



INFLUENCE OF HUMAN FACTORS ON REVENUE MAXIMIZATION IN DEVOLVED UNITS IN KENYA

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ABSTRACT

Human factors have been viewed as one of the many determinants of revenue maximization in the devolved units in Kenya. The goal of this study was to help the devolved units underscore the county revenue collection ecosystem. This paper therefore aimed to evaluate the influence of human factors on revenue maximization for county governments in Kenya, culminating in the designing of an effective revenue mobilization strategy. The research adopted both a matrix and a descriptive survey method. The sample frame was extracted from the 47 counties with a sample size of 5 counties. The targeted population constituted key informants, revenue collection clerks and taxpayers. Primary data was obtained using questionnaires. Quantitative data were analyzed using the Statistical Package for Social Sciences (SPSS) version 22. The study also used inferential statistics for data analysis where regression analysis, correlation analysis and cross-tabulations were conducted to give further meaning to the data collected. The research established that human factors in the devolved units play a significant role in revenue maximization.

Key Words: *Human factors, maximization of revenue, devolved units, Kenya*

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INTRODUCTION

Revenue maximization can be achieved in the form of a growing collection of taxes, excise and customs duties, issuing of licenses or other sources of income to facilitate smooth execution of government operations. Public revenue collection is an integral component of fiscal policy and administration in any economy because of its influence on national government operations and the grassroots. It is a stimulant to every government as it is the main instrument through which government funding is ensured. Revenue collection should fulfil and conform to best practices of equity, ability to pay, economic efficiency, convenience and certainty (Gicho, 2018). For a government to match its performance with the needs and expectations of its citizens, it should increase its fiscal depth without incurring costly recurring overheads (Gidisu, 2012).

Kenya has undergone a significant political change in the last few years, the most notable being the recent enactment of a new constitution. In this new constitution, the government's operations have been devolved from a national management level to largely independent running County Governments, 47 in total. Each County is self-governing with some support from the national government. A good number of County Governments are still in the process of implementing systems that allow for the maximum and compelling means of collecting revenues across the County. This study sought to determine the influence of human factors on revenue maximization strategies that counties may employ.

Njeru (2014) is of the view that the demand for change witnessed notably in African countries is prompted by abuse and misuse of highly centralized systems where weak and small communities have no chance of ever ascending to power, and going by the famous Kenyan slogan, 'their time to eat'. It is widely believed that fiscal decentralization encourages the flow of local information; public participation,

therefore, linking citizen needs to policies and programs thereof. While this may be the optimism by proponents of decentralization, it is also evident that if not well nurtured and a structured methodology of ascending to power disagreed upon, decentralization may as well disenfranchise the marginalized by creating a monster of inequity by flourishing the elites and a breeding ground for clannism and small demigods voting as a block at the local level. The risks could be monstrous where democratic institutions are compromised, especially electoral systems, and where the poor, whose democratic rights are compromised by their very nature of want, may as well cast their vote for the highest bidder or even forgo voting if at all there exists an immediate solution to their more pressing issues like putting food on the table for their families (Nyanjom, 2011).

Increasingly too, Kenyans are beginning to wonder whether the devolved system is living to their expectations. Another risk associated with poorly designed decentralization is an increased culture of dependency, a fact that partly triggered the need to conduct this study; the *'Pesa Mashinani'* ideology. Besides, a flawed decentralized system could have misplaced priorities with high social expenditure budgets as opposed to capital investments; defeatist to the very reason for which devolution was considered in the first place. Lastly and with much reservation because it is almost manifest in Kenya, this structure of government and the costs associated with it: running a parallel central government at the county level, evidently a heavy burden to the taxpayers.

Primarily the role of devolution in Kenya is to delegate power, transfer resources, and provide for great representation down to the local level (Kirira 2011). Therefore, the highest expectation in the hearts and minds of many Kenyans is to regularly participate in their governance to deliver the promise of faster development and access to basic amenities and services. Devolution further promises to

deliver affirmative action, positive discrimination, and acceptable levels of representation and self-governance to minorities and other marginalized groups.

The GoK 2010, clearly seeks to mitigate the social-political and economic injustices that created huge disparities amongst communities and individuals. The promulgation has given birth to current vices that define populations in Kenya; impunity, poverty, corruption, ethnicity and the widening gap between the rich and the poor and an underlying social unrest exhibited during electioneering periods when the assumed assent to 'it is our time to eat' fails to materialize, the epitome of such witnessed in the 2007/2008 post-election violence.

