

The Multiple Invoicing System as a Mechanism for Financing the National Budget: A Case of Rwanda Revenue Authority (2015-2022)

Benedictor Mugisha, Dr. Niyibizi Francois Xavier

**Faculty of Economics Social Sciences and Management, Department of Enterprise Management,
Master's of Science in Taxation.**

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ABSTRACT

The thesis “The multiple invoicing system as a mechanism for financing the National budget, in reference to the case study as Rwanda Revenue Authority” is traced back on its uniqueness based on checking the level of invoicing system as the aid of tax collection in the fiscal years 2015/2022 while considering the implemented measures set to spearhead the use of this invoicing systems vis a vis tax revenue collection in Rwanda. The load used a fair road map method, of integrating a demographic populace equivalent 893 staff of RRA from whom a sample size of 276 employees of RRA were chosen by the use of stratified sampling techniques. A complete set of questions were utilized for soliciting data. The package of solid statistics, correlation analysis and Ordinary Least Squares to analyze data. The review came into force that RRA stewardship has invoicing systems which is strong. The research identified That multiple invoicing system as a mechanism for financing the Government has made a tremendous gross in terms of raising tax revenue collections; improving tax remittance among tax payers, minimization of tax collection costs in Rwanda and decreased tax fraud among stakeholders. This conveys that there's a positive and much critical link abiding multiple invoicing system and tax revenue collections. The gathered views recommended the stewardship of RRA to ensure radio calling Programs as a merit of benchmarking the achievement of the set force objectives. The Stewardship of Rwanda revenue authority have to be alerted about smooth functioning of the devices, by establishing policies and approaches for authorizations at the correct point level, the stewardship of Rwanda revenue authority has to draft certain concrete control of authority and decentralize responsibility. However, the much concern on future, should emphasize on other factors like bridging bilateral states, reducing double taxation agreement so as to facilitate foreign investments, doing business in Rwanda as world bank recommends, job creation on wide gap aimed for reducing unemployment, irrespective of sparing all the efforts only on multiple invoicing system which is contribute a prominent tax revenue collection with in the country. In summary, the invoicing system provides a clear road map of all the mechanism set by the Government in its policies of tax collection by use of different tools so as to comply with the set international standards

INTRODUCTION

This includes, in short, an explanation of the thesis, a statement of the problem, research objectives, independent and general dependent factors, research hypotheses, research questions, choice of the thesis, significance of the study, delimitation of the study, methodology, as well as the conceptual framework model and the scope of the study.

Background of the study

Globally, multiple online invoicing systems have attained the variety agreement level in the entire universe. These reasonable ways of online monetary transactions in tax remittance are extremely used whereas fixed ways are minimal (Rachna & Priyanka, 2013). Online systems are meant to streamline commercialization. But if a stakeholder already has online proof of processing invoice, they must put into consideration, if their device is in conformity with set force criteria with an immediate effect.

The compiled report gathered by United Nations Conference on Trade and Development's international development organization UNCTAD in 2006 conveyed that online systems-based on automation methods

(OSO) are crucial networks for overcoming burdens in tax administration. The record proves that this set mechanism determines much on the set policies in tax collection (UNCTAD, 2006).

Generally, the principal objective for collecting revenues in any state from citizens is interconnected from the state obligations of ensuring primary beneficial needs and services such as security services, wealthy creation, protection of infant industries, reducing inflation rates and financial stability collecting the market failures and saving the government treasury (OECD, 2014). Developed countries around the universe have recently adopted this online invoicing system (EIS) as a mechanism to collect taxes and finance the state Budget. These tools stop irregularities of tax in commercial dealings (IGC, 2017). A good use of tax collation methods is predicated on the accurate completion of tax-related paperwork, sometimes through the use of an online invoicing system to prevent the loss of the State's interests and fiscal fraud (Steenbergen, 2017). Big and small business have installed online invoicing to work in a friendly and conducive environment, so as to stimulate wonderful operations which will enable them to achieve their main purposes. Studies exhibit that online invoicing are becoming imperative in public and private sectors in contemporary world, due to different ways of trading in this business world which is driven by the gross development of technology that accelerates measurement of business entity (Zhou and Madhikeni, 2013).

The adoption of effective multiple invoicing system internally in a solid critical step for safeguarding the core progress of the administration (Slanislav, 2016). A profitable organ is usually likely to fall into tax arrears of tax returns if it lacks these appropriate mechanisms of E-invoicing. It's against this background that on international level. However one super power country set up this policy in 1983. It was seconded by another tax agency which brought on surface these fiscal devices in 1988. In the great lakes region we adopted this scheme after joining (EAC) EastAfrican community by 2005, Ever since other sisterhood countries have followed the similar scheme so as to harmonize our best working business environment. The principal factors that steer the use of electronic invoicing system in many countries are: use of EBM improves tax collection with its regulated tax percentages, clear investigations, setting threshold of tax levels, not limited to accrued late payments of irregular tax payers, which solves the issue of cultural norms of resistance to meet obligations and unfairness perceived tax regime (Mativo, 2015).

