

EFFECT OF ELECTRONIC REVENUE SYSTEM ON LOCAL GOVERNMENT REVENUE COLLECTION IN TANZANIA: A CASE OF ARUSHA CITY COUNCIL

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Abstract: The general purpose of the study was to investigate the effect of electronic revenue system on local Government revenue collection in Arusha city council in Tanzania. The research was based on the assumption that, there was no significant relationship between electronic revenue system and local government revenue collection in Tanzania. Specifically, the study sought to assessment the effects of point of sale devices, effects of mobile payment system and the effects of max malipo payment system on local Government revenue collection in Tanzania. The study used explanatory research design to explore the relationship between variables. The target population was Arusha city council's officers and stakeholders specifically city treasurer(s), economists, trade officers, revenue collection agents and traders whereby sample size of 70 respondents were purposively selected from three department of Arusha city council agents and traders to represent employees of local government authorities in Tanzania . Reliability of research instruments was analyzed using SPSS and scaled through Cronbach alpha (α) coefficient while validity of questionnaires and interview guide were tested to validate, face validity and content validity. However pilot test was done by distributing nine (9) questionnaire equals to 13% of the total sample size of respondents to validate the appropriateness of research instrument. Data was screened and organized and later on, Statistical Package for Social Science (SPSS) and Microsoft excel were used to analyze data of which multiple regressions was used to indicate correlation of variables whereby inferential statistics: mean, standard deviation, frequencies and percentages were used to describe findings. Data were presented through graphs, charts, and tables to quantify research findings. Therefore the study found that the adoption of electronic revenue system such as Point of Sale devices and mobile payment system, substantially increase revenue collection beyond the target, despite of elimination of max malipo payment system due to system fragility. Furthermore the study concluded that there is significant relationship between electronic revenue systems and revenue collection in Tanzania. The study recommend that Arusha City Council should ensure availability of POS devices to all revenue sources, impose technology for revenue control mechanism such as camera and electronic card as used in toll services. There should be simplified bureaucracy of issuing control number to motivate service users. However, other researchers could further investigate on the contribution and challenges facing each electronic revenue system on revenue collection in local Government authorities.

Keywords: Electronic Revenue System, Point of sale devices, Mobile payment, Max Malipo, Local Government authorities, Local government revenue.

1. INTRODUCTION

The adoption of Information and Communication Technology (ICT) increases performance in revenue management all over the world. Electronic revenue system was used as a significant technique in revenue management in the Government from different sources such as tax, fees, fines, and penalties. The electronic tax system is a computerized tax administration system that is specially designed to handle general tax administration from registration, assessment, filing

returns and processing of claims and refunds (Maisiba & Atambo, 2016). However, the development of Information and Communication Technology (ICT) has modified revenue management approach both in public and private sectors where Electronic Fiscal Devices (EFDs) machines and mobile phone devices have been using to simplify transaction between service or product provider and user hence facilitate significant change on public service distribution and allocation (Manyerere & Manyerere, 2018). Casey & Castro (2015) revealed that, electronic revenue system refers to Electronic Fiscal Devices (EFDs) as introduced in the late 1970s as supporting technology used by large retailers in advanced countries as early as its invention; the technology started to be implemented in Europe from 1983 to 2010, South America from 1995 to 2008/9, North America adopted the system in 2000, Asia and Pacific 2005, and in Africa from 2005 to 2015.

In the case of Tanzania, Chatama (2013) indicated that, an installation of ICT 500 in the Ministry of Finance in 1965 disposes the ground of a financial administration to avoid monetary damage. TRA adopted various ICT systems such as Integrated Tax Administration System (ITAX), Tax Payers Identification System (TIN), Computerized Motor Vehicle Registration System (CMVRS), and Automated System for Custom Data (ASYCUDA) and Computerized Drivers' License System (CDLS) which imposed to increase revenue management efficient. The introduction of the Local Government Reform Program (LGRP) of 1998, provided fiscal authority to Local Government such as setting budget, collecting revenue from own source under clear identification of exploitable resources available that provide economic chance of generating revenue and implement the budget with respect to social, political and economic needs of the citizens of area of jurisdiction (Ringo & Peter, 2013).