Statement the Problem

Kenya has undergone a significant political change in the last few years, the most significant being the recent enactment of a new constitution. Article 209 of the constitution of Kenya 2010 mandates County governments to collect their revenues and retain and utilize the same for their local obligations. Cottarelli (2011) on revenue mobilization in a sample of developing countries concluded that a lot needed to be done by the respective countries to maximize the revenue collection in most African countries. Numerous studies have been carried out on revenue mobilization, but there has not been significant research on the factors affecting the optimal revenue collection in the Kenyan context. Furthermore, the studies excluded some essential elements on the factors affecting the optimal revenue collection, which are critical for the performance and success of a tax system.

The debate today is about increased revenue allocation for the county governments by the central government for them to meet devolved obligations which include agriculture, county road transport, health, sanitation among other functions as well as recurrent administrative expenditures. Although it is

the responsibility of the National government to allocate a certain amount of the total budget to the county government (GoK, 2010), the county governments also have a responsibility of ensuring that their internal funds are collected to an acceptable margin of error. The preceding discussion indicates that there is a gap in the manner in which county governments are collecting their revenue. This study sought to establish the influence of human factors on revenue maximization in devolved units in Kenya and which should subsequently enable the counties to have enough funds to finance their operations.

The objective of the Study

To examine the influence of Human Factors on revenue maximization in devolved units in Kenya.

Research Hypothesis

H₀: Human Factors do not significantly influence revenue maximization in devolved units in Kenya

LITERATURE REVIEW

Lewin's Change Management Theory

Change management Theory was developed by Lewin in 1940 with a view of understanding both the organizational and structural change. Lewin (1940), change is a common thread that runs through all businesses regardless of size, industry and age. Our world is changing fast, and organizations must change quickly, too. Organizations that handle change well thrive, while those that do not struggle to survive. The thought of "change management" is a familiar one in most government units today. But how government units manage change and how successful they are at it varies enormously depending on the nature of the governance, the change and the people involved (Ndunda *et al.*, 2015). A crucial part of this depends on how well people within county unit governance understand the change process. By focussing at change as a gradual process with separate stages, you can prepare yourself for what is

coming and make a plan to manage the transition – looking before you leap. All too often, people go into change thoughtlessly, causing much unnecessary turmoil and chaos. To begin any successful change process, you must first start by understanding why the change must take place. The motivation for change must be engendered before the change can occur. One must be helped to re-examine many cherished assumptions about oneself and one's relations with others. This is the unfreezing stage from which change begins.

Unfreezing stage of change involves preparing the government unit to accept that change is necessary, which involves breaking down and introspecting the existing status quo before you can build up a new way of operating. Key to this is developing a compelling message showing why the existing way of doing things cannot continue. Old habits and behaviours on ways of thinking, processes, people and organizational structures must all be carefully examined to show employees how necessary a change is for the organization to create or maintain a competitive advantage in the marketplace. This is easiest to frame when you can point to declining revenue collected figures, poor financial results, worrying taxpayers' satisfaction surveys, among others. These show that things have to change in a way that everyone can understand. To prepare the government units successfully, you need to start at its core – you need to challenge the beliefs, values, attitudes, and behaviours that currently define it. Using the analogy of governance, you must examine and be prepared to change the existing foundations as they might not support new changes. Unless this is done, the whole government unit may risk folding (Schein, 1992).

Today change is constant and organizational leaders who anticipate change and react rapidly and responsibly become successful. However, the organizational leaders who anticipate and invent the future are even more successful because as they

initiate the change, they automatically become leaders in their industry. Other organizations are followers that adapt to change, while others simply do not survive. Many models can be used for successful organizational change. Winners respond to the pace and complexity of change; they adapt, learn and act quickly. Losers try to control and master change in the environment. Organizational leaders need to identify and use a model for transformation that helps their organizations endure the dynamics in the external environment (Eaton & Smoke, 2010).

