Assemblies in Ghana are required to provide administrative, fiscal, social services and amenities to their residents. These responsibilities have been increasing in nature as a result of the gradual decentralization of some of these responsibilities which hitherto were being performed by the central government. If local governments are to carry out decentralized functions effectively, they must have adequate levels of revenue either through subvention or raised locally (Yeboah & Andrew, 2020). It is very imperative for local government assemblies to step up in improving property tax and tax system for their revenue mobilization and accountability in order to meet the increasing demands of social services and infrastructure development needs in their jurisdictions(Raju et al., 2021).

1.1 Problem statement.

Improving property tax and tax system is a concern both developed and developing countries of which Ghana is no exception. Collection of the property tax is a challenging task at all levels as it requires accurate property assessment, operational efficiency,

technical expertise, and administrative capacity. Assessing and improving the tax depends on sustained local efforts to have data on property and ownership. The question 'What new system, method, technique and or technology is the revenue collection department bringing on board to increase revenue mobilization through property taxation?' is very crucial and paramount. A major constraint to improving the property tax in transitional and developing countries is weak administration, often a result of political, institutional and capacity constraints (Yeboah & Andrew, 2020) . Property tax reforms must be designed cognizant of these constraints; existing reform environment, legal and institutional structures, government administration capacities, and political will, as all tax reforms must be country specific, adapting international best practice to each unique reform environment. Major administrative reforms, undertaken within a proper property tax policy framework, are crucial to ensuring sustainable implementation of a proportionate, equitable and efficient property tax system.

1.2 Objectives of the Research

The main objective of this study is to examine factors that improve property tax and tax system for revenue mobilization and accountability. In achieving this broad objective, the study seeks to:

1. investigate the influence digital systems for property identification on tax revenue mobilization;
2. determine the influence of taxpayer awareness of laws governing property tax among property owners;
3. investigate property tax compliance behaviors; and
4. study the challenges of property tax administration and tax systems.

2.0 Empirical Literature Review

Property tax is the oldest form of tax since the Egyptian, Babylonian, Persian, and Chinese civilization era; property tax was taken in form of land and crops, which were levied on citizens where non-compliance meant a court action, and such culprits were judged and subjected to punishment, by this property tax was by compulsion, thus everyone was meant to pay (Carlson R. , 2004). It was introduced in sub-Saharan region of Africa by their colonial masters. Even before their colonization, other forms of taxes practiced in Africa. For example, the weaker Kingdoms were levied to pay annual tax to their superior kings (Ali, Fjeldstad, & Hoem Sjursen, 2013) .The tax situation however in Ghana before attaining independence in 1957, was a similar to what was practiced in sub-Saharan African. Property tax in the Gold Coast era was known as "Ntokuaa tuor" which means (window tax) was enacted by the British. This tax was imposed based on the size of one's building(Raju et al., 2021). The idea behind this tax was that, big houses have more windows and therefore the tax was determined based on the number of windows one has on his or her building. Hence, the greater the number of windows, the higher one's tax obligation and vice versa (Adem & Kwateng, 2007). However, there were arguments among the people about the bias inherent in the tax system, many stood against that system because there was no equity and fairness, such that some citizens with larger houses may pay less tax because their houses might have had less windows and vice versa, so therefore, the system did not conform to equity (Adem & Kwateng, 2007).

This unfairness of the 'window tax' led to the establishment of Municipal Council Ordinance in 1951 under which four municipalities which were made up of Accra, Kumasi, Cape Coast and Sekondi-Takoradi started. These aforementioned municipalities were given the legal authority to impose rates on buildings with yearly rental value of not less than 6 pounds (Petio, 2013). The Local Government Ordinance was enacted in 1954 to also confer the mandate on urban and local councils to collect property tax in their jurisdictions. The regulations prescribed the procedure for assessing non-movable property value and also gave its definition as any house, hut, structure, shed or roofed enclosure, whether used for the purpose of human habitation or otherwise (Local Government Ordinance, 1954). After attaining independence, efforts were made by many successive governments to make property tax more organized and workable. In view of this, proper legislative instruments and regulations came into being to guide property tax in the country. To mention few are Municipal Rating (Immovable Property Rate) Regulations (L.I. 212), 1959; the Local Government (Immovable Property Rate) Regulations (L.I. 40), 1960; the Local Government (Immovable Property Rate) Amendment Regulations (L.I. 348), 1964; the Municipal Rating (Immovable Property Rate) Amendment Regulations (L.I. 349), 1964; the Municipal Rating (Immovable Property Rate) Amendment Regulations (L.I. 650), 1970. In Africa today, for that matter Ghana, who have shifted from the centrally planned governance to decentralization through the local governance system during the 1980s, were advised to practice decentralization after implementing the structural adjustment programs (Olowu, 2002). Thus, Ghana started its decentralization in 1988 when the PNDC Law 207 was passed and the country was re-demarcated(Raju et al., 2021). The Local Government policy was in operation until PNDC Law 207 was changed with the Local Governance (Act 462) 1993. Article 240(1) of the 1992 constitution states that Local Government in Ghana should be decentralized as soon as possible

