

ISO Quality Standards and Tax Compliance in Rwanda: A case study of Rwanda Revenue Authority

Richards Kagabo Rwamunono¹, Mercyline Kamande² and Francis Mwangi³

^{1,2,3}School of Business and Economics, Mount Kenya University
Rwanda, Kigali, Rwanda.

Abstract

This study assessed quality standards of ISO Certification and how they contribute to tax compliance in Rwanda, taking Rwanda Revenue Authority (RRA) as a case study. The study looked into the fact that, as long as RRA is ISO 9001 certified, its quality standards as merged into its quality policy should yield positive results towards tax compliance. The target population comprised all the 84 employees of the entity's Departments with core responsibility related to quality management system, service delivery and tax compliance systems. Data collection employed a semi structured questionnaire while quantitative data analysis employed SPSS. Key findings indicate how RRA responded to key ISO's exhibits by developing quality objectives, documenting control policies and also conducted ISO 9001 awareness campaign. As a result, RRA's tax collections and registration of new taxpayers kept growing together, indicating voluntary compliance as a response to RRA's quality policy, and tremendous reduction on service time, positively complementing ISO certification. On however side, gaps still exist in institution-wide communication and thorough understanding of ISO control policies and it is recommended that a targeted awareness campaign both to staff and stakeholders will harness implementation of ISO quality standards and their resulting tax compliance.

Key words: *Quality management system, ISO, Relationship management, Tax compliance.*

1. Introduction

Institutions or companies pressing quality to be key to its success, embeds a quality management system (QMS) in its operations to ensure it stays consistent in meeting consumer's quality requirements, as well as coping up with latest technology and retaining employees with a competitive reward agenda (Melsa, 2004). Setting up QMS is an institution's strategic decision that aims at improving its general performance in a consistent manner, defining it as a base for its sustainability (Wolkins & Otis, 1995).

Quality management system grounded more across all sectors when series of standards recognized internationally, merged into what is now referred to ISO 9000 family. Nowadays, when one talk about quality management system, ISO pops into the minds of hearers, and the drive of every industry, whether product or service based, is to comply with ISO quality standards, to be sure it stays competitive on the global market, both in uniqueness and in preference (Mikhled 2012).

In the context of Rwanda's drive to promote better service delivery, Rwanda Standards Board (RSB) was established to promote standards across Rwanda's business industry, offering an 'S-mark' on products and services. RSB later became one of ISO 9000 affiliates and was granted powers to audit QMS and certify entities with ISO 9001 certification. By September 2019, RSB's directory had 539 products and companies certified with an 'S-mark', while 44 products were certified for ISO quality management system.

What is worth noting is that, a big number of companies and institutions in Rwanda, including this Rwanda Standards Board, became ISO certified, though accredited certifying companies from Kenya, Egypt and other countries, other than RSB, and getting the exact numbers of ISO certified companies in Rwanda was not possible to get in a reliable source (RSB, 2019).

Schalk and Dijk (2005), elaborates how on the side of tax-state agencies, when we talk of tax compliance, many agencies believe there is an increasing consensus that customer satisfaction is a vital input to ensure tax compliance.

In efforts to promote tax compliance, Rwanda Revenue Authority introduced ISO certification in some of its services since 2009 (RRA report, 2014), complying to ISO 9001:2008 standards in September 2009, and was again audited for compliance of ISO 9001:2015, and later certified in March 2019.

This research sought to identify key institutional strategies, and to determine the extent to which the

quality standards in ISO Certification contributed to the tax compliance in Rwanda. A case under review was of Rwanda Revenue Authority, a state agency in charge of collecting taxes and levies, as well as enforcing taxation laws.

1.1. Research Problem

Considering RRA is ISO 9001 certified since 2009, the institution is expected to align its activities to meet the end needs of their customers (in this sense the taxpayers), their primary focus should be on customer satisfaction, which is among the key attributes of ISO 9001 (ISO 9000 Essentials, 2018).

Contrary to previous operations of RRA prior to ISO 9001 certification, their strategic priorities put in place emphasized on raising the tax base, with an approach of hunting and punishing non-compliance rather than putting mechanisms in place to encourage and promote voluntary compliance (RRA, 2019).

This study assessed current ISO 9001 certification QMS standards applied by RRA, and how its application affected their customer focus, and its resulting influence on tax compliance and the general feedback from taxpayers to the institution.