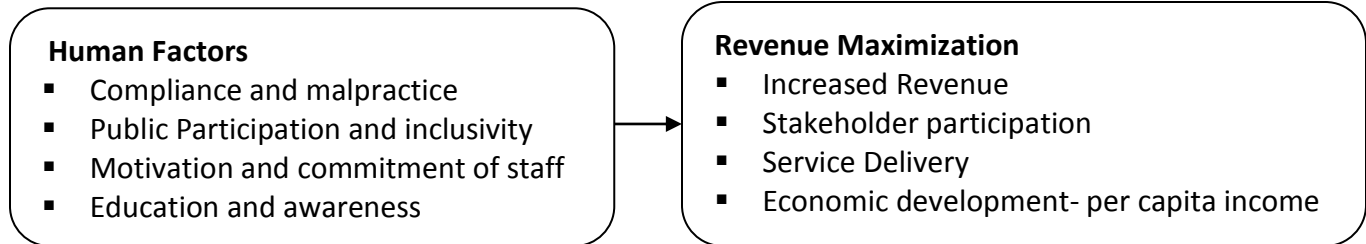
In the change management process, the critical aspect is the organization's ability to win the buy-in of their organization's employees on the change. Effectively managing organizational change involves four-step processes which include recognizing the changes in the broader business environment, developing the necessary adjustments for their company's needs, training their employees on the appropriate changes and winning the support of the employees with the persuasiveness of the appropriate adjustments (Simiyu, 2010). While singling out county staff may be inadequate, innovative revenue mobilization processes face a myriad of challenges ranging from staffs that are not keen on reinforcing compliance to corruption in the pay bill accounts (Institute of Social accountability, 2016). Consequently, taxpayers are reluctant to use the new systems to pay taxes and quickly fall back to the manual systems. Using both manual and electronic systems, concurrently creates cumbersome reconciliation processes and is open to manipulation.

The theory calls for a comprehensive and transformative review of practices, procedures and processes in revenue mobilization. This is for the simple fact that financial management at the county level seeks to raise, spend and account for the funds needed for county expenditure. Basu (2004) is of the view that since revenue is derived from citizens, it is morally incumbent upon governments to spend this money efficiently and economically. If not done it

endangers alienation of the very citizens who legitimize such governments.

Organizational Change Management aligns groups' expectations, communicates, integrates teams and manages people training. It makes use of

performance metrics, such as financial results, operational efficiency, leadership commitment, communication effectiveness, and the perceived need for change to design appropriate strategies, to avoid change failures or resolve troubled change projects (Gikandi & Bloor, 2010).



Independent Variable

Figure 1: Conceptual Framework

Dependent Variable

Influence of human factors on revenue maximization

GoK (2010) noted that the human resource plans that address training and development of employees, small staffs as well as empowering the staffs on the ethical behaviours free from fraud and corruption enhances optimal revenue collection. Training and development should be an ongoing process in any organization. Training is the formal and systematic adaptation of behaviour through continual learning which occurs as a result of education, development and practice (Armstrong, 2011). On the contrary, staff development refers to the development of supporting, technical and professional staff in organizations, such as local authorities, in which such staff form a large proportion of those employed. Its objective is to enable such employees to perform their current and future roles efficiently and effectively. Practical training can reduce learning cost; improve the individual, team and corporate performance, speed and overall output, upgrade operational flexibility by extending the range of skills possessed by employees, attract high-quality employees by giving them learning and development opportunity. It increases job knowledge and enhances their skill, thus enabling them to be more competent

in the collection of revenue (Collin, 2011). The staff structure across all county government is weighed down by a huge workforce that is too heavy with support staff and semi-skilled cadres- making it difficult to attract and sustain qualified professionals due to the unattractive remuneration offered. The staffing problem should be addressed in tandem with the transformation exercise through several measures aimed at rationalizing excess lower cadre staff (GoK, 2010). Collecting revenue in Local Authorities is an involving process that requires proper preparations before embarking on the exercise. Collection of revenue includes preparing and issuing bills, informing debtors on amounts through sending demand notices in their mail. It can also be done through revenue collectors efforts. Record keeping provides timely information on persons receiving services and follows up on amounts outstanding. It requires staffs that are diligent, well-trained and committed to their work (Brautigam, 2008).

According to Baurer (2015), inability in dealing with corrupt tax administration employees may create problems for the business community. Bird (2003) argues that flaws and weaknesses in revenue

collections lead to inadequate tax collections. Developing countries, according to the scholar, face problems of inefficient and ineffective tax administration. The foregoing problem is attributed to insufficient administrative staff with requisite skills, and high level of illiteracy among taxpayers and tax collectors.

Kayaga (2010) further asserts that financial limitations have led to the hiring of tax officials who lack understanding of the tax laws they are administering, and the concept of accounting that are essential to studying returns. The scholar further posits that the problem of inexperienced and unqualified personnel is heightened by the lack of adequate training facilities and opportunities. Franken (2007) conducted a study in Dar es Salaam, Tanzania indicated that public officials are more effective as revenue collectors than their private counterparts. Fjeldstad and Haggstad (2012) affirm that measures are required to improve the accountability of revenue collectors and elected officials. The foregoing, according to the scholars, can only be realized through political goodwill from both the county and national government. The foregoing findings disagreed with the findings of Pashev (2014) and Chiumya (2014) that noted that turnover tax was hampered by illegal practices like the reduction of deductions and collusion of County Government revenue collectors. The study also observed that, indeed, tax administrators colluded with taxpayers to reduce charges in exchange for illegitimate payments.