Tanzania regime has continued with revenue management innovation where new electronic approach adopted and legal framework restructured to facilitate record management by reducing revenue leakage loopholes: as a result the Finance Act of 2010 authorized implementation of Electronic Fiscal Devices as it defined fiscal receipt as a financial document published by electronic fiscal device for the consumers of goods and services under specified principles as described in tax laws and regulation' (URT, 2010). EFD was significantly initiated to facilitate effective revenue mobilization (Siraji, 2015), while mobile devices and bank account are traditionally emphasized to be used in revenue mobilization (Kipilimba, 2018).

Revenue collection in Arusha region has been attributed by geographical, political, administrative and social influence. Therefore, an etymological and environmental factor shows that, the region has been positioned in the north-eastern bend of Tanzania. It placed below the equator between latitudes 2° and 6°. Longitudinally, the region is located between 35° and 38° east of Greenwich. Its neighbor countries and regions are Kilimanjaro and Tanga regions to the east, Dodoma region, Singida, Shinyanga and Mara regions to the west (URT, 1998). According to the population census of 2012, Arusha region had an estimated population of 1,694,310 and 378,825 households while in the city council, population structure by sex was 199,524 male and 216,918 females (URT, 2013).

The major economic activities on which city council traps its revenue straws are small business (3.5%), street vendors and related workers (8%), Technician and associate professionals (6.3%), farmers (11%), livestock keepers (1.9%), fishermen (0.2%), Plant machines operators and assemblers include drivers (5.3%), craft and related workers (15.7%), clerk (2.4%), professionals (4.5%), legislator administrators and managers (2.3%), service workers, shops and stall sales workers (24.2%), elementary occupation (10.4%) and others (4.3%) (URT, 2016). With respect to researcher's motivation and public interest, the study sought to investigate the effect of electronic revenue system on local Government revenue collection.

2. PURPOSE

The purpose of the study was to investigate the effect of electronic revenue system on local Government revenue collection in Tanzania: A case of Arusha City Council. Precisely, the study search for the assessment of effect of Point of Sale devices, Mobile payment system and max malipo payment system on local Government revenue collection

3. RESEARCH METHODOLOGY

The study adopted explanatory research design because the design enabled the researcher to determining the nature of the relationship between the causal variables and the effect projected while drawing the general understanding on which variables are the cause, and which variables are the effect and therefore, quantify the results in relation to the study. Similar to the meaning drawn as the research design as the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. It therefore provides the

conceptual structure within which research is conducted and constitutes the blueprint for the collection, measurement, and analysis of data''(Kothari, 2004). Fundamentally, the explanatory research design yield qualitative and quantitative data that collected from the target population around Arusha City council.

The target population of the study was limited to the population around Arusha city council in Tanzania. According to Grove, Burns & Gray (2013)'target population is defined as an entire set of individual or elements who meet sampling criteria''. It consists of 'people, events or records that contain desired information and can answer the measurement of questions''(Cooper & Schindler, 2011). Therefore, the study gathered its information from 70 respondents of Arusha city council offices and business centers specifically city treasurer, trade officers, economist, revenue collection agents and traders to represent employees, agents and traders of 171 LGA's in Tanzania.

The researcher adopted purposive sampling technique so as to get accurate information because the data required were gathered from Local authority field officers and practitioners as well as third part participants in the revenue collection process. In other words, sampling is defined as the process that involves techniques and plan of selecting subset as a representative from entire population (Dattalo, 2008) while Tayie (2005) defines sample as the 'subset of the population that is taken to be representative of the entire population''. Therefore the selected number of elements or representative with regards to study is referred to as sample size (Kothari, 2004). Hence the researcher selected 70 samples from different area of specialization and revenue collection practice as shown below, to gether expected data as per study.

Data collection instruments are tools used to gather data from the research field. According to Kothari (2008) the suitable instruments for data collection are personal interview by using structured interview which involves preparation of predetermined questions and standardized recording while unstructured interview allowed a researcher to raise supplementary questions for abruptly raised concept. The researcher also used popular tools referred to as questionnaires formulated with close questions to get in-depth information from the field and contents analysis so as to capture specific data disclosed in reports.

