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# E-Tax System Usage and Effectiveness of Collection of Social Security Contribution: A Case of Rssb

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ABSTRACT: E-tax system and the manual system are two systems that can be used in collecting taxes and social security contributions. The taxes and contributions collected using the e-tax system are different from those collected by using the manual system due to different reasons based on economic and non-economic factors. Effective from July 2012, Rwanda Social Security Board (RSSB) transferred the collection of social security contributions in Rwanda Revenue Authority by utilizing e-tax system. Therefore, present study examined the effect of e-tax system payment on effective collection of social security contribution in Rwanda, determines the effects of e-tax filing system on contribution efficiency in Rwanda and identifying the ways of mitigating the challenges of e- tax system usage on contributions collection efficiency in Rwanda. Through this study, the results demonstrated that the contributors knew the major role of e-tax system in collection of social security contributions in terms of time management and reduction of related costs and consequently e-tax service system helped them to comply on time without any punishment like payment of penalties; it helped the government of Rwanda to know where the priorities to enforce in terms of social security and tax collection, and the findings of the research helped the researcher to get more knowledge about the e-tax system significant effects on the contributions increment and reduction of challenges daily met in this task as well as the selfkeeping of files. To realize the study, the researcher used descriptive research study design which based on approach of qualitative and approach of quantitative for exhaustive analysis of data. The total population was 1,599 while the sample size to take was 85 respondents. The primary and secondary sources of data were used like survey questionnaires and documentary analysis. The qualitative data was analyzed using content analysis. For the quantitative data, the codification of information was done utilizing the coding structure. The analysis of the responses from survey questionnaires collected from sampled employers and employees of RSSB showed a success, where the results showed that e-tax system is well used by both RSSB employees and employers and has positive impact on the side of RSSB like increase of contribution collected, reduction of staff costs allocated to the contribution collection, paperless, saving of files space, improved customer services delivery, reduction of customers' long line queue at RSSB offices and time management while on the side of contributors through e-tax system they got quick services and all activities related to mandatory taxes are done in one stop center without moving away, which is money saving and time management. This led to the reaching of general and specific objectives of the research RSSB is recommended to work closely with the partners especially RRA and other services providers of network, internet connectivity for providing full network and internet connection 24/24hours so that it can be accessible by everyone at any time and everywhere. This research finding is recommended to be a helpful reference to the future researchers who are interested in the similar area.

# I. INTRODUCTION

# 1.0. Introduction

This research study focuses on the contribution of e-tax system usage on the effective collection of social security contributions of Rwanda Social Security Board. This first chapter covers seven main subsections that helped to get full information about the plan of this first chapter like the study's background, problem's statement, study's objectives, research questions, significance, limitations and scope of the study.

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## 1.1. Background of the study

Manual filing stays a conventional and the most common technique to submit individual revenue tax returns for government income services, is what each nation is preoccupying for. In many years passed, several countries have attempted to bring in the system of electronic filing to enhance operations of a state and lessen expenses (Regina & Frank, 2020). The administrators of tax started to utilize the technology to revenue tax returns for the reason that it facilitates them to automatically upload tax-filing data, without human intervention into the computer and with no manual data record. It is Web based and is becoming more and more popular. The filing by use of internet has fundamentally initiated the alterations to the technique of filing tax returns, by means of necessitating for the primitive ancillary study involving electronic government issues (Wang, 2020).

Many countries that have shifted to the amalgamation of social contribution collection functions into the tax revenue management, and realized that the marginal costs of extending the systems utilized for administration of tax for including social security contributions, are relatively low (Allahverdi & Kuzucu, 2021). The Tax administration, in which the only emphasis is on income compilation, extend compliance-based organizational cultures and powerfully allied procedures appropriate to the evaluation and collection of monies (Peter, Stanford, & Graham 2019).

Social insurance agencies normally construct the strongest focal point on the establishment of personal quota to the benefits and efficiency in the imbursement out of them to the beneficiary. They build up the institutions criminate and procedures associated on this goal as it is understandable that where they have responsibility of social security collections and providing benefits to the concerned beneficiaries, the more attention will be paid to benefits payment, while the degree of performance in collection of contributions will be limited at a certain limited level of performance in comparison to the payment of benefits (Allahverdi & Kuzucu, 2021).

The establishment, mission, organization and functioning of Rwanda Social Security Board (RSSB) is determined by law No.45/2010 of 14/12/2010 and through this law, the RSSB mission is "To ensure efficient contribution collection, well managing and investing the funds of members, to insure that services of social security are provided in high quality level and provision of benefits."

With reference to report of International Organization of Pension Supervision done in 2011, the collection of contributions required the presence of the contributors to the nearest branch of RSSB for manual filing together by presenting physically a payment proof from any bank where RSSB opened an account. Those employers who disburse social security contributors were at the same time taxpayers to RRA. This system of paying social security contributions involved the traffic movement of contributors to RSSB branches monthly and/or quarterly depending on the type of returns while they had to comply also with RRA taxes. In order to facilitate customers for accessing to public services, the adoption of one stop collection center became a solution (Agreement of RSSB & RRA, 2012).

In 2012, the Rwanda Revenue Authority (RRA) launched a new system, which is known as e-tax with an objective of providing taxpayers the easiest and fastest access to services as well as bureaucracies reduction at the RRA offices (Ben, 2012). RRA also incorporated in its e-tax system, the collection of RSSB contributions, and both Institutions signed agreement in order to implement the RSSB pension and medical contributions to one collection point at RRA. Effectively all contributions of RSSB were collected by RRA since July 2012 (Ben, 2013).

Each one can ask him/herself in mind whether the implementation of this memorandum of understanding has demonstrated a good success by using e-tax system in effective compilation of social security contributions. This is a subject of this research.

# 1.2. Problem statement

Many African countries struggle to collect an adequate amount of tax revenue to support needed investments in public services. In addition, the contributors face higher tax compliance costs, even compared to countries at similar income level. Thus, the use of Information Technology (IT) in tax administration, such as e-filing, increases with national income(Okunogbe O. & Santoro F., 2023).

The government of Rwanda who is a service provider was obligated to embrace technology in order to reduce the cost of operational in terms of stationery, and transaction cost and to enable taxpayers to be compliant anywhere in the world and at any time. Indeed, the e-tax system was introduced at a time when government was championing the

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digitalization of its ministerial process as a way to enhance the service delivery to the citizens (Wasonga O.& Osiemo A.,K, 2023).

The electronic tax systems that was introduced in Rwanda through Rwanda Revenue Authority allows the government to serve citizens in more timely, effective and cost-efficient way, as a result provided by information technology, the taxpayers were called to adopt the e-tax systems to prevent extra wastage of time and money(Ananias, 2021).

In a developing country like Rwanda, the reforms in tax administration system were initiated, from manual system of tax filing and payment, to the use of information system of technology known as e-tax, with the purpose to improve the tax collections, management, and tax compliance. Before the utilization of e-tax system, Rwanda Revenue Authority faced a big problem of finding the revenue from taxes which was always below to the budget at national level, and the initiation of e-tax system in compilation of revenue became a solution for improving (Jaya S & Emmanuel N., 2016).

Also, in order to create improvement regarding the collection of social security of mandatory scheme in Rwanda, the mandate of collection of social security contributions was given to the Rwanda Revenue Authority, where e-tax is necessarily used by all contributors to do filing and payment of social security contributions (Ben, 2013).

Unfortunately, the instauration of e-tax system in compilation of social security contributions does not necessarily justifying that all contributors comply; some contributors are not complying on time or never comply (Abdul & Idris, 2020). By transferring the collection of mandatory social security contribution to Rwanda Revenue Authority especially through collection by using e-tax system, dreams were to have effective collection of social security contribution due to the contributors compliance enhanced. However, some contributors are not complying on time or never comply.

On basis of RSSB annual performance report covering the financial year of July 2011 to June 2012, it has been noted that the collection of social security contributions was increased up to 106%, which corresponds to the amount of 70.5 billion in comparison of 66.59 billion planned to collect. In that period, the contributors' compliance level was only 11,960 out of 16,030 active employers, which means 75%. The lowest level of compliance of 5,369 against 8,214 (65.4%) is mainly found in Kigali City where the active employers are covering 51% of the whole active employers over the Country. This period was before integration of Social Security contribution to RRA.

Basing on the annual performance report covering the period July 2012-June 2013 of RSSB, it was underlined that the collection of social security contributions were achieved at 82.96 billion (107%) while the target was 77.619 billion; and the level of compliance was 11.194 out of 16,891 employers (66%). For the year 2013-2014, the collection was 93%, which means that for the targeted collections of 95.7billion, only 88.6billion was collected in both schemes of RSSB (pension, medical and Occupational Hazard), while the employers' compliance level was at 76%.

The annual report of RSSB for the financial year July 2018-June 2019 showed that social security contributions were reached to 180,9 billion(111.87%) while it was 161,7billions in the year July 2017-June 2018, which demonstrated a good performance.

Through the figures mentioned in performance reports related to different years, each one can ask in mind whether e-tax is really developed as competent system to effective collection of social security contributions. Thus, this research will examine the contribution of e-tax system usage on effective collection of social security contributions.

#### 1.3. Objective of the study

This research has general objective and the specific objective

#### 1.3.1. General objective

The aim of this research is to analyze the contribution of e-tax system usage on effective collection of social security contributions in Rwanda

# 1.3.2. Specific objectives

The following specific objectives are identified:

(i) To determine the effects of e-filing system on contribution efficiency in Rwanda;

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- (ii) Examine the effect of e-payment system on collection of social security contribution in Rwanda;
- (iii) To assess the effect of e-tax system in contributors' compliance efficiency of RSSB.

### 1.4. Research questions

In our study, the research questions are the following:

- (i) What is the effect of e-filing system on contribution efficiency in Rwanda?
- (ii) What is the effect of e-payment system on collection of social security contribution efficiency in Rwanda?
- (iv) What is the effect of e-tax system on contributors' compliance efficiency in RSSB?