Statement the problem

Despite of analogical mechanism of collecting, filling, remittances of tax obligations, internet interruptions that provides loopholes, which could affect the national treasury because of collections that could only remain on 62%, tax revenues stand as a major source of income that allows the Government to provide a suitable business and economic environment in its implemented programs of development. The Government of Rwanda has recognized the great need of collecting taxes and has done a lot to improve mechanisms of its progress. In order to sustain this policy, the RRA has set as a priority to improve its tax collection systems through automated tax collection, segregation of duties of its employees, authorizations and approval procedures, conducting audit, and improved tax collection procedures (RRA, 2016).

By 2018, RRA report shows that the target for the 2015/16 fiscal year (FY) demonstrated Rwf 949.2 bn; against the received which were Rwf 983.4 bn; recording an surpass of 103.6% in excess to the Previous of Rwf 34.2 bn. When compared to 2014–15, the tax revenue status for 2015–16 increased by 14.5%. For the fiscal year 2016–17, tax revenue collection came in at Rwf 1,086.5 billion net target as opposed to Rwf 1,081.4 billion. This was a success of 100.5% and exceeded the goal by Rwf 5.04 billion. In contrast to a gain of Rwf 99.8 billion in Fiscal Year 2015/16, tax income increased marginally by 10.1% over the course of FY 2016/17. Despite a strong revenue collection (tax and non-tax, excluding local government revenues) of Frw 1,252.3 billion during the 2017–18 fiscal year, which is an achievement of Frw 1,215.2 billion and an additional Frw 37.1 billion over the objective.

The national treasury's total revenue (tax and non-tax) during the 2019 fiscal year was Frw 1,516.3 billion, falling short of the goal of Frw 1,589.0 bn. The revenues came in at Frw 72.8 billion, 95.4% short of the goal. Due to the global lockdown in response to the COVID-19 epidemic, both domestic and foreign trade experienced a recession. Despite the fact that the revenue collections fell short of expectations, there was nevertheless an increase in revenue of Frw 93.4 billion (6.6%) from the previous fiscal year. The linear economic conditions

from July to December of 2019 were the primary factor in the fiscal year 2019–20's success in terms of tax revenue.

In comparison to the objective of Frw 1,594.3 billion, or a celebration of 103.8%, the overall revenue collection (including tax and non-tax, excluding local government collections) for the 2020–21 fiscal year came to Frw 1,654.5 billion, or an excess of Frw 60.1 billion over the target. With a target of Frw 1,579.7 billion and actual tax revenue collection of Frw 1,635.8 billion, the fiscal year 2020–21 exceeded the objective by Frw 56.1 billion, an impressive 103.5%. Revenue of Frw 140.9 billion was collected (or an increase of 9.4%) in comparison to Frw 1,494.8 billion in the 2019–20 fiscal year.

Despite the increase in tax revenue collected with the aid of invoicing system in Rwanda, the online devices still operate below the capacity with a number of businesses or activities not contributing to tax revenue collection. This might be due to loopholes caused by internet connections and remoteness.

The Government of Rwanda through its development policies, under the ministry of economic planning (MINECOFIN) set its subsidiary organ known as Rwanda Revenue Authority (RRA) with the aim of ensuring more efficient monitoring of taxpayer's operations especially on the daily business transactions on purchases and sales so as to collect taxes and finance the national. But based on the Rwanda revenue authority publications report in 2018, the multiple invoicing system faces resistance from taxpayers in full payment of their taxes. According to this report the most resistant sectors are, Complex business centers, hospitality centers, that don't generate receipts to all their clients, coming from the electronic billing machines (RRA, 2018/19).

Objective of the study

This section highlighted purpose of the thesis which assembles both general and specific objectives as realized herewith:

General objectives

To examine how the multiple electronic invoicing system as the strategy contributes to the finance of national budget in Rwanda.

Specific objectives

The specific objectives are:

To evaluate how multiple invoicing systems are used by RRA as mechanism of tax collection.

To analyze the tools set while using multiple invoicing systems

To Investigate the challenges faced by taxpayers in using multiple invoicing system

Research hypothesis

The thesis lies on the set force hypotheses;

H₀: We discovered no vital relation in accordance to multiple electronic invoicing systems towards financing the national budget in Rwanda.