4. RESULTS AND DISCUSSION

Effect of electronic revenue system on local government revenue collection

The study focused on point of sale devices, mobile payment system and max malipo as the electronic revenue systems used in revenue collection by Arusha City Council. The study analyzed data and range scaled from "strongly disagree" (1) to "strongly agree" (5) where the scores of 0 to 2.5 present disagreement opinion of variables consists of mean score on the continuous Likert scale; ($0 \leq S.D \leq 2.4$). The scores range from 2.5 to 3.4 have been taken to present "moderately agreement" of variables with a mean score of on the continuous Likert scale: ($2.5 \leq M.E \leq 3.4$) and the score of both agree and strongly agree have been taken to represent a variable which had a mean score of 3.5 to 5.0 on a continuous Likert scale; ($3.5 \leq S.A. < 5.0$). A standard deviation of > 0.9 implies a significant difference on the impact of the variable among respondents.

Effect of Point of Sale Devices on revenue collection

This section of the questionnaire sought to get respondents' perception on the effect of point of sale devices on local government revenue collection in Arusha City Council. The findings were presented on table 1 below:

Table 1: Point of Sale Devices

Indicators	Mean	Std. Deviation
POS system keep record and transmit information to LGRCIS for decision making	4.32	0.641
POS system produces appropriate report of revenue collected	3.92	0.698
POS ensures proper remittance of revenue collected by agents on time and agreed amount	3.96	0.786
POS system helps to plug loopholes of fund's extravagant hence reduces arbitrary loss of revenue collected	4.53	0.621
Transactions are perfectly and effectively recorded in point of sale devices in areas like car parking, market stall and road gate	4.10	0.597
Report produced by POS devices is always similar to that generated by LGRCIS	4.08	0.552
The collected amount through POS and the amount remitted to LGAs is similar as per agreement	4.13	0.562

The results above shows that, Point of Sale system keeps record and transmit information to LGRCIS for decision making by a mean of 4.32 as argued by Myung, Rajul and Lee (2017) that POS as electronic devices enables traders to report appropriate and perfect report to revenue authority because the system has the ability to record and refine information hence reduces information asymmetry. Respondents therefore argued that, POS system produces appropriate report of revenue collected by a mean of 3.92 hence ensures proper remittance of revenue collected by agents on time and agreed amount with mean of 3.96, thus POS system helps to plug loopholes of fund's extravagant hence reduces arbitrary loss of revenue collected by a mean of 4.53 as asserted by Manyerere and Manyerere (2018) that, adoption of electronic financial management reduces the ability of officials to demand corruption during estimation and receiving public fund.

The study found that, transactions are perfectly and effectively recorded in point of sale devices in areas like car parking, market stall and road gate by a mean of 4.10 as supported by Njenga and Sevilla (2017) they concluded that, simplicity of the electronic revenue system, pleasantness of the system and capability of the system to respond and retrieve information speed up enthusiasm of users to enjoy and therefore keep record whenever transactions occur. Report produced by POS devices is always similar to that generated by LGRCIS by a mean of 4.08 and the collected amount through POS and the amount remitted to LGAs is similar as per agreement with a mean of 4.13 as recommended by Kibaara (2018) that, automation of electronic revenue collection through devices like POS helps the government to increase effectiveness of financial administration

Correlation between Point of Sale Device and Revenue Collection

The researcher performed regression analysis to obtain the correlation between point of sale device and revenue collection as shown table 2.below:

Table 2: Correlation between Point of sale Devices and revenue collection

		Revenue Collection
Point of Sale Device	Pearson Correlation	.674*
	Sig. (2-tailed)	.021
	N	95

The study findings from the table 2 above demonstrate correlation factor of 0.674* which present positive correlation coefficient between revenue collection and point of sale device, whereas this relationship was found to remain statistically important as the significant value was 0.021 which is less than 0.05. This means that mobile payment system is directly connected with local Government revenue collection, relevant to argument of OECD (2013) that, POS system plays significant roles of providing security, speeding transactions, and providing appropriate report to the user on which local Government authorities' uses the system to track transactions thus avoid the possibility of tax evasion.