## 1.5. Scope of the study

The study is a concern of the theories focusing on e-tax system usage on effective collection of social security contributions. It also concentrated to the information given by RSSB employees as the complement with the resources of secondary data in relation to the e-tax system usage for social security contribution collection. As time scope, this research is covered the data from July 2011 to June 2015.

# 1.6. Significance of the study

## 1.6.1. To the public

Through this study, contributors will know the major role of e-tax system in collection of social security contributions in terms of time management and reduction of related costs and consequently e-tax service system will help them to comply on time without any sort of punishment like payment of penalties.

## 1.6.2. To RSSB and the Government of Rwanda

The research will provide knowledge for e-tax policy administrators, makers, management of RSSB and the social security contributions collection agents as it provides the necessary information regarding the e-tax system usage in collecting social security contributions.

Also, this research will help the Government of Rwanda to know where the priorities to enforce in terms of social security and tax collection.

#### 1.6.3. To the researcher

Focus of the area of RRA e-tax system in effective collection of social security contribution which was not developed in previous researchers, the findings of the research will help the researcher to get more knowledge about the e-tax system significant effects on the contributions increment and reduction of challenges daily met in this task as well as the self-keeping of files. It will also be a helpful reference to other researchers and academicians on the same subject.

# 1.7. Limitation of the study

This study will be limited information which will be given by the respondents by sampling them in total staff of RSSB at Head Office and those who are dispatched in all Districts of the country, which requires sufficient financial budget and time, we may not be able to do systematic research where every employee may be given time to express his/her point of view about RRA e-tax system usage and effective compilation of social security contributions of RSSB. For that purpose, there is a consideration of a sample of employees who represent the whole population and from which the findings are to be generalized them.

The second limitation of this study will the degree of confidentiality of the data to be collected, which will render it a problem to have access to all required data to complete this study. Some respondents may refuse to answer all questions asked for the reasons that they thought what they say will be recorded so that they have serious effect on them.

The third limitation is that the employees/respondents can refuse to respond the questions on the questionnaire by having constraint that it is not legally authorized by institution or considering that is research in commercial way, but the researcher will use authorization letter from the University showing that the research academic and through which RSSB will give also authorization letter.

The fourth limitation of this research will be the language because some respondents do not know English while research report has to be written in English. The suggested solutions to the above limitations will be, to increase the

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sample size to reduce bias and start doing research on time. For the respondents who refused to answer all questions, the researcher will assure them that their answers will be kept confidential and told to them that there is no name of respondent on questionnaire. With these explanations, all respondents got convinced and answer all questions of the research questionnaire. To solve the problem of language, the questionnaire will be translated in Kinyarwanda to facilitate respondents understanding easily the question asked.

#### 1.8. Organization of the study

This investigation proposal is split into three chapters as follows:

Chapter one contains the introduction with sub chapters: overview of the chapter, the background of the study, statement of problem, study's objective, the research questions, the significance of the study, the scope and limitation of the study, and organization of the study. The literature review is the second chapter with the following sub chapters: Introduction, theoretical literature, empirical literature, critical review and research gap identification, theoretical framework, conceptual framework, and summary.

The research methodology is the third chapter where the main points are: overview of the chapter, research design, target population, sample design, sampling techniques, the methods of data collection, procedures of data analysis and ethical consideration.

#### II. REVIEW OF RELATED LITERATURE

#### 2.0. Introduction

This chapter significantly stands for the review of the accessible literature concerned to the E-tax services system usage and effective revenue collection, and it explains the dissimilar aims basing on the hand literature.

#### 2.1. Theoretical literature

In this section, the main focus will be concentrated on concepts which are related to the e-tax system and social security contributions.

# 2.1.1 Electronic tax system administration

It is not simple to explain the e-tax system without giving some explanation of the tax itself and Information System. A tax is pecuniary levy or added charge unavoidable upon a taxpayer through a nation or functional equivalent of a state, such that collapse to disburse is punished by the law (Auyat, 2019). Also, a tax may be brought in such a way it dischargers face the full social cost of the emanations. At the regional or nationwide level, Government would wish to opt for a policy framework that it is suitable to their specific circumstances; tax policy can all play a role (Nicholas, 2020).

Each one can ask him/herself where the social security contributions are classified, but a social security contribution is defined as a tax in such way that it payment is mandatory required and regulated by the law in a country (Pistone & Pasquale, 2019). The System refers to "The grouping of connected parts, that are as one, consisting a sole unit" (Kurdi & Abed, 2019). A group of the major systems comprises four parts: Processors, Inputs, Output, and Feedback and at the end, the system boundaries (Morsi, 2018).

The System of Information was defined as "a software helping a person or an institution in collecting data, operating, storing, and distributing all useful information for process of organizational decision making". While electronic is generally defined as the use machines built of functioning, by techniques or principles of electrons (Idris, 2018).

E-tax filing is the updated way used to disburse taxes through an electronic medium, like the Internet even though it is simple, flexible, suitable and, accessible all the time in a day (Yusniza & Anna, 2018). According to Ben (2012), e-payment is the use of mobile banking, internet banking and site to site electronic tax payment mechanism. E-tax is defined as e-filing of returns, and it involves tariff foisted on services and goods bought and sold on line amongst others. It provides quick services than business deal through letters/mails and they are secured and protected. (Auyat, 2019).

In attempting of operations modernization for fulfilling its obligations in regards of revenue, the Rwanda Revenue Authority initiated the electronic taxation's system, universally known as E-tax filling to eradicate the diverse challenges encountered by the revenue collecting body, for the fiscal year 2011-2012, which has e-tax filling and e-tax payment (Ben, 2012).

Through e-filing, the contributors can electronically, submit their tax returns to Institution in charge of collecting taxes. On the side of service provider, e-filing diminishes their workload as well as the related cost of operations, due to the tax

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returns submission in the situation of not using the papers. It simply decreases the expenditure handling of tax returns especially in processing, storing records. Filing electronically gives a lot of facets of 'convenience' to people paying taxes at extent of that is not obtainable via traditional way. Also, Electronic-filing provides time suppleness and computation mistake reduction, on the form of tax return to taxpayers. (Anna & Yusniza, 2018).

#### 2.1.2. E- tax system introduction

The electronic-tax system provides the registration electronically, tax and return filing, and payout, and schooling and sharing to taxpayer's necessary information (Guillermo, 2020).

In Rwanda, the utilization of e-tax system was initiated by RRA in 2012, where e-filling was helping to do mobile declaration, functioning the Electronic Single Window (ESW) for domestic taxpayers, and Authorized Economic Operator (AEO) for importers and exporters With the purpose of improving in collection of tax and accordingly achieve the targeted budget. And this was initiated to facilitate the contributors to deal accordingly with RRA at anywhere and at any time, and enhancing administration of tax to do tax revenue compilation in short term and as a measure of improving in tax efficiency and compliance(Jaya S. & Emmanuel N., 2016).

Through e-tax system utilization, the social security contributions are well collected and in such way, it offers to the country many potential benefits, ranging from faster collection with the purpose of minimizing errors and reducing administrative costs, while making tax returns and disbursing mandatory taxes is compulsory. On other side, it helps taxpayers to comply easily and with time saving (Regina & Frank, 2020).

#### 2.1.3. The similitude between a social security contribution and a tax

The social security contribution and tax its relation is reasonably complex. In this research, we won't analyze in profundity every one of relationships and dissimilarities between them, as it is not the main purpose of the research. Allow us now to talk about some, in most probability, most important common disparities and characteristics betwixt a social security contribution and a tax. The contributions of social security or taxes are all public tariffs while they might be felt likewise by people who ought to disburse them. All are established and defined by the law through a special decision of government cabinet or a form of a statute of the parliament. Definitively, it is understandable that it is not a free choice of the person to pay them or not. A person is coerced to disburse social security contributions and taxes (Grega,

Either social security contributions or taxes decrease the remunerations or other types of revenue in favor of taxpayer and there may be a tendency to avoid not only social security contributions, but also taxes. Nonetheless, the aim of levying social security contributions is different from the objective of levying taxes, (Idris, 2018).

## 2.1.4. Dissimilarities betwixt a social security contribution and a tax

The collection of social security contributions is done with an accurate aim and has a multifaceted significance. The comprehension of subjective-individual for the contributions of social security hence are paid, they have character of insurance and by considering a social insurance Institution as debtor. For the tax return, it is concerned to the public. The payment of contribution is done in interchange to an advantage as benefits that ought to be given by the receiver of the contribution (Stanovnik, 2017).

The perception of the contribution might be in its subjective-institutional dimension too. The emphasis is put on the element of membership as a relation of social insurance. Otherwise, the insured person is a member of the Institution of social insurance and possesses the rights of a membership, while this character cannot be found in taxpayer(Effrosyni, 2020). The dimension of objective-institutional: The custodian of a contribution of social security is a specialized agent legally defined by law, existing for a sole, and has main objectives of giving rights to the beneficiary as provided by the law (Kurdi & Abed, 2019).

Suchlike objective as well as the multifaceted significance is normally not present at taxes. They do not stand for the disbursement for the specified profit of a particular lawful individual (Effrosyni, 2020). Their objective is to congregate revenue, that from time to time might be set aside for the definite objective as well as hence incompletely liberally disposable by the government. In the country, where the social protection is financed in full by taxes in general, cannot be called a social insurance (Pieters, 2018).

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## 2.1.5. Advantage of amalgamation of Social security contribution and tax

Either social security contributions or taxes, both are public levies and, they might be felt likewise by people who disbursing them. All are established by the law through a special decision of the government or a way a statute approved by parliament. Hence, There is no gratis willingness of the human being to take action concerning them or not. A person is forced to pay social security contributions and taxes. Here, by some, there must a tendency to avoid it payment not only a tax but also, avoiding the social security contributions too. (Grega, 2020).