H₁: There is a vital relation between multiple electronic invoicing system towards financing the national budget in Rwanda

METHODOLOGY

A compiled research alignment was applied while embracing between measurable and immeasurable approach. A compiled research is the study where reviews and feedbacks are realized or weighed on scale upon the

population Ashby (2008). In this course the thesis reviewed the connection among the reviewed (measurable variable) and the intangible feedbacks (immeasurable variable). The measurable views are the defined figures of stakeholders who makes proper remittances of different tax obligations in their corresponding scales, reviewed and gathered through secondary data. Measurable views focus assembled the collective mentor ideas, commitment, genuine perception and common reasoning of the stakeholders about taxes. This was achieved after conducting the channel of face to face discussions during desk audit and spreadsheet excel sheets at fore front of a common aspect to extend wide experience or add value in skills that's could bridge up the topic of the thesis in the future contextualization domain

LITERATURE REVIEW

This chapter covers the thorough definition of key concepts, the oversight view of the thesis, and the brief of the related literature. It includes some extent empirical review of past research works on the multiple invoicing system so as to finance the national budget in selected countries. This review demarcates the research gap, spotlighting thus the contribution of the researcher. The chapter ends up with the oversight view of the study.

Key concepts definition

This part presents the definition of key concepts such as electronic invoicing systems, and National budget.

Multiple invoicing system

The multiple systems for generating invoice (MSGI) Previously re known as online Billing Machines) based on different ways of generating receipts by use of printing devices like printers, which were initiated by the government policy through its subsidiary organs. This was put in place to streamline receipts by directing into sales data to the national server in the apple -time. This multiple systems is not only meant for generating tax on invoice , but rather it facilitates the proper record keeping and tax collection whenever receipts are generated and given to respective consumers in every point of transaction by a favorite legally registered taxpayer. (Timothy 2014)

National Budget

National budget is a piece of paper ordained in monetary terms by the state /or other entity describing the forecasted activities that will implemented basing on its tax revenue (land tax, pay as u earn tax, withholding tax, excise duties) and suggested compulsory expenses (infrastructures, home based needs) for the forth casted budget year. In different parliamentary organs , the budget is brought to the cabinet and always stands for approval of the cabinet . As cited by Higgs, Robert (2008). Growth". And DavidR.Henderson (ed.). Concise of encyclopedia Economics (2nd ed.). Indianapolis: Library of Economics and Liberty ISBN'' whereas via this net worth approved budget, the state puts in place all planned policies and realizes its programs basing on the scale of preference set forth during the initial stage .

Revenue tax collection

The revenue tax collection is the system via which a tax authority can make a mechanism in order to make bigger tax revenue amassed from private income, and company tax, this collections are levied on goods, staff payroll, deductions on transfers made between the ownership and mutual transfer of property, with other parafiscal fees((Fu & Farn, 2006).

Theoretical framework

This study calls the multiple invoicing system based on underpinned on core basis of the agency theory and the respective institutional hypothesis. The discussion on this hypothesis will be explained on the following section.

Agency Theory

This proposed assumption was firstly drafted by Jensen and Meckling in 1976. It shows the correlation between two sides, whereby one is the primary party that authorizes responsibilities and assignments while the other is the subsidiary agent. The method pretends to be with valid hinderances in connection to the self-esteem and level of optimism that is attributed to the agent. For example, the agent decided to choose the act in the line that is not within the scope, or rather, the agent may act partly within the interest of his principal. There still are other issues which points a company's main focus involves a link of agreements that stands within its limited income, the decision makers who are recognized as the administrators, as well as the board member who are conceived as the representatives considering that they are in charge of managing the assets of the company (Hongming and Yanan, 2012). A thorough written agreement that balances the interests of both the primary party and the agent is also considered to be the best approach to accomplish this. The agent-primary connection in this notion must be established on a first-come, first-served basis or built by a professional, along with other investigative and control systems that aid in monitoring the agent. (1976, Jensen and Meckling).

According to Kenyon and Tilton (2014), the theory as outlined operates under the assumption that primary agents and their principals behave rationally and refer to agreements as the strategy, they have put in place to maximize their wealth. This strategy is applicable to this thesis in that comparing invoicing systems continues to be one of the primary methods used by businesses to address agency issues, particularly when it comes to tax collection, which could have a significant impact on the outcomes of the relationships within both parties.

Furthermore, It is used in this study because it is one of the well-known strategies employed by both public and private institutions and organizations to address the crucial problems relating to the collection of enterprise fees and taxes that affect both the relationship's regular operation and the benefits of the principal (Brink, 2009). According to Mukayisire (2016), providing extra statistics regarding the agent's conduct reduces the apparent data gap and lowers the investor's risk of receiving low returns.

The implication of this agency theory in this study is that comparison of invoicing activities such as billing machines records tax evasion controls, management supervision, desk audits and book keeping which are among the mechanisms that the RRA has adopted in one way of resolving the agency problem. It goes along with reducing agency expense that affects the overall goals of RRA, that is, to increase tax revenue collection in Rwanda on each single fiscal year. This implies that for the agency theory to materialize, managers of public institutions such as the RRA should not operate for their self-interests. The study demonstrates that the adoption and the application of invoicing systems by RRA helps the management of RRA in resolving the problems of fraud, loss of revenue and misuse in tax collection among the employees of RRA and the taxpayers in Rwanda.