Effect of mobile payment System on revenue collection

In this section, the researcher also distributed and administered questionnaire to get respondents' opinion on the effect of mobile payment system on local government revenue collection in Arusha City Council. The table 3 present responses

Table 3: Mobile payment system

Indicators	Mean	Std. Deviation
Arusha City council uses mobile payment system such as M-pesa, Tigo pesa, Airtel money, Hallo pesa, and Z-pesa to collect revenue.	4.63	0.872
Services available and payable through electronic mobile payment system are, fees payment, fines and penalty, license application fees, rent payment and tariffs	4.37	0.581
Electronic mobile payment system at Arusha city council is available all the time and at any jurisdiction area.	4.32	0.641
Mobile payment system generate appropriate reports as required by user	4.52	0.513

From the table 3 above, the respondents agreed that, Arusha City council uses mobile payment system such as M-pesa, Tigo pesa, Airtel money, Hallo pesa, and Z-pesa to collect revenue by a mean of 4.63 in line with those explanation of Mararo (2018) notes that, adoption of mobile payment helps small businesses owners to simplify collection of payments from customers and payment of utility charges to water and electricity authority. The relevance of the finding was also

supported by the survey done by Intel Media (2013) which describe the extent to which mobile payment is used by different users; the study indicates about 78% mobile companies' customers uses Vodacom M-Pesa, Tigo Pesa and Airtel Money mainly for deposits while 21% uses mobile financial system for payment. Whereas respondents further agree that, services available and payable through electronic mobile payment system are, fees payment, fines and penalty, license application fees, rent payment and tariffs with a mean of 4.37. This relate to the findings of Alnes (2017) who assert that, mobile payment as the most preferable system through which Small and Medium Enterprises uses to carry out financial transactions such as payment of debts to firms and individuals supplied production input to respective enterprises. However, respondents strongly agreed with a mean score of 4.32. This means electronic mobile payment system at Arusha city council is available all the time and at any jurisdiction. This enables mobile payment system to generate appropriate reports as required by user.

Correlation between Mobile Payment System and Revenue Collection

The regression analysis was performed to determine the correlation between mobile payment system and revenue collection as shown in table 4

Table 4: Correlation between Mobile Payment System and Revenue Collection

		Revenue Collection
Mobile Payment System	Pearson Correlation	.592*
	Sig. (2-tailed)	.013
	N	95

The study findings from the table above express correlation factor of 0.592* which present positive correlation coefficient between revenue collection and mobile payment system between, whereas this relationship was found to be statistically significant as the significant value was 0.013 which is less than 0.05. This implies that, mobile payment system has potential contribution in revenue collection as it helps local government service users to pay service charges when they are distant and near to city council offices.

Effect of Max Malipo payment system on revenue collection

Furthermore, a researcher sought to get respondents' opinions on the effect of max malipo on local government revenue collection in Arusha City Council. The table 5 present perceptions of respondents

Table 5: Max malipo payment system

Indicators	Mean	Std. Deviation
Arusha City council uses max malipo payment system to collect revenue.	0.92	0.872
Max malipo system produces reports required by Arusha city council for revenue management	1.47	0.935
Max malipo system consists of services required by customers such as fees payment services, fines and penalty, tariff payment, rent payment and others.	4.37	0.581
Max malipo system ensures security of fund and therefore plug revenue lose leakage	2.18	0.752
Max malipo services is available nearly to consumers	4.17	0.619
Customers are aware about max malipo payment system	4.52	0.513
Max malipo payment system is available in rural and urban areas where Arusha city council target to collect revenue	3.31	0.704

The table above reveals that, respondents disagreed that Arusha City council uses max malipo payment system to collect revenue by a mean of 0.92 contrary to the purpose described by Maxcom (2016) that Maxcom Africa innovated the system purposely to help Central and Local regime authorities, Ministries, Department and Agencies (MDAs) to simplify financial transactions such as collection of property tax, billboard tax, hotel levy and business license. Respondents further disagreed with a score mean of 1.47 that max malipo system produces reports required by Arusha city council for revenue management, despite of the fact that, respondents agreed max malipo system consists of services required by customers such as fees payment services, fines and penalty, tariff payment, rent payment and others with a mean of

4.37. Thus the study findings indicate, customers are aware about max malipo payment system by a mean of 4.52 as Mwakaje (2015) discussed that max malipo as the system through which customers use to pay electricity charges known as LUKU, it helps customers to reduce distance and queue inconvenience hence respondents agreed, max malipo services is available nearly to consumers by a mean of 4.17. However, the study reveals that, max malipo system ensures security of fund and therefore plug revenue lose leakage by a mean of 2.18.

Thus, the study findings are contrary to the use of max malipo by Arusha city council to simplify revenue collection as stated by technology acceptance theory propounded by Davis (1985) that the desire of organization to utilize available technology is attributed by simplicity and efficiency of technology to solve the day to day activities. Thus rejected the idea of Itami (as cited by Barnley & Clark, 2007) in resource based theory as postulate that technology plays significant role of simplifying work and therefore fulfill strategic vision of organization.