According to Peter, Stanford & Graham (2019), unifying the remittance of social contributions and taxes is to attain to the best probable way to well performing in collection of returns and revenue. Referring on the research carried out by EISS (2019), IMF working paper (2016), Grega (2020) and Stanovnik (2017), the arguments of amalgamating social contribution and taxes collection are summarized as to defining and registering the taxpayers and contributors utilizing the only one number of registrations; Possess the scheme of gathering the processed data in the form of profits or gains as for the self-employed and employers, normally basing on the same definitions of revenue; It is easily to the employers, to withholding contributions and taxes which comes from the employees' revenue and disburses them to concerned custodians, normally by using a system of banking; possess an effective system of collection which helps in monitoring the employers who fail to file, or ignore to pay.

Social organizations and tax competences: The administrators of taxes, wherever the only emphasis is to collect revenue, take sufficient time to build or develop compliance-based managerial cultures as well as powerfully allied procedures suiTable to the currencies evaluation and compilation, while social insurance agencies normally put up the physically powerful focus on setting up human being entitlements to benefits as well as good way of paying out to the beneficiaries, and when the collection is also integrated in its activities, the success is of course limited at a certain level of collection performance (IMF working paper, 2004).

Lower level of government's cost of administration: There is a small number of personnel as well as economies of scale in management of human resource, lower costs of training, a few number of supervisors, as well as communal procedures and processes for filing and disbursement, enforcement, recording of data as well as necessary checking or verification of accuracy of data; the costs of infrastructures for office of networking as well as accommodation and other related functions are relatively low, removal of the duplicated IT expansion expenditures as well as fewer risk in system expansion and related maintenance (Stanovnik, 2017);

Contributor's compliance costs: Setting up the accountability for compilations with the administration of taxes, also the related costs engaged by employers in compliance are considerably reduced, with not as much of formalities like a effect of shared record keeping schemes(paperwork reduced) and forms, and a communal plan of audit in cover of VAT, revenue as well as payroll tax, and social contributions. The escalating utilization of electronic filing which is internet based and the way of payment via taxes management, reduces also the contributors and taxpayers costs related to the compliance. This oversimplification is also paying more importance in enhancing of improving calculations accurate done by the contributor/employers, and then compliance levels (Grega, 2020).

Referring to the agreement signed between RSSB and RRA in June 2012, the main purpose of transferring the power of attorney of social security collection to RRA was: the execution of a parliamentary approval of the budget framework paper presented on 10th June 2010 to consolidate RSSB pension, occupational hazards and medical contributions to one collection centre, for better service delivery and to ease costs on the contributors; to promote and contribute to the development of doing business; Focus on respective roles and missions as public service organizations and particular importance of the services provided by each. Also, it was to improve and intensify the levels and scope of existing administrative and operational co-operative arrangements between the two Institutions.

# 2.2. Empirical Literature

In this subsection, the main focus will be concerned to the past studies for different writers, but also will concentrated especially specific objectives of this research.

# 2.2.1. Integration of Social Security contributions collection in tax system

The research conducted by Effrosyni (2020), in European Institute of Social Security had substantially demonstrated that the social security administrations and tax interact in respect of compilation of the means of finance regarding the system of social security; this raised interrelation betwixt the two authorities is on the grounds that they look like having a lot of familiar roles like the payers registration, accounting records and reporting of disbursement, compilation of social security contributions and the taxes, verification of registration, disbursement of taxes and social

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security contribution as well as audit, maintaining the account records on diverse levels, claims resolution, the transfer of returns of social security to capable social security funds jointly together with a pertinent data collected works.

The merging of social security operations and tax in respect to the works of collection of the contributions of social security is the way of the system centralizing of collection; this may happens in many diverse ways which may depend to the different types of the levies of either social security contributions or taxes to be centralized on the agency that has the duty of compilation of social security contributions and taxes, and by using the available means of compilation (Pieter, Stanford, & Graham, 2019).

The Centralization may come as a result of the merger of processes and procedures, specifically the unifying of payout forms for revenue of taxes and social security contributions or integrating the a part of levies in both. Also, it may be a result of a merger of institutions, where it requires a designing a new centralized structure for tax collection and social security contribution compiled or the unification of two institutions which are already in existence (Effrosyni, 2020).

Firstly, it is noted that the term of merging is different to the term of integrating of social security contributions and taxes because the last one is defined as the formation of one integration of levy, typically with the purpose of having a tax character, for together taxes and returns of social security (Zoran, 2019). Considering the explanations here above, the level of merging the compiling management of taxes and social security contributions is depending exceedingly on the number of managerial occupations connecting to the social security contributions compilation which are combined or transplanted from the social security management to the tax administration.

As explained in IMF working paper of 2016, the collecting of social contribution is incorporated into whole procedures of the scheme of a tax that is in line with the principles of self-assessment (The return filing, processing of returns and payouts, enforcement of collection and post audit assessment). The employer returns and usual taxes are utilized like the base for the information of evaluation and payout compilation, adjusted to integrated fresh information fields desired for social contribution payouts. The development and design of the system must be done in order to precise all information concerning the contributors and transferring them to the social insurance Institution in way well-matched to its computerized systems.

Referring to how social security contributions are collected in Rwanda, in June 2012, RRA and RSSB signed a memorandum of understanding in order to collect RSSB pension and medical contributions to one collection point at RRA. To insure the success of this new activity, RRA also integrated in their e-tax system, the collection of RSSB pension and medical contributions (Ben, 2013).

The implementation of the project started with the collection of the medical contributions in the month of June 2012 and Pension contribution for the 2<sup>nd</sup> Quarter 2012, all these were being implemented in Kigali only while RRA Provincial offices started the implementation in September 2012 at all stations including the newly opened offices. RSSB contributors were trained on the utilization of new online system of e-tax, so that they can file without coming to RRA offices (Ben, 2012).

The Audit and Enforcement modules for pension and medical were also developed as part of the integrated system for collection of RSSB contributions by RRA. To eliminate in mindset of taxpayers/contributors that their social security contributions will be considered as taxes transferred in public treasury, all social security contributions are paid on RSSB bank account after declaration (Ben, 2013).

# 2.2.2. Effects of collections of social security contribution in e-tax system

Referring to the EISS report done in October 2020, it is explained that the unification possessed many constructive consequences in the compilation process as well as supervision of the social security contributions compilation. Indeed, the process and procedures of collection had tested and proven to be more efficient notably and especially in respect to the past due disbursements as the tax authorities is able to utilize ways of collection which are very strict.

In addition, the tax administrator is in good position to exercise more effective control over the payment of taxes, and therefore, greater compliance with the obligation to pay social security contributions. And the contributors may utilize a procedure which is simplified through an approach of single window, for fulfilling all their obligations (Yusniza & Anna, 2018). Governments utilize the information and communication technology in collecting of tax revenues as well as its disbursement, with the purpose of creating more transparent mechanism and well-organized, and with elimination of any kinds of corruption which may happen between taxpayer and collectors (Sofia, 2021).

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Through e-tax system, the routine activities can be performed quickly like processing forms, collecting statistics, as well as utilizing obtainable data for tax revenue forecasting. The use of computer in tax compilation procedure facilitates effortless discovery of non-payers, as well as corruption reduction by lessening private contact between tax collectors and taxpayers which is necessitated by ineffective manual systems, reduces the costs incur during the collection of revenue, increase of revenue collection levels and compliance (Regina & Frank, 2020).

Also the use of e-tax helps to be convenient for the demand of technology. The technological knowledge universal is escalating from manual working, to computer system working. Thus, the nation could not go favorably in competition with other states that are computer system driven, so the need for the E-tax service system adoption is needed. Also e-tax system helps in error levels reduction (Auyat, 2019).

E-tax system helps to smooth payment and reduce paper work. In the past, by using manual system of paying contributions and taxes, at the banks they were observed the long lines of tax payers and contributors, but with introduction of e-tax system, the long queue at the banks were considerably reduced. Also, for records keeping, there was a challenge of finding enough space of book keeping of all tax, for reference in case there would be a need and information can be misplaced due to the files hands are changed (Yusniza & Anna, 2018).

#### 2.2.3. Financial benefits of e-tax in collection of NSS contributions and taxes

In terms of taxes and social security, financial benefits for the e-taxation system utilization in collections of revenues and contributions are the costs reduction incurring contributions and tax revenue compilation, increasing in revenue collections/contributions (Auyat, 2019).

Through e-tax system, the costs of revenue and contributions collection are considerably reduced. Otherwise, E-tax gives numerous profits to management of taxes as provider of services. On the side of service giver, due to the utilization of e-filing, their cost of operating and workload are reduced, as all tax returns are submitted via the environment of paper reduction. Additionally, e-tax system minimizes the processing cost, cost related to the store and tax returns handling costs (Louis & Roddy, 2022).

## 2.2.4. E-tax in collection of effective compilation of NSS contributions

Through e-tax system, the collection of tax revenue and social security contributions does not require much of the staff or does not require any evaluation of taxpayers, as the whole thing is system created. Thus, expenditures which were on one occasion spent in gathering incomes have been decreased (Yusniza & Anna, 2018).

According to the RSSB annual performance report of the year July 2012-June 2013, it has reported that collection of social security contributions through e-tax system was achieved at 82.96 billion (or107%) in comparison with the annual expected contribution collections which was 77.619 billion, and the level of compliance was 11.194 out of 16,891 employers (66%). This performance shows a good result of e-tax system usage while collecting social security contributions but the compliance level is significantly decreased as it was at 75% in the year July 2011-June 2012, before its integration in e-tax system of RRA. For the year July 2013- June 2014, the collection of social contributions was 88.6 billion out of 95.7 billion; which corresponds to 83%. The management underlined that there is a need of more focus to the enforcement mechanism. But by comparing them to the collections of last year, the increase of 5.64% was observed.