1.2. Research Objective

- i. To assess how ISO 9001 QMS is implemented in RRA;
- ii. To determine the level of tax compliance in RRA in relation to the registered taxpayers;
- iii. To examine how quality improvement practices in RRA affects tax compliance;
- iv. To evaluate how stakeholders' relationship management affects tax compliance in RRA;

2. Review of Literature

Literature demonstrates the quest for quality across all disciplines for a long period of time in history. Krishna (2009) reiterates on earliest evidence of quality assurance during the BC era, where measurements and inspections was prominent in India and Egypt, giving examples of precisely cutting of stones for pyramids and forts which depicted well-developed methods and procedures on measuring and cutting devices that guaranteed quality buildings. Krishna (2009) also tried to put together facts and evidence of quality considerations in early years, taking a documented example that took place far back 1382, where a businessman named John Welburgham of the Canterbury faced a monetary fine for selling two cooked fishes which were found rotten, foul-smelling and distasteful. This fine based on the complaint lodged by six citizens to the Mayor of Canterbury. Schalk and Dijk (2005), talks about the introduction of ISO 9001:2000, as of helping companies to decide on the kind of paperwork to retain as "objective evidence" in order to guarantee that the Quality System is alive and well.

In empirical review, few studies referenced talk more about the effectiveness of ISO 9001, and separately on taxpayer's service quality, taxpayers' response to

taxation laws, and mitigating factors to compliance. A missing link lies in the quality standards and how they lead to compliance.

Closer to intersection, Evangelos, *et al* (2013) conducted a study on the impact of ISO 9001 effectiveness on the performance of service companies. The study picked a sample of 100 ISO 9001:2008 certified service companies, data collected from quality managers through a structured questionnaire and analysed using multiple linear regression. Findings confirmed the ultimate effectiveness of ISO 9001, revealing its significant contribution to service companies' general performance. Financial performance of service companies is directly influenced by operational performance, and the impact of ISO 9001 remains indirect through correlation with operational performance

Gaps surfaces as researchers focused on QMS's role on tax compliance, highlighting different aspects of legal enforcement and behavioral change towards taxes,; it was established that most of them capitalized on the behavior of taxpayers and how tax authorities strategize with regards to those forecasted behaviors. RRA being ISO 9001 certified could be an added advantage to endeavour to promote strategies, policies and structures which ensures that non-compliance in taxpayers is kept to a minimum level.

The Conceptual framework employed, ISO 9001 quality standards involving quality improvement programs and customer focus among others on independent variables, and tax compliance features with intervening variables that include tax laws.

3. Materials and Methods

This study used descriptive research design to gain insights of different issues in Rwanda Revenue Authority (RRA) in regards to quality standards of ISO Certification to tax compliance.

The target population of this study included all the 84 staff in the selected departments of RRA that are responsible for driving the implementation of ISO quality standards and taxpayer's compliance. Total population sampling ¹ was opted to, since the population in the targeted departments is less than 100 individuals.

Primary data was obtained through direct interviews and questionnaires, while the secondary data was collected through documentation review, reading online books, and website resources. Results were summarized SPSS version 16 for qualitative data analysis.

¹ Manheim & Rich (1995)

4. Results and Discussion

4.1. Objective one: assessing how ISO 9001 QMS is implemented in RRA

In seeking respondents consent on whether key actions were established by the institution, The descriptive statistics in table 1 were derived from respondent's response on basic actions implementing ISO 9001 QMS standards. With the standard deviation on all responses ranging from 1.057 to 1.136 which is far from the average data set, respondents manifested higher disagreement on the use of researchers proposed modalities of implementing.

However, some middle managers responses, and senior managers interview responses indicate positive remarks on those implementation modalities and further added that RRA developed quality objectives, documented control policy and also conducted ISO 9001 awareness campaign amongst its staff. Responses deviating from implementation modalities were largely provided by lower level staff, most of who work in compliance related services.

4.2. Objective two: Determining the level of tax compliance in relation to registered taxpayers and tax collections

Reflecting on the data published by RRA on revenue collection performance, including numbers of taxpayers and revenue performance; **figure 1** illustrates how the number of registered taxpayers kept on increasing, and senior managers revealed in an interview that the increase is mainly because of focused compliance literacy program, where intending taxpayers are enlightened on legal requirements of doing business in Rwanda, and a checklist provided while registering taxpayers. Despite of RRA continuous improvement in its operations, it is worth concluding that ISO certification contributed to tax compliance.