Correlation between Max Malipo and Revenue Collection

The regression analysis performed to indicate the correlation between max malipo and revenue collection as shown in table 6

Table 6: Correlation between Max Malipo and Revenue Collection

		Revenue Collection
Max Malipo	Pearson Correlation	.014*
	Sig. (2-tailed)	.026
	N	95

The study findings from the table above shows correlation factor of 0.14* which present weak positive correlation between revenue collection and max malipo payment system whereas this relationship was found to be statistically insignificant as the significant value was 0.026 which is less than 0.05. This means that, max malipo payment system plays weak roles in local government revenue collection due to the fact that the system failed to accommodate local Government strategic function of revenue management.

Revenue Collection

Researcher also distributed questionnaires to get responses on the trends of revenue collection. Therefore this part of questionnaire used to get from the respondents on the trends of revenue collection at Arusha City Council and the results are presented below

Table 7: Revenue Collection

Indicators	Mean	Std. Deviation
The use of POS triggered the increase in revenue collection	4.61	0.572
Mobile payment highly facilitate process of revenue collection hence revenue increase	3.84	0.691
Max malipo plays significant role in increase of revenue	1.02	0.816

The table 7 above presents the findings on the effects of electronic revenue system in revenue collection at Arusha City Council. The respondents agreed with a mean score of 4.61 that, the use of POS triggered the increase in revenue collection as Swallo (2014) asserted that adoption of electronic fiscal devices that function as POS enabled Morogoro tax region to accelerate revenue growth by 38%. Respondents further agreed that, mobile payment highly facilitate process of revenue collection. Hence the revenue increase with a mean of 3.84 consistence to the findings of Onyuma & Kirui (2016) who affirms that mobile payment plays intermediary role of simplifying revenue collection because of integration of mobile payment and banking system which creates easy access of services between customers, business organizations and government agencies like tax authority. Nevertheless, respondents disagreed that, max malipo plays significant role of increasing revenue by a mean of 1.02 as the system was previous used by Arusha City Council where after being condemned due to technical weaknesses, the Government has decided to break away from using max malipo as a results of system failure to accommodate users' needs. In the line with argument of Gavrilov & Gavrilova, (2006) in reliability theory, basically in aging concept 'phenomena of increasing the risk of failure with the passage of time' increases possibility of lose, its therefore draw the meaning that old system is weak, where failure implies the non-functionality of the system which terminate users' expectation of system perfection of producing positive results.

Line graph justifying trend of revenue collection from 2008/2009 FY to 2016/2017 FY

This section present graphical illustration, numerical and word description of revenue trend before adoption of electronic revenue system and after the system application of electronic revenue system in Arusha city council. The line graph below shows revenue trend in Arusha City council