Literature on multiple electronic invoicing system

This part insists on multiple invoicing system in relation to tax remittance meant for financing the national budget while the benefit of the study focuses on usage of these electronic devices to identify, data integrity, capturing all the details, and disseminating the appropriate information, which may be related to finance or operational in favor to the normal functioning of business entities but due to some irregularities, administrative security organs align the means of communication, such as emails, video calls, reports, and SMS notifications. The Security policy will also specify the precise authority to which such information should be forwarded in such a circumstance (Slemrod, 2005). The benefits of using different invoicing methods also include the authenticity of company transactions; especially online transactions, the main concern are the transaction's legal standing. It is a legal question if these online transactions are legitimate. Every state recognizes the UCC (Uniform Commercial Code), which is the main federal commercial legislation in the US and regulates business dealings. Generally, e-invoicing transactions are subject to enacted business laws. However, these also result in a few new legal difficulties that, until updated, are not handled by the current laws.

Literature on related challenges

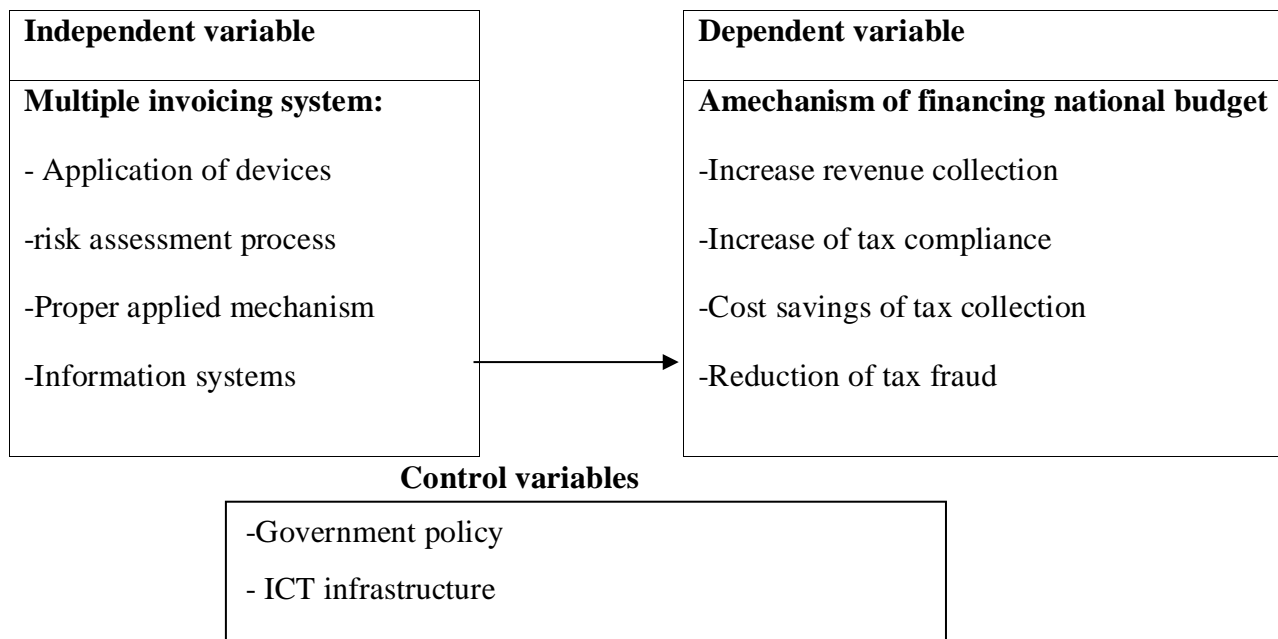
In spite of these achieved advantages of adopting Multiple -invoicing systems on countrywide scale (Spanic *et al.*, 2011) suggest that inception of multiple invoicing system is often complex and expensive for many

stakeholders . However, there is a common understanding about the challenges of adopting multiple invoicing systems and how companies plan to overcome these challenges in reasonable way. Therefore, this thesis tries to fully understand similarities and difference of the challenges that individuals, companies face and benefits they meet while adopting the usage of multiple invoicing system and possible remedies they take to overcome these challenges. Furthermore, this course of action goes deep to investigate the benefits, obstacles, constraints and strategies to overcome challenges in adopting the multiple invoicing systems either in big companies or sole business .Therefore, secondary data under semi structured interview guide ,questionnaire with open-ended questions were collected to deeply understand the challenges that these companies meet and benefits they harvest while adopting multiple invoicing, and strategies they take to overcome these challenges.

Conceptual framework model

A conceptual framework shapes the coronary heart of the thesis; it is the baseline to achieve the set queries of the study; it dictates the course of literature review, forms the groundwork of analysis, conclusions and recommendations.

Conceptual framework model



Source: Researcher own compilation, 2022.