2.1 Digital Systems for property identification influence property tax revenue mobilization.

Tax revenue has been a number one source of financial resources for developmental agenda (Yeboah & Andrew, 2020). Where governments face fiscal difficulties and need to address delayed or deferred financial obligations of all types, an effective property tax can be a valuable instrument for the common good (Gordor, 2017). If the local governments are able to generate a lot of revenue internally, some of the funds can be used to undertake development projects in their respective Assemblies instead of relying solely on the Central Government. There is therefore the need to improve the Internal Revenue Mobilization in order to meet country needs. While this is an important revenue source to local government units across the world, the fixed nature of its components makes it easily predictable, and therefore difficult to explore effectively in order to generate revenues (Riel, 2017). The focus on assessing properties is important in generating property tax revenue, thus enabling the valuation of property. There are disparities methodologies in property assessment which is influences property identification thus requiring a reform (Färber, Salm, & Hengst Earth, 2013)

Decisions on what properties to tax and what to exclude are typically outlined in country legislation (De-Cesare, 2012). Various parts of African legislation studied, including Sierra Leone and Malawi, indicated that all properties are to be taxed, and should include land and buildings held either privately or publicly(Raju, 2021). Exclusions typically relate to

religious buildings e.g., churches or mosques, public hospitals or schools. There are three general varieties of property: land and improvements to land (immovable man-made things, e.g. buildings), personal property (movable things), and real estate or realty which is the combination of land and improvements to the land.

According to a study conducted by (De-Cesare, 2012), most jurisdictions now use digital systems upgraded with geographic information systems (GIS). Some municipalities have already developed multipurpose cadaster cost-effective systems that integrate parcel-level data from public and private entities. Participating institutions provide, share, and upgrade information continuously using common alphanumeric and cartographic standards. Because of the positive influence on revenue mobilization to a large extent, it is gaining wide support in Latin America (Kelly R. , Designing a Property Tax Reform Strategy for Sub-Saharan Africa: An Analytical Framework Applied to Kenya, 2002; Ali, Deininger, & Wild, 2020). The unique ability of the GIS to store up to date and to retrieve data among other things, supports the argument that it is the basic pillar of real estate taxation since any estimate of fair market value relies heavily on cadastral data. An example of such improved technology is the use of satellite images to geo-reference cadastre information.
According to Fish (2015), Satellite imaging/GIS is essential to ensure a satisfactory and complete discovery phase in terms of data collection, as well as other indirect advantages relating to collecting data that can be shared with other departments in particular for town planning. This was supported in Ali, Deininger, & Wild, (2020). The present study therefore proposes that;

H1. The use of Digital Systems for property identification influence property tax revenue mobilization in Ghana;

2.2 Level of awareness of laws governing property tax among property owners

According to Fish (2015), traditionally local councils have used revenue collectors to coerce cash from residents on a door-to-door basis. This method tended to be focused on the vulnerable poor and marginalized who are often fearful of authority. This approach gives rise to corruption opportunities and can be a roadblock for progress. The main problems facing the local governments in Ghana is as a result of lack of information awareness and difficulty in relaying information to stakeholders (Antwi, 2013). In Ameyaw, et al (2012), the results of a study conducted indicated that 82% of the citizens demonstrated awareness of their obligations to the MMDAs, however a greater portion of that percentage do not translate that awareness into compliance of their civic responsibility of paying their tax revenue to the MMDAs which constitutes a greater percentage of non-compliance. The difficulty in the revenue mobilization was also elaborated in related literature indicating that most stakeholders that fulfill their tax obligations are “chased” by the tax collectors indicating a high sense of reluctance in fulfilling tax obligations to their respective MMDAs despite the high level of awareness (Akorsu, 2015). Payments of tax made solely through commercial banks or local financial associations to reassure residents that funds are being handled in a transparent manner that ensures accuracy (Fjeldstad, 2017). The solution is to improve collection rate by promoting public awareness programs to increase compliance and strengthen measures to increase awareness of tax laws governing property tax. The present study therefore proposes that;