Public Participation is viewed as one of the landmarks of the democratic government. This is because participatory democracy provides a mechanism for involving people to participate in governance processes. Local government is the closest to the people for allowing participatory democracy to flourish. Democracy is often referred to as "government by the people" or "by the people elected representatives" (Bekker, 2003). Public participation further encourages democratic

principles such as political equality, majority rule, popular sovereignty and widespread consultation (Dewey & Rogers, 2012).

People demand accountability from public officials at all spheres of government. Accountability is not merely a matter of exercising control; it is also a matter of rendering account and provides scrutiny by the citizens who act as overseers over the actions of public functionaries (Richards, 1995). Every member of the public has a role to play in demanding accountability. The citizen plays an essential role in ensuring that public functionaries act and chase goals for the public interests. Apart from the local government policy that influences public participation at the county government level, information provision to policy-makers and implementers has an impact on public participation. Policy-makers make public policies on behalf of the citizenry (Connelly, 2003). Policy-makers need to understand the needs of members of the public. In the county governments, the emphasis is placed on the needs of the public. To get information on public needs, county governments depend on effective communication and feedback.

Dissemination of information to the public constitutes a foundation for public knowledge and views since one's knowledge and opinions are dependent on the information at one's disposal. Consequently, dissemination of information is essential for public participation in the making and implementation of policy at local government. Public participation is also swayed by responsiveness to public needs and aspirations. Responsiveness to public needs can be defined as a process of taking appropriate, timely actions by a public official in response to needs voiced out by the community (Chiumya, 2014). The requirements for responsiveness to public needs are as follows: Members of the public must express their needs; policy-makers must deliberate on and take the needs expressed by the public, and there must be suitable mechanisms for receiving expressed public needs.

Interest in enhancing revenue mobilization in developing countries is increasing. Most developing countries are emerging from the crisis with their economic prospects broadly intact (IMF, 2010), but with many still facing a fundamental need to raise more revenue from their tax bases (Westman, 2004). Achieving the Millennium Development Goals, for instance, has been suggested to require increasing domestic revenues in low-income countries (LICs) by around 4 per cent of GDP (United Nations, 2005). Infrastructure needs are also extensive (IMF, 2010a), and there are climate challenges to address. Advanced economies are increasingly focused on improving their support of these revenue mobilization efforts.

METHODOLOGY

The study adopted a mixed research design considering descriptive, causal and cross-sectional survey approaches aiming at addressing the objectives of the study. A cross-sectional survey was adopted since it comprised of the population sharing similar characteristics and differs in some key factors of interest like the age, income levels and geographical location. The study also adopted a descriptive method for the collection of information demonstrating the relationship between variables and the unit of analysis which was the county government.

The study qualitatively described the revenue mobilization process from all parties through in-depth interview schedules for key informants and questionnaires as well as community fora. Consequently, considering that there were documented reasons for the dismal performance in revenue mobilization by devolved units in Kenya and beyond, it was prudent to determine specific indicators into the hindrances as experienced by those charged with the revenue mobilization tasks. The causal approach was adopted considering the objectives of the study, which sought to assess the

influences of independent variables (human factors) on revenue maximization. A causal research design is aimed at addressing the cause-effect relationships between variables (Schutt, 2009). This is referred to as a nomothetic causal explanation which looks at the variation in an independent variable as a cause to the variation in the dependent variable *ceteris paribus* (all other things are held constant). The research population was from the total of 47 counties in Kenya, with 416 respondents selected from five counties that are Kisumu, Nakuru, Nairobi, Vihiga and Nyeri Counties respectively. Data for the study were obtained through the following two data collection methods, in-depth interview schedules for key informants and questionnaires for revenue clerks, all purposively sampled.

Individual responses were used to collect information from the Auditor General, Commission on Revenue Allocation chairman, Controller of Budget at the national level and from the County, The Director of Revenue, Minister of Finance and Economic Planning, Head of Revenue streams and the Speaker of the County Assembly.

The questionnaire was used to gather information from revenue clerks. And the community forum was used to gather essential and factual information regarding the tax experience from citizens. The researcher was interested in; reasons for poor collection, suitable methods to increase collection, challenges faced in revenue mobilization and interventions required.