Figure 1: Conceptual framework

Public or private establishments need interrelated factors of invoicing system to make certain strong control over their business activities. These are: online computerized systems, that allows proper processing of invoices, these includes Point of sell , Laptops, desktops and cyber online services which is applied and influenced by means of authorities coverage and ICT infrastructure (Ongeri, 2010).

The thesis seeks to convey to which electronic invoicing system are applied by stakeholders such as monitoring of their operational as unbiased variable affect tremendous tax income series in Rwanda in time period of enlarge revenue collection, expand of tax compliance, reduction of tax fraud so as to finance the national budget .

Empirical study on the correlation between the multiple invoicing systems on proper tax collection platforms in order to finance the national budget. Based on the work done by Mwachiro (2013) revealed that there was once vulnerable relationship between revenue series in KRA. However, the extent to which each factor is implemented by way of Rwanda income authorities in Rwanda have methods of tax revenue collection Hence, thesis tries to check on multiple invoicing system on tax income series in Rwanda by spotlighting Rwanda Revenue Authority

Summary of literature review

In summary, a primary cause of this assessment is the usage of multiple invoicing system as mechanism for revenue collection so as to finance the national budget in some nations over the previous two many years with recommendations from researchers. The study evaluation shows the multiple invoicing mechanism on tax revenue series as it increases income series by means of encouraging voluntary usage of devices, gathering the corrected taxes, and decreasing tax evasion. It is correct to conclude that there is a fine connection between invoicing system and tax income collection. Most of these researches have been carried out in numerous creating nations such as, Nigeria, Ethiopia Kenya, and Uganda and so on; similar research had never been conducted in Rwanda for the duration so far. Therefore, this study conducted have to look on the multiple invoicing system as a mechanism for financing the national budget in Rwanda, Case study of RRA.

RESEARCH METHODOLOGY

This section concentrates upon technical methodology applied in this thesis to deal with research set objectives. It explains the research design, presentation of demographic selected area of every single factor, identified sample size with sampling techniques, data collection procedures. Furthermore, this section discusses authenticity of the gathered data, for further processing and analysis

Research design

The work based on cross-sectional layout in order to examine the relationship between electronic devices as a mechanism of tax collection so as to finance the national budget in Rwanda as they exist in a defined population at a single factor in time or over a defined period of time. Cross-sectional research is an imparting picture of the frequency of electronic systems associated characteristics (e.g. publicity variables) in a population at a given factor in time. The study is descriptive since it invites the cross-sectional attitudes of the design which involves the statically measures of determine level of tax degree correction in a described populace. Additionally analytical cross-sectional surveys that is used to investigate the affiliation between multiple invoicing devices Vis a Vis tax revenue collection in Rwanda.

Demographic of the study

The demographic study group are the staff of RRA who have information on multiple invoicing system and financial performance of RRA. Provided, regarding they are the real part of community, that encompasses 893 staffs of RRA working in their respective following sections .

Table 1: Demographic distribution in RRA

Department	Population size
Administration and Logistics	76
Corporate risk Mgt and Modernization	32
Finance Department	62
Human Resources Department	11
Information Technology Department	46
Planning and Research Department	11
Quality Assurance Department	22
Revenue Investigation & Enforcement Dept	35
Taxpayers Department services	23
Domestic Taxes Department	70
Small and Medium Taxpayers Office	147
Large Taxpayers Office	70
Regions & Decentralized Taxes Office	288
Total	893

Source: RRA 2022 Primary Data

Sample size

To get the sample size, I used the demographic study that determined 893 staff in reference to the identification of the thesis, it became the sample used in data collection on 276 RRA staff members, rather than 893. As displayed in the study, this scope was based on to attain the stratum vis a vis the Slovin's Formula, that was meant to determine the core data collection on 893 employees of RRA that is great than 100, Therefore to get the sample size for each stratum it was calculated as follows: $n = \frac{N}{1+N(e)^2}$

Where: n= the sample size,

N= Population size and

E= the margin of error (5%).

$$n = \frac{893}{1 + 893(0.05)^2} = \frac{893}{3.232} = 276.2 \approx 276$$

This study collected data on 276 employees working in RRA as shown in with its respective fixed percentage of the sample size used in the stratum on every respective department to get the real data

Table 2: Sample size and Percentage rate

Department	Population size	Sample size	Percentage rate
Administration and Logistics	76	23	8%
Corporate risk Mgt and Modernization	32	10	4%
Finance Department	62	19	7%
Human Resources Department	11	3	1%
Information Technology Department	46	14	5%
Planning and Research Department	11	3	1%
Quality Assurance Department	22	7	3%
Revenue Investigation & Enforcement Dpt	35	11	4%
Taxpayer Services Department	23	7	3%
Domestic Taxes Department	70	22	7%
Small and Medium Taxpayers Office	147	46	16%
Large Taxpayers Office	70	22	8%
Regions & Decentralized Taxes Office	288	89	32%
Grand Total	893	276	100%