H2. The level of awareness of laws governing property tax among property owners is minimal hence affect revenue mobilization in Ghana;

2.3 Property tax compliance behaviors

Tax generally affects taxpayers economically. Martinez-Vazquez & Sepulveda (2011) asserted that a good tax should be efficient and not induce any significant behavioral responses of individuals and firms. However, where the taxpayers receive appropriate benefit (benefit principle) from tax, the tax approximates the fee and is therefore considered as an efficient tax. In addition, the perception of fairness by the taxpayer and the stability of revenue collections by the administering authority are the behaviors imitated by stakeholders (Rahman et al., 2018).

Findings of a study by Ayodele (2006) suggested that taxpayers in parts of Africa see tax collectors as corrupt, thus paying property tax is a means of helping tax collectors and politicians to enrich themselves. According to Bird and Slack (2014) the main objective for imposing property tax is defeated as taxpayers feel abused and cheated thereby forming a negative perception about the tax hence reluctance to pay. Property taxpayers in Ghana lack tax education so therefore do not see the need to pay property tax (Adaletey, Raju, & Phung, 2018). This was opposed by a study conducted by Armah-Attoh & Awal, (2013) where the findings suggested that Ghanaians generally are aware of the existence of property tax and know they are obliged to pay it, however they do not see the need to pay. This is because MMDAs do not provide enough social services that can motivate taxpayers, hence the feeling of being cheated by the MMDAs. The present study therefore proposes that;

H3. Property tax compliance behaviors influence revenue mobilization in Ghana;

2.4 Challenges of property tax administration and tax system.

Ghanaians in general do not believe in tax administrators in Ghana including the local government (Adaletey, Raju, & Phung, 2018). The tax administration system is considered fragile, and most taxpayers have lost confidence in the system. Enid & Bird, (2014) suggested that no other form of taxation is more dependent on proper administration than property tax. This is one of the reasons why local governments are not able to generate enough funds internally because a good tax administration affects not only revenue but equity and efficiency (Enid & Bird, 2014). Rosengard (2013) described property tax as "tax everyone loves to hate" due to its unpopularity between taxpayers and politicians because where local governments levy property tax, there is an implication of accountability on the part of the government to the citizens which is mostly nonexistent. Property values are mostly self-assessed due to limited data supplied by owners to determine costs of properties especially in most African countries (Enid & Bird, 2014). There is the need to digitize the functions for effective administration which is almost non-existent in most African countries (Ali, Fjeldstad, & Hoem Sjursen, 2013). Summaries from related studies concluded on factors such; exemptions and locations advantages, differential tax treatments due to locations, property tax competition among local governments, lack of uniform application of property tax rates among others, as the challenges of administering property taxes (Bird, Enid, & Tassonyi, 2012; Norregaard, 2013; Rosengard, 2013).

The trend of taxpayers losing confidence in tax administrators is not peculiar to Ghana alone but other parts of the world including some advanced countries. In conclusion, after reviewing the article of Enid & Bird, (2014) and Ali, Fjeldstad, & Sjursen (2019), it was concluded that property taxes have the potential to add significant revenue to the internally generated funds of MMDAs. However, citizens' compliance for property tax in the Municipality is next to zero, mainly due to negative perceptions that have been formed about property tax in the local assemblies due to lack of understanding of the property tax concept and lack of trust and confidence in tax administrators in the local assemblies. The present study therefore proposes that;

H4. Challenges of property tax administration and tax system affect revenue mobilization in Ghana.