FINDINGS

The objective of the study was based on the construct measuring human factors that affect revenue maximization in devolved units in Kenya. The study thus sought to first describe the situation regarding the human factors in the devolved units through other observable indicators measured on an ordinal scale. The Likert scale was used and the questions that sought to determine the level of agreement of

the respondents to the questions on the influence of human factors on revenue maximization. The summary statistics of the responses were presented

in the following table 1, where 1-strongly disagree, 2-disagree, 3-neither agree nor disagree, 4 –agree and 5-strongly agree

Table 1: Descriptive Statistics of Human Factors on revenue maximization

Statement	1	2	3	4	5	Mean	SD
The county revenue collectors possess relevant skills.	18 (4.5%)	10 (2.5%)	56 (13.9%)	220 (54.7%)	98 (24.4%)	3.92	0.939
When county staffs acquire training skills and education that matches their job, then the revenue collection targets are achieved	11 (2.7%)	13 (3.2%)	26 (6.5%)	146 (36.3%)	206 (51.2%)	4.3	0.93
When employees working as revenue collectors are disciplined, then citizen participation and intensity is realized	7 (1.7%)	16 (4.0%)	20 (5.0%)	157 (41.5%)	192 (47.8%)	4.3	0.87
There is accountability and transparency on the revenue collection staff in the county	9 (2.2%)	17 (4.2%)	69 (17.2%)	185 (46.0%)	122 (30.3%)	3.99	0.91
When a county has continuous staff training programs on revenue collection, the County realizes more in terms of revenue collection	12 (3.0%)	9 (2.2%)	22 (5.5%)	204 (50.7%)	155 (38.6%)	4.2	0.873

For this construct, the study sought to find out whether the county revenue collectors possess the relevant skills. The majority (54.7%) of the respondents agreed, 24.4% strongly agreed, 13.9% were uncertain, 2.5% disagreed, 4.5% strongly disagreed. The mean response score of 3.92 indicated that the respondents on average agreed that the council revenue collectors possessed relevant skills. Regarding the question as to whether the county staffs acquired training skill and education that matches their job, 51.2% of the respondents strongly agreed, 36.3% agreed, 6.5% were uncertain, 3.2% disagreed and 2.7% strongly disagreed. The average response was that the clerks agreed that the county staffs acquired training skill and education that matches their job as portrayed by the mean response score of 4.3. As to the statement that when employees working as revenue collectors were very disciplined, then citizen participation is easily achieved. The majority (47.8%) of the respondents strongly agreed, 41.5% agreed, 5.0% were uncertain,

4.0% disagreed and 1.7% strongly disagreed. On average (mean=4.3), revenue clerks agree that when employees and revenue collectors are disciplined, then citizen participation and intensity is realized. The study also sought to determine the levels of transparency and accountability of the revenue collection staff in the counties. The majority (46.0%) of the respondents agreed, 30.3% strongly agreed, 17.2% were uncertain that the revenue collection staff in the counties exhibit accountability and transparency. The other 4.2% and 2.2% disagreed and strongly disagreed respectively. On the last indicator of this study, most (50.7%) of the respondents agreed that their counties had a continuous staff training programs on revenue collection, 38.6% strongly agreed, 5.5% were neutral, 3.0% strongly disagreed, and 2.2% disagreed. This resulted in a mean response of 4.2, which showed that revenue clerks in the counties agree that they have continuous staff training programs on revenue collection in their respective counties.

The items observed as human factors influencing revenue maximization have been observed and recommended by other studies. Kayaga (2010) cited the need for experienced personnel while noting that inexperienced and unqualified personnel are amplified by the lack of adequate training facilities and opportunities. Fjeldstad and Haggstad (2012), on the other hand, recommended that measures are required to improve the accountability of revenue collectors and elected officials. Apart from competence, Ndunda et al. (2015) also recommend the attraction of skilled and competitive employees to increase revenue collection performance. This study observed high levels of the agreement by the revenue clerks to the questions asked indicating high levels of performances in these aspects of human factors measured. Variation was also noted, thus giving foundation and ground for further analysis on

the effects of human factors on revenue maximization.

Regression analysis of human factors on revenue maximization

A simple linear regression model was also fitted to assess the objective on establishing the influence of human factors on the maximization of revenue in devolved units in Kenya. The results were displayed in a model summary statistics which for the goodness of fit. The R, which shows the level of correlation between the 2 variables, was found to be 0.567 while the variation coefficient (R-square) was 0.322. The results show that the variation in the model predictor (Human factors) explains up to 32.2% of the variation in revenue maximization. The remaining 67.8% of the variation in revenue maximization in this one-parameter model is explained by other factors that are not included.