Source: RRA 2022

Sampling techniques

The thesis applied stratified sampling technique because employee of RRA participated in the research were selected based on their department which are subcategorized as follow: 23 Administration and Logistics , 10 Corporate risk Mgt and Modernization,19 Finance

Department, 3 Human Resources Department,14 Information Technology Department,3

Planning and Research Department,7 Quality Assurance Department, 11 Revenue Investigation & Enforcement Dpt,7 Taxpayer Service Department,22 Domestic Taxes Department, 46 Small / Medium Taxpayer's Office, 22 Large Taxpayers Office department

Data collection procedure

Figurers relieved from the study were collected through questionnaire as primary data while documentation techniques meant to gather the secondary data:

Data processing and analysis

Researcher made a perfect plan of processing and analysis of data. Therefore this section deals with data processing and analysis that were applied so as to realize specific set objective of the thesis with the analysis done while organizing the data collected to step at the clear and tangible results. The results ascertained were related to the set objectives of the study and were converted into justifiable statistics to help the analysis after interpreting editing, coding and tabulation. This study used a faircombined descriptive statistics, such as correlation analysis and multiple linear regressions.

RESULTS AND DISCUSSIONS

This chapter provides the whole statistics whereby the analysis includes the use of fundamental data. Both descriptive and inferential statistical outcomes which are presented in Tables and figures. The first part rotates on explaining the profile of the respondents, seconded by the part that deals with a description of the findings on tax collection by usage of multiple invoicing systems which displays a tremendous growth in those collections against the previous fiscal years 2014 /2015 before the proper usage of Revenue collections which was Rwf 871.4 billion upon the target of Rwf 888.2 billion; indicating a performance of 98.1%. that was an achievement of 97.8%, missing the target by Rwf 19.6 billion .Meanwhile after the introduction of these systems the stewardship of Rwanda revenue authority realized the growth which was reflected on collections achieved for the next fiscal year . According to 2018 RRA report,it shows that the target for the 2015/16 fiscal year (FY) demonstrated Rwf 949.2 bn; against the received which were Rwf 983.4 bn; recording an surpass of 103.6% in excess to the Previous of Rwf 34.2 bn.when compared to 2014–15, the tax revenue status for 2015–16 increased by 14.5%. For the fiscal year 2016–17, tax revenue collection came in at Rwf 1,086.5 billion net target as opposed to Rwf 1,081.4 billion. This was a success of 100.5% and exceeded the goal by Rwf 5.04 billion. In contrast to a gain of Rwf 99.8 billion in Fiscal Year 2015/16, tax income increased marginally by 10.1% over the course of FY 2016/17. Despite a strong revenue collection (tax and non-tax, excluding local government revenues) of Frw 1,252.3 billion during the 2017–18 fiscal year, which is an achievement of Frw 1,215.2 billion and an additional Frw 37.1 billion over the objective.

The national treasury's total revenue (tax and non-tax) during the 2019 fiscal year was Frw 1,516.3 billion, falling short of the goal of Frw 1,589.0 bn. The revenues came in at Frw 72.8 billion, 95.4% short of the goal. Due to the global lockdown in response to the COVID-19 epidemic, both domestic and foreign trade experienced a recession. Despite the fact that the revenue collections fell short of expectations, there was nevertheless an increase in revenue of Frw 93.4 billion (6.6%) from the previous fiscal year. The linear economic conditions from July to December of 2019 were the primary factor in the fiscal year 2019–20's success in terms of tax revenue.

In comparison to the objective of Frw 1,594.3 billion, or a celebration of 103.8%, the overall revenue collection (including tax and non-tax, excluding local government collections) for the 2020–21 fiscal year came to Frw 1,654.5 billion, or an excess of Frw 60.1 billion over the target. With a target of Frw 1,579.7 billion and actual tax revenue collection of Frw 1,635.8 billion, the fiscal year 2020–21 exceeded the objective by Frw 56.1 billion, an impressive 103.5%. Revenue of Frw 140.9 billion was collected (or an increase of 9.4%) in comparison to Frw 1,494.8 billion in the 2019–20 fiscal year. In the first quarter of the fiscal year 2021–2022,which contributed a rate of 80% to the national budget .After reviewing, analyzing , placing codes and insert in data into SPSS. The sketched corresponding tables, that are inter related with statistical tools from SPSS are set alert for usage in analyzing data into percentages rates; spearman coefficients(r) multiple linear regression to reflect clear relationship between multiple invoicing systems Meant for financing the national Budget.