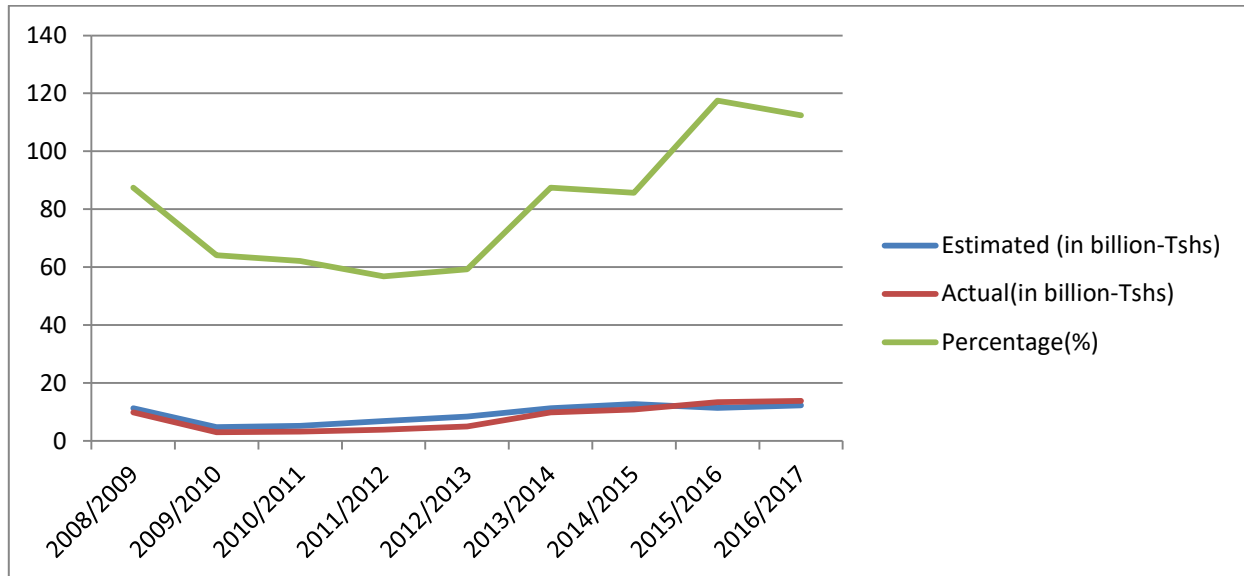


Figure 1: Justification of revenue trend from 2008/2009 FY to 2016/2017 FY

The line graph above presents the findings of revenue trend from 2008/2009 FY to 2016/2017 FY information that affirms the relevance of revenue collection before adoption of electronic system and after adoption of the system. Before adoption of electronic revenue system starting from 2008/2009 financial years report, the information attests that 87% of revenue collection equal to 9.867 billion was actual collection from estimated amount of 11.278 billion, whereas in 2009/2010 financial year, collection decreased to 3.058 billion equal to 64% against estimated amount of 4.767 billion. Furthermore, the collection continue to decrease in 2010/2011 financial year where 62% of 5.259 billion collected equal to 3.268 while in financial year 2011/2012, revenue proceeded to drop for collection of 57% of 6.890 billion where 3.918 billion collected, but started to rise in 2012/2013 financial year where 59% of 8.475 billion collected equal to 5.019 billion and lastly, the trend of revenue collection in 2013/2014 financial year, reached 87% of 11.278 billion equal to 9.867 billion.

The adoption of electronic revenue system in 2014/2015 financial year, started with collection of 10.897 billion equivalents to 86% against estimated amount of 12.719 billion whereas 2015/2016 financial year, revenue accrued beyond 100% as 13.437 billion collected equal to 117% of 11.437 billion, meanwhile in 2016/2017 financial year, the revenue mobilization reached 112% of estimated amount of 12.299 billion where 13.826 collected. Therefore rapid revenue increase in Arusha city council under application of electronic revenue collection technology such as the POS and mobile payment is compatible to technology acceptance theory as Lee, Kozar and Larsen (2003) explain that, desire to utilize technology is influenced by users' trust of technology on simplifying job (Perceived usefulness), simplicity of technology on job execution (perceived easy to use) and glance toward the use of technology. Consistence to agency theory as Namazi, (2013) explain that, the performance of organization depends on the agent's (Local Government) capability to fulfill goals set by principal (Central Government) such as meeting and exceed budget estimates, increasing revenue, reduce costs and risks associated with organization's objectives

5. CONCLUSIONS AND RECOMMENDATIONS

In conclusion, the evidence indicates that electronic revenue system has significant correlation with revenue collection in Arusha city council despite of max malipo payment system being deceased. The evidence confirms that electronic revenue system like POS and mobile payment system are congruent in function and efficiency in revenue mobilization at Arusha city council hence contribute to revenue mobilization thus fulfill government objectives as postulated by the technology acceptance theory, agency theory, resources based theory and reliability theory . The study is therefore conclude that the use of POS and mobile payment facilitated increase of revenue in Arusha city council thus reject the

assumption that, there is no significant relationship between electronic revenue system and local government revenue collection in Tanzania while the reality certify absolute increase of revenue trend from when the council adopted electronic revenue system.

From the study findings, the researcher recommended based on conclusion above with respect to results generated from the data as collected from the field on the effect of electronic revenue system on Local Government revenue collection as mostly, evidence gathered from Arusha City Council.