3.0 Research Methodology

The target population of the study included owners of immovable properties in Ho, Volta Region. The total number of immovable property owners is unknown; thus, a definite statistical sound sample size is not feasible for the study. A sample size of 120 property owners (taxpayers) who were either indigenes from Ho or other regions but reside in Ho were selected in order to conduct the study successfully. The response rate was 80% (96) out of which 94% was valid for analysis (90) and 6 was rejected due to incompleteness of data. Krejcie and Morgan (1970) have worked in determining sample size for research, they propose that the proper sample size for 120 population is at least 92. Simple Random sampling technique was employed for the study with justification that the population is homogeneous. Thus, taking a representative sample of people will reflect a representation of the population (Creswell, 1999).

An instrument adapted (Questionnaires) consisting of a five-points- Likert scale was administered to property owners in their residence or at their workplaces. All items for the questionnaire were adopted and adapted from the previous instrument. The questionnaires were distributed to the literate respondents to fill by themselves with no assistance from the researcher. Questionnaires adopted were employed to ensure validity of data collected for analysis.

4.0 Empirical findings and discussions

The data collected from the questionnaire adopted and adapted for the study was based on the following research questions:

1. *What registration factors influence property tax revenue mobilization in Ghana?*
2. *Does the level of awareness of laws governing property tax affect revenue mobilization in Ghana?*
3. *Does property tax compliance behaviors influence revenue mobilization in Ghana?*
4. *What challenges of property tax administration and tax system affect revenue mobilization in Ghana?*

This table below shows the response rate for the study.

PROPERTY OWNERS	TAXPAYERS	RATE
RESIDENTIAL	67	74.4%
COMERCIAL	14	1.6%
BOTH	9	10%
TOTAL	90	100%

Table 1 Statistics of Property owners

4.1 Descriptive Analysis of Demographic Data

The adapted instrument was employed to collect demographic data from respondents including gender, age, level of education, occupational status and type of property. The descriptive statistics featured in the study include; the mean, median, maximum value, minimum value and standard deviation. The results suggested positive values, with no missing values and valid for analysis. These statistics are shown in the tables below:

Statistics						
		Gender	Age	Level of Education	Occupational Status	Type of Property
N	Valid	90	90	90	90	90
	Missing	0	0	0	0	0
Mean		1.256	3.344	3.833	1.967	1.356
Median		1.000	3.000	4.000	2.000	1.000
Mode		1.0	4.0	4.0	1.0	1.0
Std. Deviation		.4386	.7214	.7680	.9174	.6588
Variance		.192	.520	.590	.842	.434
Minimum		1.0	2.0	3.0	1.0	1.0
Maximum		2.0	4.0	7.0	3.0	3.0
Sum		113.0	301.0	345.0	177.0	122.0

Table 2: Descriptive Statistics of Demographic Variables

The response for Gender of taxpayers received indicated that, of the total valid responses, 74% (67) are male and 26% (23) are female respondents. The age distribution indicated that 14.4% (13) are between the ages of 26-30, 36.7% (33) are between the ages of 31-40, 48.9% (44) are between the ages of 4 and above. The level of education of respondents indicated that 35.6% (32) of respondents have a diploma, 47.8% (43) have a degree, 15.6% (14) have masters and 1.1% (1) have other educational qualifications. The responses received for Occupational status indicated that 43.3% (39) of respondents work in the private sector, 16.7% (15) are in the public sector, 40% (36) are self-employed. The type of property of taxpayers for the study suggested that 74.4% (67) or the properties are residential, 15.6% (14) are commercial and the rest 10% (9) are used as both commercial and residential properties.

4.2 Correlation Analysis of Variables

The coefficient of correlation between variables denoted by r, measures the strength of the relationship between the variables. The values range from +1 and -1. Negative values closer

to -1 indicate a weaker correlation while positive values closer to +1 indicate a stronger relationship.

Variable names	Symbols	Mean of DSP	Mean of AWL	Mean of PTC	Mean of TSA	Mean of RM
Digital systems	**DSP**	**1**				
Awareness of laws	**AWL**	**.246***	**1**			
Compliance	**PTC**	**.896****	**.417****	**1**		
Tax Adm Systems	**TSA**	**.116**	**.946****	**.242***	**1**	
Revenue mobilization	**RM**	**-.186**	**.311****	**.243***	**.197**	**1**

Table 7 Correlation Analysis

The results of the study show the variables have a linear relationship ranging between a strong negative (-0.186) and a strong positive (0.946) (See Appendix E).