With annual performance report of 2014-2015, the collection of social security contributions was achieved at 98.4%, in other words 98.447 billion collected out of 100billion planed. This shows an increase of 15.5% by comparison of the realization of the last year. It requires to emphasizing on the enforcement for collection of planned contribution. For the year 2015-2016, the collection of all social security contributions was 111.966 billion over 106 billion planed; which is correspond to 105.6% or an increase of 7.153% by comparing to the achievements of previous year. Based on the annual targets, the collection of social security contributions by using e-tax system, were achieved to the expected collections in two years only (2012-2013; 2015-2016), while in others two years were underperformance (2013-2014 and 2014-2015).

## 2.3. Critical review and Research Gap Identification

In this research, different writers who worked profoundly on different topics related to the e-tax system or on the computation system in collection of taxes and social security contributions were mentioned.

Many countries that have shifted to the amalgamation of social contribution collection functions into the tax revenue management, realized that the marginal costs of extending the systems utilized for administration of tax for including social security contributions, are very relatively low (Allahverdi & Kuzucu, 2021).

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Auyat M.(2019) wrote on e-tax system and how it is adopted particular in Uganda Revenues Authorities. She tried to demonstrate how e-tax system is used by emphasizing on the role of its adoptions, but slowly adopted for different reasons. But, implication of utilization of e-tax in effective compilation of social security and tax was not drawn up.

In the conceptual paper wrote by Yusniza & Anna (2018), regarding the adoption of tax e-filing, many focus was to explain that in many developed States, tax e-filing was adopted as the one element derived on e-government. Especially, in Malaysia, it became the one of the most services very advanced and important of e-government, which offers convenience to contributors and tax payers to do tax self-assessments and initiates the payment. However, the researchers found that due to the public's perceived risk at high level, the adoption of tax e-filing is still need the establishment of a reliable integrated system, especially in Malaysia. The effective collection of social security contributions due to the tax e-filling adoption was not talked about.

Regina & Frank (2020), also talked about e-Tax Filing with a case study of online Service of Revenue. In their research, they tried to emphasize on revenue online filing of tax and compilation system, where they mentioned that Ireland was also invested more in technology so that services provided to their citizens together with their business be done manly as online services. However, financial implication was not manly focused on in it research.

In order to create improvement in collection of social security of mandatory scheme in Rwanda, the mandate of collection of social security contributions was given to the Rwanda Revenue Authority, where e-tax is necessarily used by all contributors to do filing and payment of social security contributions, (Ben, 2013). Unfortunately, the instauration of e-tax system in compilation of tax revenue returns and social security contributions does not necessarily justifying that all contributors comply; some contributors are not complying on time or never comply (Abdul & Idris, 2020).

In the year 2011-2012, before use of e-tax system, the employers' compliant was 75%. Basing on the annual performance report covering the period July 2012-June 2013 of RSSB, it was underlined that the level of employers' compliant was 11.194 out of 16,891 employers (66%), for the year 2013-2014, the employers' compliance level was at 76%. The gap is lack of clear mechanism of e-tax system applicability in automatic enforcement of default employers compliant.

Based on the gaps above highlighted, this research will examine the contribution of e-tax system usage and effective collecting of social security to RSSB.

## 2.4. Theoretical Framework

Through e-tax system, the routine activities can be performed quickly like processing forms, collecting statistics, as well as utilizing obtainable data for tax revenue forecasting. The use of computer in tax compilation procedure facilitates effortless discovery of non-payers, as well as corruption reduction by lessening private contact between tax collectors and taxpayers which is necessitated by ineffective manual systems, reduces the costs incur during the collection of revenue, increase of revenue collection levels and compliance (Regina & Frank, 2020).

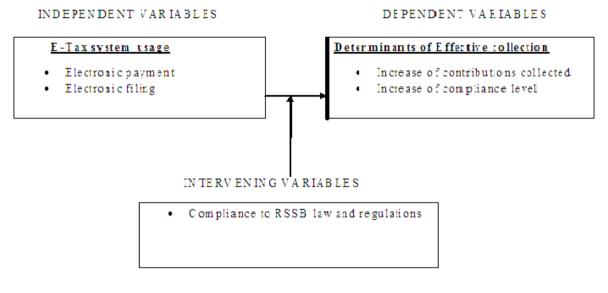
Also the use of e-tax helps to be convenient for the demand of technology. The technological knowledge universal is escalating from manual working, to computer system working. Thus, the nation could not go favorably in competition with other states that are computer system driven, so the need for the E-tax service system adoption is needed. Also e-tax system helps in error levels reduction (Auyat, 2019).

E-tax system helps to smooth payment and reduce paper work. In the past, by using manual system of paying contributions and taxes, at the banks they were observed the long lines of tax payers and contributors, but with introduction of e-tax system, the long queue at the banks were considerably reduced. Also, for records keeping, there was a challenge of finding enough space of book keeping of all tax, for reference in case there would be a need and information can be misplaced due to the files hands are changed (Yusniza & Anna 2018).

# 2.5 Conceptual framework

The diagram representing the conceptual framework illustrates the independent variable such as e-tax system in collection of social security contributions, and the dependent variables like determinants of effective collection of NSS. All of these variables are interacting in this research.

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Source: Researcher, 2024

Figure 2. 1: Conceptual Framework

#### 2.6. Summary

In summary, the utilization of e-tax system in collection of social security contribution and taxes provides potential profits to the country from quicker compilation to fault diminution as well as managerial expenditure savings while returns filling as well as taxes payout are compulsory. On the other hand, it helps taxpayers and contributors to comply easily (Regina & Frank2020). As said by, Stanford, & Graham, in IMF working paper, 2019, the superseding merging purpose of social contributions and tax compilation is to attain the good performance in income compilation, that helps the countries achieves their overall goals. The findings of researcher in chapter of literatures review are more theoretical and stand in need of being practically put to the test as well as verification. It is the concern of investigation methodology to help collection of data needed.

# III. RESEARCH METHODOLOGY

# 3.0. Introduction

In this research, the chapter presents the methods and techniques to be utilized in the design and study implementation. It describes the methods and processes to be followed for compilation and analysis of data. It describe the research design, the area of study, target population, sample design and sample selection, the procedures of data collection and instruments used, data analysis methods and processing and summary of the study.

## 3.1. Research design

A research design is explained as a master plan that specifies the procedures and methods utilized in collection and analysis of the data which are needed (Zikmund, 2020). This study followed descriptive and analytical method. Quantitative and qualitative techniques were also utilized. The survey questionnaire was used for collecting primary data which needed in achieving the study objectives and answering research questions.

And, this design was chosen because the data was gathered at the same time from different corners of the case study sector at a one point in time. The design further enabled the investigator to collect data by using the quantitative and qualitative survey questionnaires and made own observations.

# 3.2. Target population

Bougie and Sekaran (2010), explain that the population gives reference to whole group composed by people, the events or the other things of interest, from which researcher wants to interrogate or make inferences.

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The population of this study consisted of all staff of RSSB, men and women in different category of responsibility working at the Head Quarters of RSSB and at branches level of RSSB which located in different Districts and also the active employers who are located in Kigali City Branches(Nyarugenge, Kicukiro and Gasabo), as the low level of compliance is found in Kigali City. The number of all staff of RSSB is 562, where 427 employees are located at the Head Quarter of RSSB and 135 are located 30 Branches of RSSB. The total number of employers located in Kigali City is 7,581, in which Nyarugenge has 3,647, Gasabo 2,725 and Kicukiro 1,209 employers respectively. The ideal practice in research is to obtain the information from the entire population that ensures the maximum coverage of population concerned in the research.

# 3.3. Sample design

This part focuses to the simple size and sampling techniques to be utilized in this study.

## 3.3.1. Sample size determination

Bougie and Sekaran (2010), is defining a sample as the subset of the population. The sampling is described as the processes in which some elements of a given population are chosen as representation of the whole population. The main purpose of sampling is that by choosing some elements of a given population, the researcher is able to elaborate the conclusions concerning the whole population. The staff survey sample was selected randomly from all staff of RSSB and employers located in Districts of Kigali City (Nyarugenge, Gasabo and Kicukiro).

To determine the sample size, the Yamane formula was used and with error margin of 10% was used because the researcher established from preliminary investigation that error margin would not be significantly different from using 5%.

$$S = \frac{N}{1 + N(e^2)}$$
 Where:

S = sample

N = Population

e = the confidence level at 0.01 or 10%

By using the above formula, 562 employees of RSSB were represented by the following sample:

$$S = \frac{562}{1 + 562(0.1^2)} = \frac{562}{1 + 5.62} = 84.89$$

As the half of person does not exist, the sample size representing the whole population was 85 instead of 84.89.

Table 3.1: Population and sample size determination from RSSB employees

	Target Population	Percentage	Sample size
Employees at Head Quarters	427	75,98%	65
Employees at Branch Level	135	24,02%	20
Total	562	100,00%	85

Source: RSSB 2024

From the target population of 85 employees of RSSB, 20 employees are located in Branches of RSSB while 65 employees are located at the Head Quarter of RSSB.

The conclusions or inference were drowned from a sample of 85 employees who were participated in answering questions of survey and interview as representation of total population 562 employees.

The sample size determination from 7,581 total employers located in Kigali City Branches is done also by applying the formula of Yamane:

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$$S = \frac{7,581}{1 + 7,581(0.1^2)} = \frac{7,581}{1 + 75.81} = 98.69 \approx 99$$

Table 3.2: Population and sample size determination from RSSB employers

Location of employers	Target Population	Percentage	Sample size
Nyarugenge	3 647	48,2%	47
Gasabo	2 725	35,9%	36
Kicukiro	1 209	15,9%	16
Total	7 581	100,00%	99

Source: RSSB 2024

#### 3.3. 2 Sampling Technique

Using a simple random sampling, the researcher divided the entire population into different subgroups or strata; then randomly selects to each subgroup proportionally until the size population needed to each subgroup is reached. The researcher distributed the questionnaire and collected it back within 10 working days.