4.3. Objective three: Examining how quality improvement practices affect tax compliance

In order to examine the effect of quality improvement practices, the research applied correlation analysis on different parameters of answers provided by respondents as indicated in the table 2, that shows significant correlation between quality manuals and number of audits conducted. This means that as the institution developed quality manuals for implementing quality standards, and so the number of external audits to taxpayers reduced over time, as a positive note to taxpayers' responsiveness.

Also in an interview with senior management, the research probed on policies and facilities introduced by management in response to ISO requirements, and the respondents mentioned how RRA reverted on use of online systems to help traders compute taxes and pay without necessarily queuing at tax offices. One of significant facilities mentioned as introduced in 2012 is

the use of electronic billing machines (EBM) in enforcing VAT collections (see results in figure 2 and figure 3).

Again, table 3 indicates respondents concerning RRA's view on taxpayers' behavior. The standard deviation indicates that statistical information provided by respondents varies from a value slightly above the mean data set, but still tending further from the data set. This means that respondents are closer to agree on taxpayers' easily getting tax clearance certificates, but having all taxpayers file and pay taxes on time, reduction of audits over a period of time, and reduction of tax appeals are still at large. This implies that quality improvement still have a long way to go, and so is tax compliance.

4.4. Objective four: Evaluating how stakeholder's management affect tax compliance

This section reviewed how RRA manages its stakeholders, probing into number of taxpayers' audits conducted and the amount of money all audits charged, as well as the back office facilities to foster compliance, onsite responses as well as actions to deal with non-compliance.

Figure 4 indicates the reduction of audits conducted against taxpayers versus charges imposed on total audits since 2014. Through interviews, senior managers indicated this as a positive trend to compliance becoming a habit since audit cases reduced over time.

Furthermore on back office facilities, the descriptive statistics in table 4 resulted in a standard deviation below the mean data set of 0.5, indicating a strong agreement of respondents on how RRA conducts onsite responses to facilitate tax compliance through site visits to bring registrations closer to taxpayers, conducting public lectures in schools and professional forums, delivering handbooks explaining taxpayers obligations, and also sensitizing the population to report suspected fraud and tax evasion activities.

On actions used to deal with non-compliance through field visits, descriptive statistics in table 5 and table 6 indicate a standard variation of values less than the mean data set of 0.5, indicating respondents acceptance of the actions used to deal with non-compliance, which are: random site visits to check whether all traders are registered as taxpayers, thorough inspection of all imported goods to ascertain tax payments, target audits to newly registered taxpayers and others with high balances of tax arrears.

5. Conclusions

Finds revealed that, ever since RRA was ISO certified in 2009 until it renewed in 2019, its systems and management style have continually improved their focus on customer satisfaction, largely the taxpayers. RRA aligned its quality policies with the requirements of ISO, developed quality manuals, enforced developing of processes and procedures in all services, developed quality objectives, and documented control policies. However, it's important to note that quality

standards assumed without through communication equates to their non-existence, which was also noted in some service departments of RRA.

Also as manifested in interviews and questionnaire responses, RRA's improved operations with introduction of ISO Certification made revenue collections to steadily increase by close to 10% each year, which is a positive note on taxpayers' compliance. Most respondent agreed that all taxpayers file and pay tax returns before the deadline. They also manifested that online services were increased and simplified, thereby reducing service time. In such instance, it's fitting to conclude that RRA's quality improvement affected tax compliance.

On the attribute of relationship management, respondent manifested a number of office facilities that keeps taxpayers reminded of their tax obligations. These include putting to their disposal online systems that allows them to honour their obligations with cuts on time and resources expenses, targeted campaigns and checks to keep traders awake on tax obligation. In doing this, it is fair to conclude that the way RRA keeps their customers engaged positively affects taxpayers' compliance.

This research concludes that the quality standards of ISO certification significantly contribute to tax compliance in Rwanda.

Future studies may consider the impact that intervening variables on complying to ISO 9001 requirements that fosters tax compliance. Future researches may also narrow down to individual quality standards and how a single standard can result in more voluntary tax compliance, and widen tax base.

Acknowledgements

I was lucky to have been guided and supported by Dr. Mercyline Kamande and Mr. Francis Mwangi as my supervisors throughout the course of this work. Their unequalled and detailed guidance made it possible for me to produce this work. Saying "thank you" to them wouldn't be considered sufficient, considering their invaluable comments, feedback and review that helped to produce this document.