Table 2: Model summary for human factors

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.567 ^a	.322	.320	.682

a. Predictors: (Constant), human factors

The ANOVA carried out for the regression model (Table below) assessed the levels of variability within the regression model and in the form of general significance test of the whole model. The results show an F-statistic of 186.620 with a p-value of 0.000. The p-value is less than 0.05, implying that this

bivariate regression model of Human Factors on revenue maximization is generally significant. This gave a further implication of a significant causal relationship between the predictor in the model (human factors) and the revenue maximization.

Table 3: ANOVA on Human Factor

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	86.927	1	86.927	186.620	.000 ^b
	Residual	183.059	393	.466		
	Total	269.987	394			

a. Dependent Variable: revenue maximization

b. Predictors: (Constant), human factors

Table 3 below showed the model coefficient. The results revealed that Human Factors significantly influence Revenue maximization. This was indicated by the significant coefficient estimate of Human

Factors ($\beta = 0.449$, $t = 8.122$, $p\text{-value} = 0.000$) at 5% level of significance as shown by the p-value that is less than 0.05. The constant term was also significant; thus, the equation generated from this model does

not pass through the origin. The constant term is the expected level of revenue maximization at zero levels of human factors as measured in this study. The model equation is given below.

$$Y = 3.496 + 0.449X_4 + 0.137$$

Table 4: Model Coefficient for Human Factor

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	(Constant)	3.496	.137	25.588	.000
	Human Factors	.449	.055	.376	.000

a. Dependent Variable: Revenue Maximization

The results in this bivariate regression model between human factors and revenue maximization informed the hypothesis test and conclusion on the study objective that sought to establish the causal relationship between the 2 variables.

H₀: Human Factors do not significantly influence revenue maximization in devolved units in Kenya

The coefficient of human factors in this regression model was found to be 0.449 with a p-value of 0.000. The p-value of this coefficient being less than 0.05 led to a rejection of the null hypothesis to conclude that human factors significantly influence revenue maximization in devolved units in Kenya. Improvement in the dimensions of human factors assessed in this objective, such as accountability and transparency, employee discipline and acquisition of skills would significantly have a positive impact on the maximization of revenue. It was observed that when counties have continuous staff training programs on revenue collection, then they realize more in terms of revenue collection. The results, therefore, indicate that a unit increase in human factors would increase revenue maximization by 44.9%.

The findings are in line with theories and past empirical studies. According to Kayaga (2010), new technology alone is not enough unless the government recognizes the need for skilled tax officials. Effective tax administration requires qualified tax personnel with requisite skills and competencies to maintain these systems and operate

them to their fullest potential. In this study, the results show that when employees working as revenue collectors are disciplined, then citizen participation and intensity is realized. The revenue collection report in Kitui county (2016), on the other hand, also recommended minimization of clerks (employees) handling cash to enforce accountability and citizen participation.

SUMMARY

When exploring whether human factors significantly influence the maximization of revenues, several statements were used and different reactions observed where the study established that the county revenue collectors possessed relevant skills, and that county staffs had requisite training skills and education that matches their job for optimal revenue collection. Besides, it was discovered that when employees working in devolved units and revenue collectors are disciplined, accountable and transparent; citizen participation is easily achieved, leading to revenue enhancement. Finally, county governments do have continuous staff training programs on revenue collection, and this helps them realize increased revenue.

The results in this bivariate regression model between human factors and revenue maximization informed the hypothesis test and conclusion on the study objective that sought to establish the causal relationship between the two variables as indicated in hypotheses **H₀**:

H₀: Human Factors do not significantly influence revenue maximization in devolved units in Kenya.

On assessing the correlation between human factors and revenue maximization, it was found that the two variables have a significant moderate and positive relationship ($\rho = 0.376$, $p\text{-value} = 0.000$). The study also revealed that human factors significantly influence revenue maximization. Model estimation between human factors and revenue maximization yielded a significant coefficient estimate for human factors in the bivariate model ($\beta = 0.449$, $t = 8.122$, $p\text{-value} = 0.000$). The $p\text{-value}$ of this coefficient being less than 0.05 led to a rejection of the null hypothesis to conclude that human factors significantly influence revenue maximization in devolved units in Kenya. Improvement in the dimensions of human factors assessed in this objective, such as accountability and transparency, employee discipline and acquisition of skills would significantly have a positive impact on revenue maximization.

CONCLUSIONS

The study concluded that human factors significantly influence revenue maximization in devolved units in Kenya. This finding is influenced by the study results from the regression model that the $p\text{-value}$ of the coefficient of human factors was less than 0.05 which informed the rejection of the null hypothesis and concluded that human factors significantly influence revenue maximization. The study, however, indicated that some county revenue collectors did not possess the relevant skills, had inadequate training and education and hence were not able to achieve the revenue targets given to them.