Obstacles met by taxpayers in using multiple invoicing system

The third objective was to investigate the challenges faced by taxpayers in using multiple invoicing system in tax collection .The similar problems faced by the taxpayers in the due process of using electronic devices in Rwanda were analyzed and interpreted for the amicable decision so as to bring more progressive revenues , depending on favorable drafted good ways of levying taxes excluding facilitation expenses, proper use of time , possible mechanisms of dealing with tax issues, fair components of devices applications , authenticity

of online invoicing systems improved data integrity, confidentiality, and audit ability of transactions. They also provided assurance of information, control, and assurance of transactions. A five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree), was used to gauge their level of agreement or disagreement the findings of this analysis are presented below in Table 7.

Table 3: Respondents views on main problems faced by the usage of electronic invoicing system in Rwanda

	1	2	3	4	5	Mean	Std Dev
The usage of invoicing system burdens Taxpayers	0 (0.0%)	0 (0.0%)	8 (11.4%)	15 (21.4%)	47 (67.1%)	4.56	.694
High penalties	0 (0.0%)	5 (7.1%)	14 (20.0%)	24 (34.3%)	37 (52.9%)	4.43	.671
The system of using invoicing system has made easy tax evasion	0 (0.0%)	3 (4.3)	12 (17.1%)	12 (17.1%)	43 (61.4%)	4.36	.917
Chance of training on usage of electronic device	0 (0.0%)	0 (0.0%)	8 (11.4%)	15 (21.4%)	47 (67.1%)	4.56	.694
There is lack of training on how to use invoicing systems in some regions of Rwanda	0 (0.0%)	2 (2.7%)	12 (16.2%)	32 (43.2%)	28 (37.8%)	4.16	.794
Low Skills of taxpayers makes them to avoid using Electronic devices invoices	0 (0.0%)	5 (7.1%)	14 (20.0%)	24 (34.3%)	37 (52.9%)	4.43	.671

Source: Primary data, 2022

Table 7 Shows that 67.1% of the staff strongly agreed with the statement that using invoicing system burdens taxpayers . According to the data in table 7 revenue systems are automated and incase of irregularity on tax remittances or returns heavy penalties are accrued with other fines coming from the principal , as per the se rules and regulations of tax policy originating from the Ministerial Order that mandates the use of e filling . This means that anyone who fails to acquire and properly use the electronic invoicing system will be breaking the law which is punishable basing on legal acts.

Majority (52.9%) strongly agreed with the statement that heavy penalties to taxpayer has become a hinderance for the progress on their business that's why some to go into competent courts. However 61.4% strongly agreed that the system of using invoicing system has made easy for tax evasion this is because of other associated expenses in our normal living conditions Majority (67.1%) strongly agreed with the statement that there is limited opportunities due to remoteness which cause the scarcity of training on how to use of online electronic invoicing system in some regions of Rwanda, . Lastly, 52.9% of the participants responded by citing that there is Low Skills of taxpayers makes them to consequently dodge or avoid using Electronic devices invoices.

The study is in line with Umoru and Anyiweh (2013) they deeply analyzed the impact of using online system in Nigerian tax administration. To validate and obtain the physical data, the study made reference to their exploratory research strategy. The results showed that an important part of tax administration is played by online electronic tax systems. It is imperative to emphasize that the study did not take the impact of electronic tax systems into account. Alm, et al. (2020) evaluated the impact of the rapid technological development on the tax system. Even though this study combined all characteristics connected to new technological developments, the study discovered that they have a positive correlation. The results were revealed in a literature review.

Correlation Analysis

According to Hyndman (2008), when dealing with a population's collection of two quantitative variables, the principle of Pearson's correlation is used. to determine the findings intended for the relationship's direction. The variables that show a positive linear association are those that constitute the true study hypotheses. According to these scholars, Pearson's correlation coefficients show how complementary two variables are to one another. It

is possible for the Pearson correlation coefficient to fall inside the range of +1 and -1. A value of zero indicates that there is no relationship between the two variables. Positive values are greater than 0, and as the value of one variable increases, so does the value of the other. (Kombo & Tromp) from 2009. If the result is less than 0, there is a negative relationship, which means that when the value of one variable increases, the value of the other variable decreases. In this study, the Pearson correlation coefficient was used to highlight the significance and strength of the relationship between the variables.

Table 4: Relationship between electronic invoicing systems and tax collections in Rwanda

		Electronic invoicing system	
Electronic invoicing devices	Pearson Correlation Sig. (2-tailed)	1	
	N	74	
Tax collections	Pearson Correlation Sig. (2-tailed)	.765** .000	1
	N	74	74

** . Correlation is significant at the 0.01 level (2-

A Pearson correlation coefficient of $r=0.765$ between the electronic invoicing system and tax collection in Rwanda at RRA is seen in Table 8's data. The relationship between an electronic invoicing system and tax collection is seen in Table 8. Using the Pearson correlation coefficient, the researcher discovered that the coefficient r is equal to 0.765. Between -1 and 1, the Pearson Coefficient of Correlation might vary. The p-value of 0.000 (i.e., 0.0%) is less than 5% because the significant level is set at 0.05 (5%). This supports the idea that there is a strong connection between taxes and computerized invoicing systems collection to finance the national budget.