4.3 Regression Analysis of Variables

The statistical in-built software: SPSS was adopted for the testing of hypotheses using regression analysis to facilitate making decisions based on the scientific study (Haenlein & Kaplan, 2004).

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.944[a]	.891	.886	.19834	.891	173.423	4	85	.000

a. Predictors: (Constant), Mean of Factor 1, Mean of Factor2, Mean of Factor 3, Mean of Factor 4

b. Dependent Variable: Mean of Factor 5

Table 8 Model Summary

The rule of thumb for R-values is that a value of greater than 0.4 is acceptable for further analysis. In this case, the value is .944 shows a good correlation between the dependent and independent variable. The R-square shows a total variation that could be explained by the independent variables. The rule of thumb is that a value of greater than 0.5 shows the model is effective to determine the relationship thus, the results of .891 are good. The model summary table shows satisfactory results therefore the results can be used for hypothesis testing.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	27.288	4	6.822	173.423	.000[b]
	Residual	3.344	85	.039		

Total	30.631	89			

a. Dependent Variable: Mean of Factor 5
b. Predictors: (Constant), Mean of Factor 4,, Mean of Factor 3, Mean of Factor 2, Mean of Factor1
Table 9Analysis of Variance

4.3 Validity and Reliability tests

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.766	.765	36

Table 4Overall Reliability test using Cronbach's coefficients

The table above showed the summary for overall reliability of the research instrument at .756 Cronbach's alpha indicating scales used in measuring research variables are reliable (good).

	Items	N	Mean	Std. Deviation	Cronbach's
Mean-Digital Systems	5	90	2.9607	.55804	.734
Mean-Awareness of Laws	10	90	3.7913	.72241	.861
Mean-Compliance	9	90	3.2568	.61317	.729
Mean-Tax Adm Systems	8	90	3.9869	.73290	.758
Mean of RM	4	90	3.4238	.61354	.733

Table 5 Reliability test for each Research Variable.

Descriptive Analysis of Research Variables
The descriptive statistics of the research variable include; the mean, median, maximum value, minimum value and standard deviation. The items were converted into a composite variable by computing the mean statistics of the research items. There are 36 items adopted and adapted from previous scales.
The present study added the test of skewness and excess kurtosis to test for normality. The rule of thumb is that if either value is close to zero, then the data set is not normally distributed, therefore the present study's datasets are moderately skewed at a kurtosis of -0.107(See Appendix E). Therefore, the present study states a 95% confidence the data does not fit the normal distribution.

The summary of construct reliability using Statistical Package for Social Sciences are indicated in the table below:

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
FRM	**0.734**	**0.701**	**0.800**	**0.702**
AWL	**0.861**	**0.800**	**0.830**	**0.515**
PTC	**0.729**	**0.797**	**0.830**	**0.561**
TSA	**0.758**	**0.952**	**0.938**	**0.702**
RM	**1.000**	**0.820**	**0.938**	**0.761**

Table 6Construct Validity and Reliability

The results indicated that the evidence supported the existence of internal consistency in the scale using Cronbach's Alpha coefficients. The rho_ coefficient of Dijkstra-Henseler measures composite reliability. The rule of thumb is that Rho_A must be greater than (>) 0.7 to establish Composite Reliability. Therefore, the results have supported an establishment of composite reliability. To establish a discriminant validity, the Average Variant Extract must be greater than 0.5 (Henseler, Ringle, & Sarstedt, 2014; Fornell & Larcker, 1981).

5.0 Conclusions

Based on the literature reviewed and the findings from the present study, property taxes have the ability to boost revenue mobilization within local governments of any country. However, there are factors that influence that objective. Overall, property tax revenue mobilization in Ghana is difficult due to the:

- Ineffective education and sensitization of the property tax concepts and procedures;
- Negative perceptions of taxpayers towards property tax in general;
- Lack of trust and confidence in tax administrators;
- Incompetence on the part of the assembly to keep records on individual landed properties;
- Administrative lapse and poor tax system management;
- Non enforcement of property tax laws and punishing tax evaders.