To reach all 85 respondents, 40 as quantitative questionnaires were distributed hand to hand for the staff that is located at Head Office, and 45 others were distributed electronically to others respondents not met face to face at Had Office and Branches, by using the random method, until the total number of sample size required was reached.

Also, the distribution of 99 questionnaires to the selected employers, the 30 quantitative questionnaires were distributed hand to hand to the respondents while 69 questionnaires were given to respondents who came to visit RSSB Branch Offices located in Kigali City for service enquiries.

#### 3.4. Data collection methods

The methods and techniques differently, were utilized in process of data collection.

# 3.4.1. Data collection methods

Primary data and secondary both were used data gathering. The primary data collection involved the use of designed questionnaires that were distributed to the staff of RSSB, where the survey questionnaires were consisted of open and close-ended questions and both focusing on themes. The survey questionnaire themes were e-tax system management in RSSB contributions gathering; and the role of e-tax system in correction of RSSB contributions; while the secondary data was obtained from existing documents information from RSSB reports and others writings of previous researchers.

# 3.4.2. Data collection procedure

The investigator was given an official research authorization letter from Director of Institute of Post Graduate Studies & Research, in Mount Kenya University. The letter officially introduced the researcher to RSSB officially and other relevant Departments.

This enabled the researcher to legally initiate and continue easily the study in the authorized areas. The researcher preceded then, the visiting of RSSB staff in different Departments and distributed the questionnaire one to one until 40 questionnaires were distributed hand to hand, while the 45 staff was given the questionnaire electronically and responded electronically too; the research authorization letter was presented to respondents on the time of sending them the questionnaire. Thus, with the letter of research authorization, the researcher was able to strongly establish the report and build it confidently on basis of the RSSB staff responses and employers.

Also, the distribution of 99 questionnaires to the selected employers, due to COVID-19 prevention, only 20 quantitative questionnaires were distributed hand to hand to the respondents at their office and collect them at the same day, 50 questionnaires were sent on email and get response at least 10 days, while 29 questionnaires were given to respondents who visited RSSB Branch Offices located in Kigali City.

## 3.4.3. Reliability and Validity of Research Instruments

The validation, as a process, involves the data collection and analyzing them for assessing the accuracy of research instruments. Thus, the reliability and validity in the instrument in this research was done by verifying the consistency of the instruments of research. The research instrument validation was tested in order to know its reliability.

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# 3.5. Data analysis techniques

This was required the incorporating of the qualitative and quantitative data analysis processes and procedures.

#### 3.5.1. Qualitative data analysis

Through content analysis, all ethnographic data was analyzed. This was required the development of the themes and sub-themes, with reference to the main objectives of the study that is: to assess the role of e-tax system in collection of social security contributions and financial performance.

It also involved themes and sub-themes such as: the reason why RRA has been given the power to collect RSSB contributions, to know whether or not e-tax system helps successful in collection of RSSB contributions and financial benefits of e-tax system in collection of RSSB contributions, and categorize the gathered data basing on the above themes and sub-themes.

The information received from the field was grouped into themes and sub themes, and the field was organized with insurance that no information is left out. All responses with similarities were grouped in one butch and had one theme or sub theme for avoiding any uncoordinated information and generic one. Then, the researcher was interpreted the data and some of responses received were used as quotations in the findings' presentation and its discussion. For more clarifying meaningful of data presented, the needed Table extracts and graphs were included also in the report.

#### 3.5.2. Quantitative data analysis

The researcher methodically was done a cross-checking of the questionnaires surveyed from the respondents, to determine completeness, consistency and accuracy, and the consistency of the given answers. The survey information was then coded with the help of coding frame. For proper analysis, the coded data was recorded in computer by using SPSS PASW statistics Student Version 18 computer packages and this enabled the researcher to tabulate the data.

Frequency Tables were utilized for describing the different variables. Cross-tabulations and regression linear tests were also used to demonstrate the significance level of one variable to the other one. In addition, to clearly demonstrate the variability of responses done by respondents, about e-tax system in collection of RSSB contributions and its effect financial performance, it was used the Table also. Lastly, all information from respondents was put together for helping in completion of the report of research and other related literature were incorporated in dissertation.

#### 3.6. Ethical consideration

For collecting data, the researcher was given an official research authorization letter from Mount Kenya University which was introduce the researcher to Director General of RSSB and asking the permission to collect data from employees in selection. Hence the permission is done, and arrangement was well done, it was presented to the selected employees of RSSB. Through a written consent explaining the purpose of research, all respondents were informed that the participation was voluntary. The confidentiality of information provided by the respondents was kept strictly.

# IV. RESEARCH FINDINGS AND DISCUSSION

#### 4.0. Introduction

In this chapter, the researcher presents the findings collected on the field by using the questionnaires and annual reports. The research questionnaires were administrated to the respondent whereby they were requested to fill their information basing to the view and knowledge on e-tax system usage and effective collection of social security contributions. All 85 questionnaires distributed to the employees of RSSB were returned back, and all 99 questionnaire distributed to the employers were all returned back. And this explains that the questionnaire responses rate was 100%.

# 4.1. Demographic Characteristics of Respondents

This subsection focused to the age of respondents in order to know whether the respondents were mature enough to participate in research, gender, their experience in order to have accurate information, marital status and level of education.

## 4.1.1. Gender of the respondents from RSSB

In the questionnaire administrated and mailed to the respondents, employees of RSSB, the gender of respondent was asked. The results are illustrated in the Table below:

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Table 4.3: Gender of the respondents from RSSB

	Frequency	Percent	
Male	46	54.1	
Female	39	45.9	
Total	85	100.0	

Source: Computed from survey data, 2024

The research findings indicated that the most of respondents were men, represented by 54.1% and women 45.9%. The data indicates that number of women that uses e-tax system is still low.

#### 4.1.2. Age of the respondents from RSSB

The results from the analysis of the age of the respondents are illustrated in the following Table:

Table 4.4: Age of the respondents from RSSB

	Frequency	Percent	
25-40 Years old	42	49.4	
Above 40 years old	43	50.6	
Total	85	100.0	

Source: Computed from survey data, 2024

The Table 4.4 shows that the high number of respondents was above 40 years old, which corresponds to 50.6% of respondents. This implies that the majority of employees of RSSB who utilizes the e-tax are above 40 year old.

#### 4.1.3. Marital status of the respondents

The results from the analysis of the age of the respondents are illustrated in the following Table:

Table 4.5: Distribution of respondents by marital status

	Frequency	Percent	
Single	26	30.6	
Married	57	67.1	
Widowed	2	2.4	
Total	85	100.0	

Source: Computed from survey data, 2024

The Table 4.5 shows that the majority of respondents are married people. Otherwise, in the sample of 85 respondents, 57 respondents which represent 67.1%, were married, 30.6% are single, while 2.4% are widowed people. This explains that the majority of employees of RSSB who uses e-tax are married.

# 4.1.4. Education background of the respondents

The respondents also provided their education background, and the results are reflected in Table below.

Table 4.6: Level of education of respondents

	Frequency	Percent	
Degree	52	61.2	
Masters	33	38.8	
Total	85	100.0	

Source: Computed from survey data, 2024

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The Table 4.6 illustrates that 61.2% of the respondents completed the university in bachelor degree, while 38.8% of the respondents have completed an education level of masters. This explains that the majority of employees of RSSB who uses e-tax have a degree as education level.

# 4.1.5. Current job position of the respondents

In this research, the respondents have different work position as shown in the Table 4.7.

Table 4.7: The current position of the respondent

	Frequency	Percent
Division manager/Head of Department	2	2.4
Director of unit/Specialist	4	4.7
Branch manager	26	30.6
Officer	53	62.4
Total	85	100.0

# Source: Computed from survey data, 2024

The Table 4.7 illustrates that the majority of respondents are in staff position of officers with 62.4%, Branch managers are represented by 30.6%, while 4.7% of the respondents are Directors of Units, and 3.4% are Division Managers. This reflects that the majority of respondents is in low level of position but frequently, uses e-tax system.

## 4.1.6. Work experience of the respondents

The respondents also provided their work experience, and the results are reflected in the Table that follows.

Table 4.8: The work experience of the respondents

	Frequency	Percent
0-5 Years	9	10.6
6-9 Years	14	16.5
10-15 Years	55	64.7
16 Years and above	7	8.2
Total	85	100.0

Source: Computed from survey data, 2024

The Table 4.8 illustrates that the majority of respondents represented by 64.7%, has work experience variating between 10 and 15 years at RSSB, 16.5% of respondents represent the work experience from 6 to 9 years, 10.6% of respondents are in the interval of 0-5years of work experience, while 8.2% of respondents are in the range of work experience from 16 years and above. This reflects that the majority of respondents have enough experience provide necessary information related to the utilization of e-tax system in collection of social security contributions.

# 4.1.7. Employer business location

At this stage, it was necessary to know the location of employers subjected to the research respondents of questionnaire. This helped to know how many questionnaires to distribute in each District of Kigali City.

Table 4.9: District of Company's business location

·	Frequency	Percent	
Nyarugenge	47	48,2	
Gasabo	36	35,9	
Kicukiro	16	15,9	
Total	99	100,0	

Source: Computed from survey data, 2024

The Table 4.9 illustrates that the majority of respondents are the employers whose business is located in Nyarugenge District and it represented by 48.2%, while those of Gasabo and Kicukiro are represented respectively by 35.9% and 15.9%.

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# 4.1.8. Period of time the employers were served at RSSB Offices

The respondents also provided the period of time they were served by RSSB, and the results are reflected in the Table that follows according to their experience in business.