Therefore, the researcher recommended that the council should distribute POS devices to all categories of revenue sources of local Government authorities especially in internal revenue streams so that all payment to be done through POS and thus completely reject manual system. There should be established control mechanism of revenue collectors such as electronic cards and cameras on revenue target areas such as car parking as used in toll system that ensures proper recording in relation to amount paid by service users. To improve likeness of revenue collection, the government should emphasize on utilization of electronic revenue collection technology all over the country purposely to reduce disparity of collection and control mechanism

The study further recommends that, Arusha city council should simplify execution of control number to customers whenever they want to pay through mobile payment system by designing electronic features that would produce automatic control number to the users who are far away and they cannot physically attend to city council's offices. The study also recommended that, Arusha city council should advice the government to reuse max malipo payment system after renovation of features that would reduce invariable weaknesses of the system, because customers have understanding on the use of the system and therefore would increase revenue collection due to system proximity.

REFERENCES

- [1] Allan, I. J. (1993). Revenue Collection Administration Guide for Smaller Governments (No. ISBN 0-89125-164-2). Chicago: Government Finance Office Association. Retrieved from <https://www.gfoa.org/sites/default/files/RevenueCollectionAdministrationAGuideForSmallerGovernments.pdf>
- [2] Alnes, K. J. (2017). Mobile Money Adoption in East Africa A cross-country study of best- and least-performing countries by. Lund University. Retrieved from <http://lup.lub.lu.se/student-papers/record/8918206/file/8918208.pdf>
- [3] Assad, M. (2014a). The Annual General Report of Controller and Auditor General on the Financial Statements for the Financial Year Ended 30th June, 2014. (Vol. 255). Dar Es Salaam, National Audit Office of Tanzania. Retrieved from <http://www.nao.go.tz/financial-year-20132014/>
- [4] Assad, M. (2015b). The Annual General Report of Controller and Auditor General on the Financial Statements for the Financial Year Ended 30th June, 2015. Dar Es Salaam (Vol. 255), National Audit Office of Tanzania. Retrieved from <http://www.nao.go.tz/financial-year-2016-17/>
- [5] Assad, M. (2016b). The Annual General Report of Controller and Auditor General on the Financial Statements for the Financial Year Ended 30th June, 2015. Dar Es Salaam, National Audit Office of Tanzania. Retrieved from <http://www.nao.go.tz/financial-year-2016-17/>
- [6] Bendickson, J., & Liguori, E. (2018). Agency theory: background and epistemology, (August). <https://doi.org/10.1108/JMH-06-2016-0028>
- [7] Casey, P., & Castro, P. (2015). Electronic Fiscal Devices (EFDs) An Empirical Study of their Impact on Taxpayer Compliance and Administrative Efficiency. IMF Working Paper, WP/15/73, 1–56.
- [8] Charfeddine, L. (2018). Expanding the Technology Acceptance Model to Examine Internet Banking Adoption in Tunisia Country, (September 2013). <https://doi.org/10.4018/ijide.2013100104>
- [9] Cooper, D. & P. S. (2011). Business research methods (12th Editi). New York: McGraw-HillIrwin. Retrieved from <http://b-ok.cc/book/2729547/c0fabe>
- [10] Dali, S. (2015a). Electronic Revenue Collection: Does It Improve organization Performance? a Case Study of Ngorongoro Conservation Area Authority. A Desertation Submitted in Partial Fulfillment of the Requirements for the Award of Masters of Science in Accounting and Finance of Mzumbe University.