Appreciations are also extended to all lecturers of MKU especially those in the School of Business and Economics, Kigali Campus, for their contribution to my intellectual development.

In the related manner to my family, I sincerely appreciate your patience, understanding and support rendered when much needed.

May God bless you all!!

References

- [1] American Society for Quality (ASQ), (2012). Quality Glossary, Available at www.asq.org, accessed July 26, 2018.
- [2] Carmen, C., & Liliana B. (2012). Coordinates of TQM in Fiscal Administration: Review of General Management.
- [3] Evangelos, L. P., Angelos, P., & Dimitrios, P. K. (2013), "The impact of ISO 9001 effectiveness on the performance of service companies", a Journal of Managing Service Quality, Vol. 23 No. 2, pp. 149-164.
- [4] ISO. (2008), Quality Management System, requirements, ISO, Geneva.
- [5] ISO Essentials. ISO 9000 - Quality Management. International Organization for Standardization. http://www.iso.org/iso/iso_9000_essentials Accessed 30 July 2018.
- [6] Krishna, K. (2009). Manager-Business Development online resource, <https://www.slideshare.net/krishnakant1/02historyquality>, Accessed on Jul 26, 2018.
- [7] Levine, D.I., & Toffel, M.W. (2010), "Quality management and job quality: How the ISO 9001 standard for quality management systems affects employees and employers", Management Science, Vol. 56 No. 6, pp. 978-996.
- [8] Manheim, J.B., & Rich, R.C. (1995). Empirical political analysis research methods in political sciences, New York.
- [9] Melsa, J. L. (2004). Systems Engineering and management for sustainable development, Volume II, John Wiley & Sons, New York.
- [10] Mikhled, S. (2012). Global Journal of Management and Business Research, Global Journals Inc, USA
- [11] Rizky, N. (2011). analysis of factors that affect tax compliance of hotel entrepreneurs in paying tax.
- [12] RRA tax statistics in Rwanda (2019).
- [13] RSB QMS Guide manual (2019).
- [14] Saraph, J.V., Benson, G.P. & Schroeder, R.G. (1989). An instrument for measuring the critical factors of quality management, Decision Sciences, Journal Vol. 20.
- [15] Savitri, E., & Musfiady, (2015). the Effect of Taxpayer Awareness, Tax Socialization, Tax Penalties, Compliance Cost at Taxpayer Compliance with Service Quality as Mediating Variable. Procedia – Social and Behavioral Sciences.
- [16] Schalk, R., & Dijk, V.W., (2005). "Quality management and employee commitment illustrated with examples from Dutch health care", International Journal of Health Care Quality Assurance.
- [17] Wolkins, D. & Otis (1995). Total Quality: A Framework for Leadership. Management Leadership Series. New York: Productivity Press,.
- [18] Yahia-Berrouiguet, A., Mankouri, I., & Benarbia, N. (2015) " Impact of ISO 9001 Certification on Firm Performance: Case Study of Beni Saf Cement Company", Journal of Economics and Business Research, No.1, 2015, pp. 158-165.

List of figures



Figure 1: Level of tax compliance in relation to registered taxpayers.
Source: RRA, 2019