Based on the conclusions drawn, the study recommends that;

The MMDAs should provide further education on property tax and its concept to their citizens. This can be done through public and community education and sensitization programs. The focus should be on the need to pay property tax, the uses and importance, the legal perspective among other things the medium should allow for feedback. The tax policies on property tax should be geographically neutral, and evenly distributed to eliminate thehigh fiscal disparities and the undesirable differences in the degree of revenue autonomy among localities. This is because local governments with less revenue autonomy are not able to exert more discretion in their expenditure decisions, and this might translate into lower ability to tailor the public service provision to the preferences of their community. This may equip the citizens and give them insight to understanding the need

for property tax, thereby improving upon property tax and tax system for revenue mobilization.

5.1 Theoretical contributions

The present study contributes to the existing research on using property tax to generate revenue for local government operations. The first dimension of the study investigated the influence of digital systems for property identification within local government and this was recommended in a study by Fish (2015) and supported as a major contribution to improving local government revenue by (Abdulai, Tundyiridam, & Alhassan, 2016). The study identified the relevance of digital systems and asserted that local governments are unable to use digital systems to identify properties in order to levy the appropriate taxes, which will enable the revenue mobilization of the local government. This was supported in related studies by (Bahl, Jorge, & Youngman, 2008).

This study suggested that taxpayer's awareness of laws has a significant positive relationship with revenue mobilization, thus a change in taxpayer awareness of laws will result in a change in revenue mobilization. The focus is on influencing taxpayer awareness through education and ensuring that there is a visual representation of the relevance and use of property tax revenue as supported in the findings of Fjeldstad,(2017); Adaletey, Raju, & Phung, (2018).

There was no significant relationship between Property tax compliance behavior and revenue mobilization, this was supported by a study by Ahmad, Brosio, & Pöschl, (2014) and Alabele (2019) who associated this to corruption of tax officials especially in developing countries such as Ghana (Yeboah & Andrew, 2020). The results of the present study suggested a negative significant relationship of property tax administration and its effect on revenue mobilization. This is a challenge of most countries that do not have established structures resulting in mismanagement and lack of efficiency and equity in administering property taxation.

5.2 Policy Implications

Most governments recognize the importance of property tax and its contribution to revenue generation, though there are implications regarding policy. The first policy issue is the need to identify and address the property tax base. This is due to the general or selective nature of property tax application. Thus, some policy applications apply the same rules or policies to property tax while others are selective in terms of application therefore having an impact on property owners as well as the revenue generated from property tax within different locations. There is also the implication of identifying how future potential gains from property tax is treated. In Ghana currently, there is no reliable data on rental of property therefore limitation valuation of future potential property gains from property.

5.3 Practical Implications

As a result of the limitation of data on the property ownership or rental system, most properties are valued using area-based approaches, thus the same building in the capital city is valued differently from other areas. In practice, other methods of property valuation are adopted all resulting in the lack of uniform application of property tax. Property

owners are mostly unaware of policies governing property ownership in Ghana therefore subjecting them to abuse by the local authorities administering the property tax laws. Governments may easily reform property tax and link it to broader public sector management for efficient administration rather than leaving it to local governments (Bird, Enid, & Tassonyi, 2012).

5.4 Limitations and Future Research

Property tax is a complex levy and its administration is not simple in several ways as a result of different components. It is not easy to determine the incidence of property tax and its interplay of factors makes it challenging for most governments to administer property tax fairly, equitably and efficiently, especially where the tax structures and policies are not well established. Nonetheless, Bird, Enid & Slack (2013) asserted that developing countries may be able to overcome such challenges by linking property tax management to broader reforms, educating taxpayers to be aware of tax laws (Adaletey, Raju, & Phung, 2018) and administering property tax using the canons of taxation. Considerably, a careful pre-planning of property tax reform will contribute to revenue generated through property tax. It is essential to design a property tax policy reform with the support of both public and private sector institutions. The focus should be on property tax administration and dealing with property factors such as registration and valuation, housing and infrastructure, property revenue management, governance and accountability among others.

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APPENDIX

A. Analysis of Variance

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	27.288	4	6.822	173.423	.000[b]
	Residual	3.344	85	.039		
	Total	30.631	89			

a. Dependent Variable: Mean of Factor 5

b. Predictors: (Constant), Mean of Factor 4, Mean of Factor1, Mean of Factor 3, Mean of Factor 2

Table 9Analysis of Variance

Generally, 95% confidence interval or 5% level of the significance level is chosen for the study **Invalid source specified.** Thus, the p-value should be less than 0.05. In the above table, it is .000. Therefore, the result is significant. The rule of thumb for F-ratio is a value greater than 1 shows an efficient model, the above table shows 173.423 which is good.