- [11] Dali, S. (2015b). Electronic Revenue Collection : DoesIt Improveorganization Performance? .A Case Study of Ngorongoro Conservation Area Authority. Retrieved from http://scholar.mzumbe.ac.tz/bitstream/handle/11192/1098/MSc_A%26F_Dali Sanga_ 2015.pdf
- [12] Dattalo, P. (2008). Determining Sample Size-Balancing Power, Precise and Practicality. (D. Tony Tripodi & O. S. U. D. Professor Emeritus, Eds.). New York: Oxford University Press, Inc. Retrieved from <http://b-ok.cc/book/923236/c2f8f8>
- [13] Gavrilov, L. A., & Gavrilova, N. S. (2006). Reliability Theory of Aging and Longevity. In Masoro E.J & Austad S.N.(eds) (Ed.), “Handbook of the Biology of Aging”, Sixth Edition. (Sixth Edit, pp. 3–42). San Diego: Academic Press. Retrieved from <http://www.healthsters.com/Aging-Theory-2006.pdf>
- [14] Jay B. Barnley and Delwyn N. Clark. (2007). Resource-Based Theory:Creating and Sustaining Competitive Advantage. Published in the United States by Oxford University Press Inc., New York ©: SPI Publisher Services, Pondicherry, India.
- [15] Kipilimba, T. F. (2018). Impact of Tax Administration Towards Government Revenue in Tanzania- Case of Dar-es Salaam Region. *Social Sciences*, 7(1), 13–21. <https://doi.org/10.11648/j.ss.20180701.13>
- [16] Kothari, C. (2004). Research methodology: methods and techniques. New Delhi: Published by New Age International (P) Ltd, Publishers.
- [17] Maisiba, G. J., & Atambo, W. (2016). Effects of Electronic-Tax System on the Revenue Collection Efficiency of Kenya Revenue Authority: A Case of Uasin Gishu County. *Imperial Journal of Interdisciplinary Research (IJIR)*, 2(4), 815–827.
- [18] Manyerere, J. J., & Manyerere, D. J. (2018). The Contribution of Effective Electronic Record Management to Fight Corruption: The Evidence from Selected Public Service Offices in Tanzania, 1–21. Retrieved from https://www.scecsal.org/publications/papers2018/031_manyerere_2018.pdf
- [19] Ringo, C., & Peter, A. (2013). The Creeping Decentralization in Tanzania: Is the Strategy Accorded Full Support by the Government? *International Journal of Arts and Entrepreneurship*, 1(5), 1–23.
- [20] Siraji, Y. K. (Mzumbe U. (2015). Challenges Faced by Taxpayers in Using Electronic Fiscal Devices in Tanzania: A Case Study of Selected Taxpayers in Nyamagana District, Mwanza City. A Dissertation Submitted to School of Business in Partial Fulfilment for the Requirements of the Award of Master of Business Administration (Corporate Management) Degree of Mzumbe University, 1–81.
- [21] Susan Grove, Nancy Burns, J. G. (2013). The Practice of Nursing Research (Appraisal, Sythesis, and Generation of Evidence) (7th Editio). St Louis, Missouri. Retrieved from <http://b-ok.cc/book/2778476/bf56bd>
- [22] Tayie, S. (2005). Research Methods and Proposals Research Methods and Writing Research Proposals by (1st editio). Cairo: Center for Advancement of Postgraduate Studies and Research in Engineering Sciences, Faculty of Engineering.
- [23] Tobbin, P. (2012). Towards a model of adoption in mobile banking by the unbanked: A qualitative study. *Info*, 14(5), 74–88. <https://doi.org/10.1108/14636691211256313>
- [24] Utouh, L.(2010a). The Annual General Report of the Controller and Auditor General on the Financial Statements for the Financial Year Ended 30th June, 2010. Dar Es Salaam, National Audit Office of Tanzania. Retrieved from <http://www.nao.go.tz/#&panel1-9>
- [25] Utouh, L. (2011b). The Annual General Report of Controller and Auditor General , on the Financial Statements for the Financial Year Ended 30th June, 2011 Dar Es Salaam, National Audit Office of Tanzania. Retrieved from <http://www.nao.go.tz/#&panel1-9>
- [26] Utouh, L. (2012c). The Annual General Report of Controller and Auditor General on the Financial Statements for the Financial Year Ended 30th June, 2012. Dar Es Salaam, National Audit Office of Tanzania. Retrieved from <http://www.nao.go.tz/#&panel1-4>

- [27] URT , (2010). The Finance Act 2010. Statutes, No 15.
- [28] URT, (2013). 2012 Population and Housing Census. Dar Es Salaam. Retrieved from http://ihi.eprints.org/1344/1/Census_General_Report_-_29_March_2013_Combined_Final_for_Printing.pdf
- [29] URT, (2016). Basic Demographic and Social-Economic Profile:2012 Population and Housing Census-Arusha Region. National Bureau of Statistics Ministry of Finance & Office of Chief Government Statistician, Zanzibar Ministry of State, President Office, State House and Good Governance Zanzibar ,Dar Es Salaam. Retrieved from <http://www.nbs.go.tz/nbstz/index.php/english/statistics-by-subject/population-and-housing-census/697-2012-phc-regional-profiles>
- [30] URT, (1998). Arusha Region-Social-Economic Profile. Arusha. Retrieved from <http://www.tzonline.org/pdf/Arusha.pdf>
- [31] Wernerfelt, B. (1984). A Resource-based View of the Firm. Strategic Management Journal, Vol. 5, 171-180 (1984), 5(June 1982), 171–180.