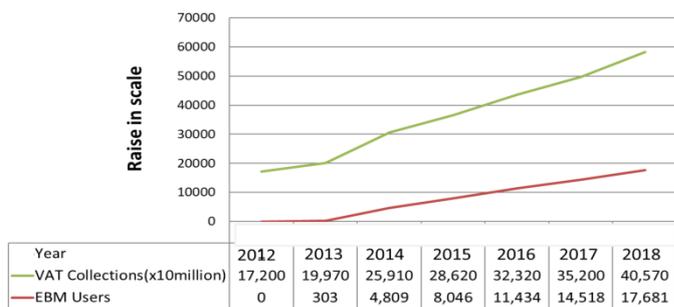


Figure 2: EBM usage and VAT collections
Source: RRA, 2019

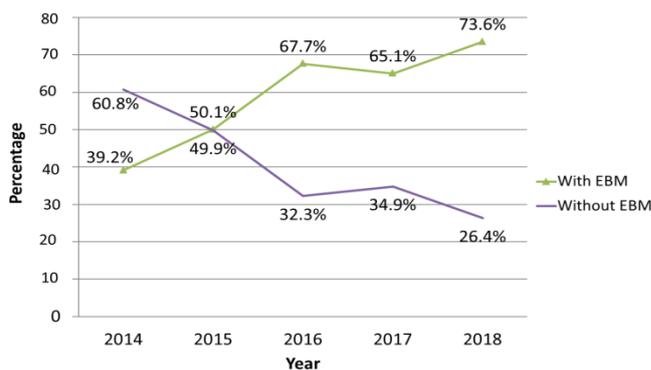


Figure 3: Percentage of VAT taxpayers with Electronic Billing Machines, EBM
Source: RRA, 2019



Figure 4: Taxpayers audit conducted versus audit charges imposed
Source: RRA, 2019

List of tables

Table 1: Assessing how ISO 9001 QMS is implemented in RRA

Activity	N	Min.	Max.	Mean	Std. Deviation
1) Developed Quality Policy	82	2.00	5.00	3.451	1.102
2) Developed Quality Manual for Implementing Quality	82	2.00	5.00	3.768	1.136
3) Developed Processes and Procedure for all Services	82	1.00	4.00	2.512	1.057
4) Established Policy Statements: Vision Mission and Core Values	82	1.00	4.00	2.585	1.133

Source: Field Data, 2019

Table 2: Correlation analysis on quality improvement practices

	Developed Quality Manual	Quality Developed Processes & Procedure for all Services	Number of tax appeals reduced over time	Number of Audits reduced over time
Developed Quality Manual for Implementing Quality	Pearson Correlation	1	-.054	-.271*
	Sig. (2-tailed)	.162	.631	.014
	N	82	82	82
Developed Processes and Procedure for all Services	Pearson Correlation	.162	.362**	.067
	Sig. (2-tailed)	.147	.001	.550
	N	82	82	82
Number of tax appeals reduced over time	Pearson Correlation	-.054	1	-.071
	Sig. (2-tailed)	.631	.001	.529
	N	82	82	82
Number of Audits reduced over	Pearson Correlation	-.271*	-.071	1
	Sig. (2-tailed)	.014	.529	.550
	N	82	82	82

Source: Field data, 2019

Table 3: Examining how quality improvement practices affect tax compliance

Activities	N	Min.	Max.	Mean	Std. Dev.
1) All taxpayers file and pay Tax returns before the deadline	82	2.00	5.00	3.3780	.856
2) Number of tax appeals reduced over time	82	1.00	5.00	2.5732	1.031
3) Number of audits reduced over	82	1.00	4.00	2.8780	.894
4) Taxpayers easily get tax clearance certificates	82	3.00	5.00	4.1707	.605

Source: Field Data, 2019

Table 4: Back office facilities to foster tax compliance

Action	N	Min.	Max.	Mean	Std. Dev.
a) Is there online registration facility for taxpayers?	82	1.00	3.00	1.049	.268
b) Have deadline of filing returns been communicated	82	1.00	2.00	1.049	.217
c) Are there SMS or e-mail facility given to taxpayers who don't file returns as a reminder?	82	1.00	2.00	1.171	.379
d) Is there a simplified or online facility to assist taxpayers deregistration	82	1.00	1.00	1.000	.000

Source: Field Data, 2019

Table 5: Onsite response to facilitate compliance

Activity	N	Min.	Max.	Mean	Std. Dev.
a) Are Site visits conducted to provide on-spot registration of taxpayers?	82	1.00	2.00	1.049	.217
b) Are there campaigns to encourage hotline reporting of suspected frauds and evasion?	82	1.00	2.00	1.098	.299
c) Are there handbooks explaining requirements on tax obligations?	82	1.00	2.00	1.098	.299
d) Are public lectures conducted in schools and professional forums on tax education?	82	1.00	1.00	1.000	.000

Source: Field Data 2019

Table 6: Actions used to deal with non-compliance

Activity	N	Min.	Max.	Mean	Std. Dev.
Are there random site visits conducted to verify whether particular taxpayers are registered?	82	1.00	2.00	1.305	.463
Are imported goods thoroughly inspected?	82	1.00	2.00	1.134	.343
Are there audits on newly registered taxpayers and others with higher tax arrears balances?	82	1.00	2.00	1.317	.468
Are criminals publicly handed over to prosecution	82	1.00	2.00	1.415	.496

Source: Field Data, 201