Also, indiscipline among employees working in devolved units concerning revenue collection made the revenue collection process less effective with failed targets. The study then concludes that there should be good citizen participation that leads to accountability and transparency in the revenue collection process at the county government levels.

Finally, there is need for experienced personnel while noting that inexperienced and unqualified personnel are amplified by lack of adequate training facilities and opportunities. There is need for the attraction of skilled and competitive employees to increase revenue collection performance.

RECOMMENDATIONS

On human factors, the study recommends that the county revenue collectors should be equipped with relevant skills, through training and education that matches their job description since this leads to the achievement of revenue collection targets. There is need to attract, recruit and retain skilled and competitive employees to increase revenue collection performance.

The study recommends that employees working in devolved units, especially revenue collection departments, should have the required internal discipline and that they should ensure accountability and transparency in the revenue collection process. Finally, there is need for experienced personnel while noting that inexperienced and unqualified personnel are amplified by lack of adequate training facilities and opportunities. The need to have continuous staff training programs on revenue collection cannot be emphasized enough and this should help in improving revenue collection.

The personnel involved in the revenue collection should be people of high integrity to ensure that the county government funds are not diverted instead channelled to the county government account as required by law.

SUGGESTIONS FOR FURTHER STUDIES

The research suggested that a further study should be conducted on factors resulting to the harmonization of county revenue streams and leading to the promotion of principles of efficiency, accountability, transparency, predictability and equity in all the 47 devolved units in Kenya.

REFERENCES

- Anyafu, A. M. (1996). *Public finance in a developing economy: The Nigerian case*. Department of Banking.
- Babbie (2001). *The Practice of Social Research* 9th Edition. Belmont: Wadsworth
- Bahl, R. W., & J.F. Linn., (1992). *Urban Public Finance in Developing Countries*. Oxford University Press.
- Bennett, S., Corluka, A., Doherty, J., Tangcharoensathien, V., Patcharanarumol, W., Jesani, A., & de-Graft Aikins, A. (2011). *Influencing policy change: the experience of health think tanks in low-and middle-income countries*. *Health policy and planning*, 27(3), 194-203.
- Bird, Richard M. (2003). *Administrative Dimensions of Tax Reform*. International Tax Program Paper 0302, online: University of Toronto <<http://www.rotman.utoronto.ca/iib/>>.
- Bird, Richard M., 1992. *Tax Policy and Economic Development*. Baltimore and London: The Johns Hopkins University Press.
- Bird, Richard M., 1996. *Why Tax Corporations?* Working paper 96-2. Ottawa: Finance Canada, online: Department of Finance Canada
- Blokker, P., & Dallago, M. B. (Eds.). (2012). *Youth entrepreneurship and local development in Central and Eastern Europe*. Ashgate Publishing, Ltd.
- Boadway, R. W., & Watts, R. L. (2004). *Fiscal federalism in Canada, the USA, and Germany*. Queen's University, Institute of Intergovernmental Relations.
- Boadway, R., & Watts, R., (2004) *Fiscal Federalism in Canada USA and Germany* Working Paper 2004 (6) © 2004 IIGR, Queen's University
- Boex, J. (2011). Fiscal Decentralization in Kenya: A Small Step or Giant Leap?.
- Bryman, A. (2001). *Social Research Methods*. Oxford: Oxford University Press.
- Cavaye ALM (1996). Case study research: A Multifaceted Research Approach for Information Systems Journal, Vol.6, pp,227-242
- Collins Odote (2015). *Lessons from failed bid to suspend Makueni*. Business Daily Africa online Opinion and Analysis. Retrieved September 25, 2015.
- Commission on Revenue Allocation. (2012). *Policy on the Criteria for Identifying Marginalised Areas and Sharing of the Equalization Fund*.
- Commission on Revenue Allocation. (204.12.)
- Constitution of Kenya (2010). Article 203 (d) 115 Ibid (g) and (h) 116 Ibid (e), Article 203(2)
- Council of Governors & 6 others v Senate (2015). Petition No.44.12. of 2014. National Council for Law Reporting. The Attorney General. Kenyalaw.org
- County Government of Kitui (2016). Report On Revenue Collection in Kitui County. Clerks Chambers, Assembly Buildings.