Table 4.10: The Period of time the company has served at RSSB Offices

	Frequency	Percent
2-3 years	13	13.1
4-5 years	44	44.4
Over 5 years	42	42.4
Total	99	100.0

Source: Computed from survey data, 2024

The Table 4.10 illustrates that 13.1% of employers who responded have been served at RSSB offices in period of 2 and 3 years, 44.4% of employers have been served at RSSB offices between 4 and 5 years, 42.4% of them were served at RSSB offices over 5 years. This indicates that the respondents who have experience in business from 4 years and above are those ones who were served by RSSB Offices.

# 4.2 Presentation of research findings

This section focuses on the research findings related to the e-tax system usage on effective collection of social security contributions in RSSB. The research findings examined the effect of e-payment system on collection of social security contribution in Rwanda, determination of the effects of e-filing system on contribution efficiency in Rwanda, and the effect of e-tax system on contributor's compliance efficiency.

## 4.2.1 E-tax system usage in collection of social security contributions

In this section, the researcher wanted to know whether the users of e-tax system have an idea to use the system in place or not.

Table 4.11: RSSB employees' knowledge on the use of e-tax system in the collection of RSSB contributions

	Frequency	Percent
Yes	85	100.0

Source: Computed from survey data, 2024

The Table 4.11 illustrates that on the question asked to the respondents whether they have information on the utilization of e-tax system in collection of RSSB contributions or not; all respondents at 100% responded yes. This means that with the survey conducted to 85 employees of RSSB, all confirmed that they have information on the usage of e-tax system.

On the side of RSSB customers (employers), with the survey conducted to 99 contributors (employers), also, all confirmed that they have information on the usage of e-tax system, as it shown in the Table 4.12.

Table 4.12: Ability of contributors to use e-tax system in filing the RSSB contributions

	Frequency	Percent
Yes	99	100.0

## Source: Computed from survey data, 2024

The Table 4.12 illustrates that with the research survey conducted to 99 RSSB's contributors; 100% of the respondents confirmed that they know to use e-tax system in filing of RSSB contribution.

With the results in Table 4.11 and Table 4.12, from the research conducted to RSSB employees and RSSB customers (contributors) respectively, all said that they know to use e-tax system. While RSSB customers said that they know to use e-tax system, we attempted to know if they comply with RSSB contributions regularly by using e-tax, and the Table 4.13 gives illustration.

Table 4.13: Regular use of e-tax system in filing of RSSB Contributions

Frequency Percent
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Yes	83	83.8
No	16	16.2
Total	99	100.0

Source: Computed from survey data, 2024

The Table 4.13 illustrates that with the research survey conducted to 99 RSSB's contributors; 83.8% of the respondents confirmed that they regularly filed RSSB contributions through e-tax system, while 16.2% of respondents confirmed that they do not file RSSB contributions on regular basis. It means that those who did not file regularly RSSB contributions through e-tax system, are those whose delay to comply or never comply due to different factors, which are not subject of this research.

Table 4.14: Appreciation of RSSB's employees of using of e-tax system in access of data

•	Frequency	Percent
Easy to use	50	58.8
Easy but needs improvement	27	31.8
Somehow difficult to use	8	9.4
Total	85	100.0

Source: Computed from survey data, 2024

The Table 4.14 illustrates that with the question on how the respondents (RSSB's employees) appreciate the use of e-tax system in accessing data of social security contributions collection; 58.8% of respondents explained that it is easy to use e-tax, while 31.8% of respondents said that it is easy to use e-tax but needs improvement, and lastly, 9.4% of respondents said that it is somehow difficult to use e-tax system.

Table 4.15: Variation found with use of e-tax system in RSSB contributions collection

	Frequency	Percent
Increased considerably	85	100.0

Source: Computed from survey data, 2024

The Table 4.15 illustrates that all 85 respondents from RSSB confirmed at 100%, that the variation they found in the usage of e-tax system regarding collection of RSSB contributions is the increase of contributions collection. Otherwise, the enforcement of the e-tax system gave a positive sign of increase of contributions social security collection.

Table 4.16: The comparison between the use of manual and e-tax system

	Frequency	Percent
Through e-tax system, collection was efficient	55	64.7
Through e-tax system, collection was inefficient	30	35.3
Total	85	100.0

Source: Computed from survey data, 2024

The Table 4.16 illustrates that through e-tax system, 64.7% of the respondents said that the contribution collection is efficient, while 35.3% of respondents confirmed that through e-tax system, the contribution collection was inefficient.

With reference to the analysis of respondents feedback from the Table 4.11 to Table 4.16, the results illustrate that it e-tax system is well used by both RSSB employees and employers, as responded by the majorities on both sides. The results showed that it has also positive impact on the side of RSSR and contributors. This leads to the reaching of general objective of the research which stated: "to analyze the contribution of e-tax system usage on effective collection of social security contributions in Rwanda".

## 4.2.2. Assessing the effects of e-tax system on contributors' compliance efficiency

The researcher wanted to know whether e-filing system impacted on contributions efficiency.

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Table 4.17: Comparison between e-filing and manual system in keeping employers' files

	Frequency	Percent	
Through e-filling, files are secured	78	91.8	
Through e-filing, files are not secured	7	8.2	
Total	85	100.0	

## Source: Computed from survey data, 2024

The Table 4.17 shows that in comparison between e-filing and manual system in keeping employers' files of return, through e-filing system, 91.8% of the respondents said that the files of contribution collected are well secured, while 8.2% of respondents said that the files of returns are not secured.

Table 4.18: The access to check the employers' records kept through e-filing system

	Frequency	Percent	
Accessible	65	76.5	_
Internet connection is problem	20	23.5	
Total	85	100.0	

Source: Computed from survey data, 2024

The Table 4.18 shows that 76.5% of respondents confirmed that to check employers' records kept through e-filing system is accessible, while 23.5% of respondents said that internet connection is a problem to check to the employer's record kept through e-filing system.

Even if the majority of respondents confirmed that the employers' records kept through e-tax is accessible, the monitoring of availability of the full internet connection 24/24 hours is required and has to be improved as well as possible.

Table 4.19: The possibility to change the employers' records kept through e-filing system

	Frequency	Percent
No access and possibility to change them	85	100.0

Source: Computed from survey data, 2024

The Table 4.19 illustrates that all 85 respondents confirmed at 100%, that they don't have access and possibility to change employers records kept through e-filing system. This gives security to the employers who filed the returns through e-filing system.

Table 4.20: The detection of the none compliant employers through e-filing system

•	Frequency	Percent
Always detected and notified automatically	27	31.8
Sometime detected and notified automatically	32	37.6
Detected but not notified automatically	9	10.6
Not detected nor notified automatically	2	2.4
No information	15	17.6
Total	85	100.0

#### Source: Computed from survey data, 2024

The Table 4.20 shows that 31.8% of respondents confirmed through e-filing system none compliant employers are always detected and notified automatically, 37.6% of respondents said that through e-filing system, none compliant employers are sometime detected and notified automatically, 10.6% of respondents said that through e-filing system none compliant employers are detected but not notified automatically, 2.4% of respondents said that through e-filing system none compliant employers are not detected nor notified automatically, while 17.6% of respondents said that they do not have information.

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The Table 4.21 illustrates the results from survey questionnaire addressed to the employers located in Kigali City, when they were asked to respond if they get a reminder message to comply and pay RSSB contribution or not.

Table 4.21: A reminder message from e-tax system to comply and pay contributions

	Frequency	Percent
Yes	68	68.7
No	31	31.3
Total	99	100.0

Source: Computed from survey data, 2024

The Table 4.21 indicates that, 68.7% of the respondents said that they received a reminder message from e-tax, to comply RSSB contributions, while 31.3% of respondents said that they did not receive a reminder message to comply with RSSB contribution. This means that e-tax system has to be improved so that all employers must receive the reminder message to comply with RSSB contributions.

With reference to the results in Table 4.12, where 100% of respondents (employers) said that they have ability to use e-tax system, through analysis of the results from the Table 4.17 where by comparing the e-filling system with the manual system, the analysis showed that 91.8% of respondents confirmed that through e-filling system files are very secured, having access to the information filed in e-tax as confirmed by 73.5% of respondents in Table 4.18, having in mind set that no possibility to change employers' records filed through e-tax as confirmed by 100% of respondents in the Table 4.19; by considering that through e-filing system none compliant employers are detected, as confirmed by 69.4% of respondents as resulted in Table 4.20, considering the results of the Table 4.21 where is indicated that 68.7% of respondents confirmed that employers receive message reminding them to comply and pay RSSB contributions, we say that: having knowledges to use e-tax system, secured information filed in e-tax system, personal accessibility to the information kept in e-tax system, limitation to other persons to change personal records in e-tax system, detection of none compliance employers and reminder message to comply, both are the effects of e-tax system on contributors compliance efficiency in RSSB.

Otherwise the specific objective numbers (i), which stated that: "to assess the effects of e-tax system on contributors' compliance efficiency", is achieved.

# 4.2.3. Effect of e-filing system on contributions efficiency

Table 4.22: The positive effect of e-filing system on RSSB operational activities

	Frequency	Percent
Saving the File space	28	32.9
Increment of customer service delivery	27	31.8
Reduction of customers' long line queue	19	22.4
Time management to RSSB	11	12.9
Total	85	100.0

# Source: Computed from survey data, 2024

In order to know the positive effect of e-filing system on RSSB operational activities, the Table 4.22 illustrates that 32.9% of respondents confirmed that through e-filing system the space of filing was saved, while 31.8% of respondents said that through e-filing system, customer services delivery was increased, 22.4% of respondents confirmed that through e-filing system the customers' longue line queues were reduced, and 12.9% of respondents confirmed that through e-filing system the time managements on the side of RSSB was well observed.