A descriptive and correlation study design was employed. Both primary and secondary data were gathered using questionnaires and desk research, respectively. Multiple invoicing systems and tax collection were found to be strongly correlated, according to the data. Like any of the earlier research stated, this study demonstrates a factor analysis of comparing multiple invoicing system on the tax collection to finance the national Budget.

Regression model

Regression analysis was used in this study to reflect the correlation between several invoicing variables, systems as mechanism for tax returns remittances in Rwanda. The case study Rwanda Revenue Authority (RRA).

Table 5: Summary model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.801 ^a	.642	62.4	.35837

Source: Primary data, 2022.

Table 9 indicates results for explaining regression between multiple invoicing systems and tax returns remittances in Rwanda whereby 62.4% of variation in the tax regime is explained by a value change of electronic invoicing systems. In other words, the deficit of 37.6% is explained by other factors apart from online invoicing systems. The results are satisfactory through the indication of goodness of fit by the linear regression.

Table 6: ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2.052	4	410	3.399	.000 ^b
	Residual	13.762	51	121		
	Total	15.813	55			

Dependent Variable: Tax collection by electronic devices

Predictors: (Constant), Influence of the System, User of invoicing system, Quality of Information and invoicing system use

Source: Primary data, 2022

Result review that electronic invoicing systems is statistically significant in explaining tax collection in Rwanda. Tests were conducted to rule out the null hypothesis, according to which there is no connection between Rwanda's computerized invoicing system and tax collection. The results of the ANOVA test in Table 10 indicate that the null hypothesis is rejected since the probability value (value=0.000) is less than or equal to 0.05.electronic invoicing system and tax collection in Rwanda.

Table 7: Coefficient results

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.167	.231		1.973	.106
	System	.304	.009	.444	4.104	.000
	Quality	.315	.050	1.231	4.616	.000
	User	.359	.240	.230	3.689	.000
	Use	.333	.240	.230	3.012	.000

Source: Primary data, 2022

From the data in the Table 11, the established regression equation was:

$$Y = 0.167 + 0.304 X_1 + 0.315 X_2 + 0.359 X_3 + 0.333 X_4$$

Checking the above the regression equation, it was analyzed and seen that holding Influence of the System, briefly User of invoicing system, Quality of Information and invoicing if system usage was kept at a constant zero, tax revenue would be 0.167. A unit increase in the system would result in a 0.304 increase in tax revenue, a unit increase in quality would result in a 0.315 increase in tax revenue, and a unit increase in users would result in a 0.304 increase in tax revenue

0.359 Additionally, increasing the number of units used would result in a 0.333-fold increase in tax revenue.

CONCLUSION AND RECOMMENDATION

Conclusion

Thorough analysis from constant statements justified that there should be strong relationship between online invoicing systems in the policy mandated for tax collection in Rwanda to finance the national budget the findings indicate that the independent variable and dependent variable have a high positive correlation of.765**, and the p-value is.000, which is less than 0.01. The respondents' N is 74, and the significant threshold is 0.05. Researchers get the conclusion that there is connection between the variables when the significance level of the p-value is not reached. This suggests that there is a powerful connection between online invoicing systems in tax collections in Rwanda. Therefore this draws a conclusion that electronic invoicing systems positively laid a strong foundation as mechanism of tax collection so as to finance the national budget in Rwanda.

Recommendations

The study focused on usage of multiple invoicing systems as mechanism of financing the national budget with positive attitudes of answering raised questions raised like : What is the effect of multiple online invoicing system on tax collection aimed at financing the national budget a Rwandan? What are the primary obstacles to

Rwanda's adoption of multiple electronic invoicing system? What connection exists between Rwanda's online invoicing system and tax collection?

On the basis of the direction and conclusion, the following suggestions are made: Therefore, creating new breakoff for the government's could be the most effective tool of raising large amounts of tax income.

Implementing fiscal policy measures that encourage voluntary tax remittance using operating models for tax reforms. By building the necessary infrastructure and creating an atmosphere that encourages the emergence of additional businesses. The government should increase the tax base. Efficient Tax Administration: To prevent potential tax evasion, tax avoidance, and different gaps in the tax system, the government should enhance tax administration. The government should keep enticing businesses to increase their tax payment compliance. Subsequently in order to build a concrete foundation for e-invoicing, public and commercial entities should steadily raise the required infrastructure by encouraging the development of relevant technologies, hiring specialists, and extending high-speed information networks.

Suggestions for further study

Researcher has observed the following areas for further studies because they are some of the challenges facing Multiple invoicing system in Rwanda: Further studies can be carried out on:

Firstly, Consistency of electronic invoicing system reliability through online taxation Management.

Secondly, Stewardship awareness on electronic taxation system.

Thirdly, Tax policy and Tax planning with aid of electronic taxation system.

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