- CPAK (2014). *Public Finance building blocks for devolution*. A baseline survey on Devolution in Kenya concerning Finance Management Systems. Available at <http://www.cpak.com>
- CRA (2014). *Commission Revenue Allocation*. Available at <Http://www.CRAkenya.information/faqs>.
- Creswell, J. W. (2003). *Research Design: Quantitative, Qualitative and Mixed Method approaches*, 2nd edition. Carlifornia, Sage
- Daily Nation (2014). *Presidency, governors on the spot over devolution*. Retrieved 26 March 2014.
- D'Arcy, M., & Cornell, A. (2016). Devolution and corruption in Kenya: Everyone's turn to eat?. *African Affairs*, 115(459), 246-273.
- Dewey, J., & Rogers, M. L. (2012). *The public and its problems: An essay in political inquiry*. Penn State Press.
- Doolin, B. (1996). Alternative views of case research in information systems. *Australasian Journal of Information Systems*, 3(2).
- Eaton, K., Kaiser, K., & Smoke, P. (2010). *The Political Economy of Decentralization Reforms: Implications for Aid*. World Bank, Washington DC.
- Ebel, R. D. (2005). *Subnational tax policy and administration in developing economies*.
- Edgar, Tim and Daniel Sandler. 2005. *Materials on Canadian Income Tax*. Toronto: Thomson Canada Ltd.
- Elachi, B (2014). *The rationalisation is a touchy subject, and we'd all do well to leave politics out of it*. Daily Nation Online Opinion. Retrieved July 19, 2014.
- Ewa, E. U., & Udoayang, J. O. (2012). The Impact of Internal Control Design on Banks' Ability to Investigate Staff Fraud, and Life Style and Fraud Detection in Nigeria. *International Journal of Research in Economics & Social Sciences*, 2(2), 32-43.
- Gicho, D. N. (2018). *Revenue collection systems and revenue collection levels in lands, housing and physical planning department at Kiambu County* (Doctoral dissertation, University of Nairobi).
- Gidisu, T. E. (2012). Automation system procedure of the Ghana revenue authority on the effectiveness of revenue collection: A Case Study of Customs Division. *Unpublished MBA Thesis, Kwame Nkrumah University of Science and Technology*.
- Kamolo, J. (2014). *Machakos automates tax collection*.
- Ndunda, J., Ngahu, S., & Wanyoike, D. (2015). Analysis of Factors Influencing Optimal Revenue Collection by County Governments in Kenya. *International Journal of Economics, Commerce and Management*, 5, 1114-1129.
- Nyanjom, O (2011). *Devolution in Kenya's new Constitution*. Constitution Working Paper Series No 4. Society for International Development, SID.
- Obala, R. (2014.12.). *CIC, Governors want TA Disbanded*. *Standard Digital* Accessed on 23rd October 2014
- Ole-Shitemi, Shitemi (2014). *Website and blog*. Accessed July 2014.

- Ouma, S A (2011). *Challenges of Nationhood: Identities, citizenship and belonging under Kenya's new Constitution*. Constitution Working Paper Series No Society for International Development, SID.
- Rawlings Otieno (2014.12.). *Nairobi County Loses Tax in Parking Fees Due to Graft and Inefficient Staff* accessed on 25.09.2014
- UNDP. 1995. *Statement of the Republic of Uganda on the Fourth World Conference on Women, Beijing China*
- Riaga F., (2012). *Enhancing Professionalism in Kenya. ICPAK's position on the Formula for Revenue Allocation*.
- Riaga F., (2012). *Enhancing Professionalism in Kenya. ICPAK's position on the Formula for Revenue Allocation*.
- Saideman, S. M. (2012). *The ties that divide: Ethnic politics, foreign policy, and international conflict*. Columbia University Press.
- Saitoti, George. 2002. *The Challenges of Economic and Institutional Reforms in Africa*. England: Ashgate Publishing Limited
- Sakyi, E. K. (2014.12.). A critical review of the theoretical objectives and practical experiences of decentralization from the perspective of developing African countries. *Journal of African & Asian Local Government Studies*, 2(3).
- Sen Gupta, A. (2007). Determinants of tax revenue efforts in developing countries.
- Tanzi, Vito. (1999). Uses and Abuses of Estimates of the Underground Economy. *The Economic Journal* 109, 388.
- Wood, S. N. (2017). *Generalized additive models: an introduction with R*. Chapman and Hall/CRC
- World Bank (2014). *Innovative Technologies to Help County Governments Improve Service Delivery*. Available at <http://www.Worldbank.org/en/news/press-release2014/03/26>.
- World Bank. (2012). *Devolution without disruption: Pathways to a successful new Kenya*.
- Yin, R.K. (1994). *Case study Research Design & Methods*. 2nd Edition: Sage Publications, Thousand Oaks.
- Zee, Howell, H., 2005. *Personal Income Tax Reform: Concepts, Issues and Comparative Country Developments*. Working Paper WP/05/87. Paris: IMF, Fiscal Affairs Department.