Table 4.23: Positive effect to employer by using e-tax system in filing RSSB contributions

	Frequency	Percent
Time management	37	37.4
One stop center activities and quick services	29	29.3

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Money saving	14	14.1
Reduction of frequency at RSSB offices	13	13.1
Filing space and paperless	6	6.1
Total	99	100.0

#### Source: Computed from survey data, 2024

In order to know the positive effect of e-filing system on employers' business, the Table 4.23 indicates that the majority of respondents (employers) represented by 37.4%, confirmed that e-tax system helped them to save time, while 29.3% of respondents said that through e-tax system they got quick services and all activities related to mandatory taxes are done in one stop center without moving away. 14.1% of the respondents said that e-tax system helped them to save money, 13.1% of respondents said that the long line queue at RSSB offices were reduced, and 6.1% of the respondents also said that e-tax system helped them to save file space and paperless.

The results from survey done indicate trough analysis in the Table 4.21; Table 4.22; and Table 4.23 that on the side of RSSB, saving files space, improved customer services delivery, reduction of customers' long line queue at RSSB offices and time management, are ranked as the key elements considered as the effects of e-filing system on contribution efficiency in Rwanda, while on the side of employers (customers), the time management, one stop center activities and quick services, money saving, reduction of customers' frequency and long line queue at RSSB's offices, saving filing space and paperless, and the reminder message to comply, are also ranked as the keys elements considered effecting the e-filing system on contribution efficiency in Rwanda.

Otherwise, the research objective (number ii) which is the effect of e-filling system in contribution' compliance efficiency in Rwanda, is now reached.

#### 4.2.4. Effects of E-payment system on RSSB's contributions collection

The researcher wished to know the effects of e-payment system in relation to the collection of social security contributions

Table 4.24: The most modalities used by RSSB employers' to pay contributions

	Frequency	Percent
Online payment	27	37.6
Payment order	12	14.1
Cash deposit	32	31.8
Check deposit	14	16.5
Total	85	100.0

# Source: Computed from survey data, 2024

With the purpose to know the most modalities used by employer pay social security contributions of RSSB, the Table 4.24 shows that the respondents (RSSB employees) ranked them as follows: online payment represented by 37.6% of respondents is the most used by contributors, cash deposit represented by 31.8% of respondents is ranked as the second modality used to pay RSSB contributions, a check deposit represented by 16.5% is ranked as the 3<sup>rd</sup> method of payment of RSSB contributions, while the use of payment order represented by 14.1% of respondents is ranked as the last modality of payment of social security contributions.

Table 4.25: The categories of the employers who use of e-payment system

	Frequency	Percent
Majority users are big employers	19	22.4
Majority users are small employers	59	69.4
Big and small employers use it	7	8.2
Total	85	100.0

Source: Computed from survey data, 2024

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The Table 4.25 indicate that 69.4% of respondents said that e-payment system is mostly used by the small employers, 22.4% of respondents said that big employers use the e-payment system, while 8.2% of respondents said that big and small employers use e-payment system.

Table 4.26: Participation of e-payment in collection of social security contributions

	Frequency	Percent
Efficient collection	47	55.3
Inefficient collection	11	12.9
Increased in positive trend	27	31.8
Total	85	100.0

Source: Computed from survey data, 2024

In order to know the participation of e-payment in collection of social security contribution, the results illustrated in the Table 4.26, indicate that the respondents (RSSB employees) represented by 55.3% of respondents confirmed that e-payment contributed to the collection of RSSR contributions with efficient, 31.8% of respondents said that e-payment contributed to the increase of social security contributions in positive trend; while 12.9% of respondents said that with the use of e-payment system, the contributions of RSSB are collected inefficiently.

Table 4.27: Appreciation of the use e-payment system in the collection of contributions

	Frequency	Percent
Very good	29	34.2
Good	28	32.9
Needs improvement	28	32.9
Total	85	100.0

#### Source: Computed from survey data, 2024

With the purpose to know the appreciation of RSSB employees in regard of use of e-payment in collection of social security contribution, the results in the Table 4.27, indicate that the respondents represented by 34.2% of respondents appreciated e-payment in collection of RSSR contributions as "very good system", 32.9% of respondents appreciated e-payment as "good system" while 32.9% of respondent said that e-payment system need improvement. Otherwise, e-payment system was appreciated by respondents at 67.1%, while other respondents represented by 32.9% are those who said that e-payment needs improvement.

Table 4.28: Employers appreciation of e-tax system in filing and paying of contributions

	Frequency	Percent
Easy to use	67	67.6
Easy to use but needs improvement	28	28.4
Somehow difficult to use	4	4.0
Total	99	100.0

Source: Computed from survey data, 2024

With the purpose to know the appreciation of employers in regard of use of e-tax system in filing and payment of social security contributions, the results in the Table 4.28, indicate that the respondents represented by 67.6% of respondents appreciated e-tax system as "easy to use", 28.4% of respondents appreciated e-tax system in filing and payment of contributions as "easy to use but needs improvement", while 4% 3 of respondents said that e-tax system is somehow difficult to use.

Table 4.29: The positive effects of e-tax system on the collected contributions

	Frequency	Percent
Contributions increased	30	35.3
Time management	17	20.0
Compliance level increased	22	25.9

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Re	educed the fraud and errors	16	18.8
То	otal	85	100.0

## Source: Computed from survey data, 2024

In order to know the positive effect of e-tax system on RSSB contributions collection, the analysis of result in Table 4.29 indicates that the respondents (RSSB employees) confirmed that: 35.3% of respondents said that the contributions collected were increased, 25.9% respondents said that the compliance level was increased. Also, the respondents represented by 20.0% of respondents confirmed that e-tax system helped in time management, while 18.8% of respondents confirmed that e-tax reduced fraud and errors.

Table 4.30: The challenges met in accessing the information filed in e-tax system

•	Frequency	Percent	
Difficult to check the information	22	25.9	
Lack of full time internet	52	61.2	
Not easy to download and save files	3	3.5	
No challenges encountered	8	9.4	
Total	85	100.0	

Source: Computed from survey data, 2024

In order to know the challenges met by RSSB employees in accessing information filed in e-tax system, the results of analysis of the Table 4.30 indicates that the majority of respondents represented by 61.2%, confirmed that the lack of full time internet is a big challenge to them to access to information files in e-tax system, while 25.9% of respondents said they have difficult to check the information filed in e-tax system; and 3.5% of respondents said also that it is not easy to download and save files due to the slow running internet. Only 9.4% of respondents said that no challenge encountered in accessing the information filed in e-tax system.

Table 4.31: The suggested improvement needed in e-tax system

·	Frequency	Percent
Providing option of an offline system	28	28.3
Reminder message on filing and payment	41	41.4
Training on the use of the e-tax system	19	19.2
Providing computers or smart phones to customers	11	11.1
Total	99	100.0

Source: Computed from survey data, 2024

In order to know the improvements needed in accessing e-tax system on the side of RSSB employers, the results of analysis of the Table 4.31 indicates that the majority of respondents represented by 41.4%, suggested to do improvement so that they should receive a reminder massage to files and pay RSSB contributions, providing option of an offline system represented by 28.3% of respondent was ranked as 2<sup>nd</sup> suggestion to improve in e-tax system, training on the use of the e-tax system represented by 19.2% of respondents was ranked as the 3<sup>rd</sup> suggestion of improvement needed in e-tax system, while 11.1% of respondents said that they need to be given computers or smart phones compatible with e-tax system so that they should be able to comply with RSSB contributions.

With the results of the majority of respondents from the Table 4.24; Table 4.25; Table 4.26; Table 4.27; Table 4.28, and Table 4.29, we say that the e-payment system affected the collection of social security contributions in Rwanda, with efficient in collection of contributions, as it facilitated to the employers to pay RSSB contributions online without moving with money to the banks. E-payment also, facilitated the tasks and navigation with the system on the side of RSSB employees and the employers as confirmed by the results of respondents in Table 4.27 and Table 4.28. Through e-tax system, social security contributions were increased as well as compliance level, time management and fraud reduction also, as indicated in the results of respondent in the Table 4.29, and we say that the research objective (number iii) of examining the effect of e-payment system on collection of social security contribution in Rwanda, is achieved.

The summary, conclusion and the recommendations related to the findings of this research is the subject of next chapter five.

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#### V. Introduction

This chapter presents the summary of research findings which focused on the "E-tax system usage and effective collection of social security contributions, the conclusion and suggestions.

The researcher concentrated on the view of contributors and RSSB employees towards e-tax system usage in collection of social security contributions.

# 5.1. Summary of findings

The findings depicted the positive effect of e-tax system usage in collection of social security contributions. The analysis of research findings showed that the majority of respondents appreciated the usage of e-tax system toward effective collection of social security contributions in Rwanda Social Security Board.

With reference to the analysis from the Table 4.11 to Table 4.16, the results illustrate that it e-tax system is well used by both RSSB employees and employers, as responded by the majorities on both sides. The results showed that it has also positive impact on the side of RSSR and contributors. This helped to reach to the general objective of this research which is to analyze the contribution of e-tax system usage on effective collection of social security contributions in Rwanda, is now achieved. The next points will help to know whether the specific objectives of the research were achieved or not.

## 5.1.1. Determination of the effects of e-tax system on contributors' compliance

With reference to the results in Table 4.12, where 100% of respondents (employers) said that they have ability to use e-tax system, also, the Table 4.17 shows that in comparison between e-filing and manual system in keeping employers' files of return, through e-filing system, 91.8% of the respondents said that the files of contribution collected are well secured. The contributors had in their mindset that the files of returns submitted through e-tax are well kept and managed.

The results from the Table 4.20 indicate that 69.4% of respondents confirmed that through e-filing system none compliant employers are detected and notified automatically. If those none compliance employers are detected and notified, they can willingly comply without waiting to be recovered.

With reference to the results in the Table 4.21, the analysis of the finding shewed that 68.7% of the respondents (employers) said that they have received a reminder message from e-tax to comply with RSSB contributions and RRA taxes, only 31.3% of respondents said that they did not receive a reminder message to comply with RSSB contribution and RRA taxes.