B. Hypotheses Testing

No	Independent Variable	Sig-Value	Hypothesis Testing @ 95% C.I.	Interpretation
1	Use of Digital Systems	.019	Null Hypothesis not rejected (0.019 > 0.05)	No significant change in tax revenue mobilization due to the use of digital systems for property identification, because of the Sig. value of 0.019, is greater than the acceptable value of 0.05.
2	Awareness of Tax Laws	.000	Null Hypothesis Rejected (0.000 < 0.05)	There is a significant change in tax revenue mobilization due to the awareness of tax laws, because of the Sig. value is 0.000, is less than the acceptable value of 0.05, With a 1% increase in the promotion of digital systems for property identification, the revenue mobilized from property tax will increase by .116 (B value).
3	Compliance Behaviors to Property Tax	.434	Null Hypothesis not rejected (0.434 > 0.05)	No significant change in tax revenue mobilization due to the compliance Behaviors of taxpayers, because of the Sig. value of 0.434, is greater than the acceptable value of 0.05.
4	Property Tax administration and System	.000	Null Hypothesis Rejected (0.000 < 0.05)	There is a significant change in tax revenue mobilization due to Property Tax administration and System, because of the Sig. value is 0.000, is less than the acceptable value of 0.05.

Table 10Hypotheses Testing for Research Variables.

C. Results of Hypotheses Significance

Factor	H	Regression Coefficient	T-values	P-values	Significance	Causal Relationshi

		s (b)				p
DSP ➡ RM	H1	-2.062	-2.382	.019	Not Significant	Negative
AWL ➡ RM	H2	+.116	-23.394	.000	Significant	Positive
PTC ➡ RM	H3	+2.086	.785	.434	Not Significant	Positive
TSA ➡ RM	H5	-.177	20.415	.000	Significant	Negative

Table 11Results of Hypotheses Significance

Based on the results shown in the Table 2 above, the hypotheses H2 and H3 are supported, however the H1 and H4 are not supported.

D. Goodness of Fit Test Statistics

Goodness of Fit Test Statistics

	Mean of Factor1	Mean of Factor 2	Mean of Factor 3	Mean of Factor 4	Mean of Factor 5
Chi-Square	23.067[a]	87.333[b]	22.000[a]	68.044[a]	34.800[c]
df	7	9	7	7	8
Asymp. Sig.	.002	.000	.003	.000	.000

Table 12Goodness of Fit using Chi-Square

The model fit for a research model is identified as a Goodness of Fit (GOF) which is the comparison between the covariance matrices saturated, the results are less than 0.08 hence significant, therefore represent an acceptable model.

E. Model Fitting Information

Model Fitting Information

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	360.282			
Final	.000	360.282	14	.000

Link function: Logit.

The model fitting information for a research model identified as a Goodness of Fit (GOF) also represents an acceptable model of less than 0.08 significance level.

F. Correlations

Correlations

		Mean of Revenue Mobilization	Mean of Digital Systems for PT	Mean of Awareness of Tax Laws	Mean of Property Tax Compliance	Mean of Tax System Administration
Pearson Correlation	Mean of Revenue Mobilization	1.000	-.186	.311	.243	.197
	Mean of Digital Systems for PT	-.186	1.000	.246	.896	.116
	Mean of Awareness of Tax Laws	.311	.246	1.000	.417	.946
	Mean of Property Tax Compliance	.243	.896	.417	1.000	.242
	Mean of Tax System Administration	.197	.116	.946	.242	1.000
Sig. (1-tailed)	Mean of Revenue Mobilization	.	.040	.001	.011	.031
	Mean of Digital Systems for PT	.040	.	.010	.000	.137
	Mean of Awareness of Tax Laws	.001	.010	.	.000	.000
	Mean of Property Tax Compliance	.011	.000	.000	.	.011
	Mean of Tax System Administration	.031	.137	.000	.011	.
N	Mean of Revenue Mobilization	90	90	90	90	90

	Mean of Digital Systems for PT	90	90	90	90	90
	Mean of Awareness of Tax Laws	90	90	90	90	90
	Mean of Property Tax Compliance	90	90	90	90	90
	Mean of Tax System Administration	90	90	90	90	90