In order to know the positive effect of e-filing system on RSSB operational activities, the results from respondents (RSSB employees) as illustrated in the Table 4.22, indicated that 32.9% of respondents confirmed that through e-filing system the space of filing was saved, while 31.8% of respondents said that through e-filing system, customer services delivery was increased, 22.4% of respondents confirmed that through e-filing system the customers' longue line queues were reduced, and 12.9% of respondents confirmed that through e-filing system the time managements on the side of RSSB was well observed.

In order to know the positive effect of e-filing system on employers' business, the Table 4.23 indicates that the majority of respondents (employers) represented by 37.4%, confirmed that e-tax system helped them to save time, while 29.3% of respondents said that through e-tax system they got quick services and all activities related to mandatory taxes are done in one stop center without moving away. 14.1% of the respondents said that e-tax system helped them to save money, 13.1% of respondents said that the long line queue at RSSB offices were reduced, and 6.1% of the respondents also said that e-tax system helped them to save file space and paperless.

The results from collected survey analyzed in the Tables 4.20; Table 4.21; Table 4.22; and Table 4.23, indicate that on the side of RSSB, saving files space, improved customer services delivery, reduction of customers' long line queue at RSSB offices and time management, are ranked as the key elements considered as the effects of e-filing system on contribution efficiency in Rwanda. On the side of employers (customers), the time management, one stop center activities and quick services, money saving, reduction of customers' frequency and no long line queue at RSSB's offices, saving filing space and paperless, and the reminder message to comply, are also ranked as the keys elements that impacted positively the e-filing system on contributor efficiency in Rwanda. Otherwise, the research objective (number i) of assessing the effect of e-tax system on contributors' compliance efficiency of RSSB is now reached.

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## 5.1.2. The effects of e-filing system on contribution compliance efficiency

The results from survey done indicate trough analysis in the Table 4.21; Table 4.22; and Table 4.23 that on the side of RSSB, saving files space, improved customer services delivery, reduction of customers' long line queue at RSSB offices and time management, are ranked as the key elements considered as the effects of e-filing system on contribution efficiency in Rwanda, while on the side of employers (customers), the time management, one stop center activities and quick services, money saving, reduction of customers' frequency and long line queue at RSSB's offices, saving filing space and paperless, and the reminder message to comply, are also ranked as the keys elements considered effecting the e-filing system on contribution efficiency in Rwanda. Otherwise, the research objective (number ii) which is the effect of e-filing system in contribution compliance efficiency in Rwanda, is now reached.

## 5.1.3. Effect of e-payment system on collection of social security contribution

With the purpose to know the most modalities used by employers to pay social security contributions of RSSB, the Table 4.24 shows that the respondents (RSSB employees) ranked them as follows: online payment represented by 37.6% of respondents is the most used by contributors, cash deposit represented by 31.8% of respondents is ranked as the second modality used to pay RSSB contributions, a check deposit represented by 16.5% is ranked as the 3<sup>rd</sup> method of payment of RSSB contributions, while the use of payment order represented by 14.1% of respondents is ranked as the last modality of payment of social security contributions. It means that the through.

The Table 4.25 indicate that 69.4% of respondents said that e-payment system is mostly used by the small employers, 22.4% of respondents said that big employers use the e-payment system, while 8.2% of respondents said that big and small employers use e-payment system.

In order to know the participation of e-payment in collection of social security contribution, the results illustrated in the Table 4.26, indicate that the respondents (RSSB employees) represented by 55.3% of respondents confirmed that e-payment contributed to the collection of RSSR contributions with efficient, 31.8% of respondents said that e-payment contributed to the increase of social security contributions in positive trend. Only 12.9% of respondents said that with the use of e-payment system, the contributions of RSSB are collected inefficiently.

With the purpose to know the appreciation of RSSB employees in regard of use of e-payment in collection of social security contribution, the results in the Table 4.27, indicate that the respondents represented by 34.2% of respondents appreciated e-payment in collection of RSSR contributions as "very good system", 32.9% of respondents appreciated e-payment as "good system" while 32.9% of respondent said that e-payment system need improvement. Otherwise, e-payment system was appreciated by respondents at 67.1%, while other respondents represented by 32.9% are those who said that e-payment needs improvement.

Otherwise, e-payment system was appreciated by respondents at 67.1% of RSSB employees, while on the other hand it was appreciated by 32.9% of respondents representing RSSB employees, who said that e-payment needs improvement.

With the results of the majority of respondents from the Table 4.24; Table 4.25; Table 4.26; Table 4.27; Table 4.28, and Table 4.29, we say that the e-payment system affected the collection of social security contributions in Rwanda, with efficient in collection of contributions, as it facilitated to the employers to pay RSSB contributions online without moving with money to the banks. E-payment also, facilitated the tasks and navigation with the system on the side of RSSB employees and the employers as confirmed by the results of respondents in Table 4.27 and Table 4.28. Through e-tax system, social security contributions were increased as well as compliance level, time management and fraud reduction also, as indicated in the results of respondent in the Table 4.29; and we say that the research objective (number iii) of examining the effect of e-payment system on collection of social security contribution in Rwanda, is achieved.

# 5.2 Conclusion

The research was carried out on E-tax system usage and effective collection of social security contributions with a case study of RSSB.

With reference to the analysis from the Table 4.11 to Table 4.16, the results illustrate that it e-tax system is well used by both RSSB employees and employers, as responded by the majorities on both sides. The results showed that it has also positive impact on the side of RSSR and contributors. This helped to reach to the general objective of this research which is to analyze the contribution of e-tax system usage on effective collection of social security contributions in Rwanda, is now achieved.

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The results from collected survey analyzed in the Table 4.20; Table 4.21; Table 4.22; and Table 4.23, indicate that on the side of RSSB, saving files space, improved customer services delivery, reduction of customers' long line queue at RSSB offices and time management, are ranked as the key elements considered as the effects of e-filing system on contribution efficiency in Rwanda. On the side of employers (customers), the time management, one stop center activities and quick services, money saving, reduction of customers' frequency and no long line queue at RSSB's offices, saving filing space and paperless, and the reminder message to comply, are also ranked as the keys elements that impacted positively the e-filing system on contributor efficiency in Rwanda. Otherwise, the research specific objective (number i) of assessing the effect of e-tax system on contributors' compliance efficiency of RSSB is now reached.

The results from survey done indicate trough analysis in the Table 4.21; Table 4.22; and Table 4.23 that on the side of RSSB, saving files space, improved customer services delivery, reduction of customers' long line queue at RSSB offices and time management, are ranked as the key elements considered as the effects of e-filing system on contribution efficiency in Rwanda, while on the side of employers (customers), the time management, one stop center activities and quick services, money saving, reduction of customers' frequency and long line queue at RSSB's offices, saving filing space and paperless, and the reminder message to comply, are also ranked as the keys elements considered effecting the e-filing system on contribution efficiency in Rwanda. Otherwise, the research objective (number ii) which is the effect of e-filing system in contribution compliance efficiency in Rwanda, is now reached.

With the results of the majority of respondents from the Table 4.24; Table 4.25; Table 4.26; Table 4.27; Table 4.28, and Table 4.29, we say that the e-payment system affected the collection of social security contributions in Rwanda, with efficient in collection of contributions, as it facilitated to the employers to pay RSSB contributions online without moving with money to the banks. E-payment also, facilitated the tasks and navigation with the system on the side of RSSB employees and the employers as confirmed by the results of respondents in Table 4.27 and Table 4.28. Through e-tax system, social security contributions were increased as well as compliance level, time management and fraud reduction also, as indicated in the results of respondent in the Table 4.29; and we say that the research objective (number iii) of examining the effect of e-payment system on collection of social security contribution in Rwanda, is achieved.

### 5.3 Recommendations

In order to know the challenges met by RSSB employees in accessing information filed in e-tax system, the results of analysis of the Table 4.30 indicated that the majority of respondents represented by 61.2%, confirmed that the lack of full time internet is a big challenge to them to access to information files in e-tax system, while 25.9% of respondents said they have difficult to check the information filed in e-tax system; and 3.5% of respondents said also that it is not easy to download and save files due to the slow running internet.

The Table 4.18 shows that 56.5% of respondents confirmed that to check employers' records kept through e-filing system is accessible, while 43.5% of respondents said that internet connection is a problem to check to the employer's record kept through e-filing system.

We suggest RSSB to work closely with their partners especially RRA and other providers of network and internet connectivity for providing full network and internet connection 24/24 hours, as well as possible so that it can be accessible by everyone at any time and everywhere you are.

The Table 4.21 indicates that, 68.7% of the respondents said that they received a reminder message from e-tax, to comply RSSB contributions, while 31.3% of respondents said that they did not receive a reminder message to comply with RSSB contribution. This means that e-tax system has to be improved so that all employers must receive the reminder message to comply with RSSB contributions.

In this research, each response was taken into consideration, the reason why those contributors who are not receiving the reminder massage to comply with RSSB contributions, as represented by 40.4% of respondents and as also confirmed by RSSB employees who said that e-tax system detect or not detected but not notifying automatically none compliant employers; the researcher advices to the management of RSSB and collaborate with RRA management for looking the way that e-tax system can be improved so that all employers must receive the reminder message to comply with RSSB contributions.

Taking into consideration the idea of some respondents even if it was not represented by the majority of respondents, but some respondents (RSSB employees and employers) who said that e-payment system needs to be improved, their

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ideas is necessarily taken into consideration in this research and it help the researcher to suggest that RSSB Management has to work closely with RRA management for e-payment improvement, so that it will be easy to use by everyone.

In the view of the results of the study and regarding the time and the context in which the investigation was undertaken, there are areas that should be interesting for future research. The future researchers would be interested in the study of how RSSB should facilitate none compliance employers to file and pay employee contributions timely without applying the fines which is a burden for some and causes them the left and close their business.

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