



‘Investigating the current performance monitoring and evaluation tool in the public administration of Rwanda:Case study: Nyarugenge District

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‘Investigating the current performance monitoring and evaluation tool in the public administration of Rwanda: Case study: Nyarugenge District’.

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Declaration

I declare that this Dissertation contains my own work except where specifically acknowledged

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Date.....

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ABSTRACT

Decision-makers use evidence from performance evaluation to assist them in taking effective and quick solutions to accelerate development, this practice is coupled with external expertise and good practices. This study seeks to investigate the current performance monitoring and evaluation tool in Nyarugenge District. The performance contract also called imihigo are agreements signed between the District's mayors and the president of the Republic of Rwanda for the former to reach certain targets on socio-economic development indicators. The perspective of this research was to interpret the current imihigo reporting and monitoring status and identify the key challenges which prevent an effective reporting and monitoring. The review of previous literatures and interviews was done with different stakeholders of imihigo to collect data. The result demonstrate that Nyarugenge District actually use a purely manual system to plan, monitor and report the imihigo, a number of gaps caused mainly by the absence of an Information System for imihigo Performance management has been identified . We recommend the Rwandan local government to put in place an information management system for imihigo to save time, improve the quality of imihigo end result.

Keywords: E-government, performance contract, gap analysis, Information Systems, imihigo, Rwanda.

LIST OF SYMBOLS AND ACRONYMS

ICT	:	Information and Communication Technology
GoR	:	Government of Rwanda
ITPOSMO	:	Information, Technology, Processes, Objectives and values, Staffing and skills, Management system and structures, other resources
eGov	:	eGovernment
NPM	:	New Public Management
IPAR	:	Institute of Policy Analysis and Research
7YGDP	:	7 Year Government Development Plan
EDPRS	:	Economic Development and Poverty Reduction Strategy
MINALOC	:	Ministry of Local Government
MINECOFIN	:	Ministry of Finance and Economic Planning
JSR	:	Joint Sector Review
JADF	:	Joint Action Development Forum
SSP	:	Sector Strategy Plan
DDP	:	District Development Program
MTEF	:	Medium Term Expenditure Framework
IT	:	Information Technology
M&E	:	Monitoring and Evaluation
CoK	:	City of Kigali
RALGA	:	Rwanda Association of Local Government Authorities
RGB	:	Rwanda Government Board
NGO	:	Non-Governmental Organization

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1 Introduction

The sustainability of development interventions is often viewed to result from a proper participation of the citizen in the planning process, including the supply and management of resources, services, and facilities (Olphert & Leela, 2007).

Hence, over the year, many governments have invested many efforts to enhance meaningful planning process. The justification for these efforts being not only in achieving greater efficiency and effectiveness of public investments but also to contribute to the process of empowering citizens and democratization (Nymans, Catasús, & Öhman, 2013).

For example, the government of Rwanda has put in place several homegrown initiatives, the *imihigo* being one of them. *Imihigo* is the plural Kinyarwanda word of *Umuhigo*, which means to vow to deliver. Local governments innovate in management by introducing performance-based accountability and innovate in service delivery (Shah, 2014). The *imihigo* (defined as performance contract) actually stimulate a competitive environment within local government, as they are signed between district mayors and the President of the Republic of Rwanda. At the end of the year, performance evaluation reports are presented to the President of the Republic and the public, in the ceremony top performing districts are rewarded for their annual achievement based on district performance contract. This enforces the culture of accountability when it comes to public vows (GoR, 2014).

Imihigo has been institutionalized in 2006 as a comprehensive and national wide system of performance contracting (Rwiyereka, 2014). The *imihigo* program has been adopted at the national level to assist the planning process from the state up to the household level. By signing the *imihigo*, each District commits his *imihigo* to the president, and within a specific timeframe, achieve certain things such as new infrastructure to be put in place, improving health conditions of the population, addressing major social challenges, etc...As such, *imihigo* can be seen as a mean to entail participation in the formulation, implementation, and monitoring of national policy (Rwiyereka, 2014).

The local government processes are getting more efficient due to the use of modern technologies. The government of Rwanda has put in place ICT platforms that facilitate the public service delivery. Among the current platform, we have *Irembo* which is the one-stop portal for e-Government services. Its role as a platform is the provision of Government services online with ease, efficiency, and reliability. Yet the public sector hasn't achieved a maturity level when it comes to the adoption and use of technologies in daily processes. We can analyze *imihigo* processes from an Information Technology perspective, our analysis can help us to get a deep understanding of all processes and gaps that affect different aspects of *imihigo*. With a clear understanding of gaps that surround the process, we can build on it and define how *imihigo* process can be improved.

Despite its contribution to the national planning process, *imihigo* derive from a traditional form of participation whose venue is public gathering. However, several studies have reported on the inefficiency and ineffectiveness of traditional participatory approach because the timing and form of these venues are often to blame for low participation levels by the general public (Conroy, 2006). The *imihigo* process involves multiple actors, who act at different levels and all having different roles. Having clear and timely control on the progress contributes to the quality of process outputs. In this study, we will focus on looking at the current status quo and looking at gaps that might be among drawbacks to the ideal process. The ITPOSMO (Information, Technology, Processes, Objectives and values, Staffing and skills, Management system and structures, other resources) model which describes gaps between design process and reality of e-government implementations in seven perspectives (Syamsuddin, 2011), is used in this study to analyse the actual situation of *imihigo* process and identify the gap that *imihigo* might have.

Participatory planning is beneficial to observe and collect the aspirations of the public community about various issues and public community needs that are related to the development that will be implemented by local government (Sinaga & Murnawan, 2016). Therefore, the appropriations of ICTs in the public planning process have the potential to create new avenues for better planning and reporting process in the local government institutions.

We have formulated our main study objectives as follow:

Assess and find the gap in the way performance reporting and monitoring are conducted by the local government

This study aims to address the following question: “What are the gaps between the current status and an effective eGov driven system for local government performance reporting and monitoring?”

This study will be articulated in four sections

- Literature study on government performance and monitoring system
- The methodology used to conduct this study will be explained
- Analysis and study findings
- Conclusion and recommendations

The next section provides a literature study on government performance and monitoring system in other countries and it describes briefly *imihigo* system adopted in Rwanda.

2 Literature review

2.1 Performance measurements In public Administration

Information and Communication Technology (ICT) has been a performance success tool for many Countries, ICT is perceived as the main instrument to achieve the e-Government Goal (Cordella & Iannacci, 2010), information technology is a critical enabling factor for building and maintaining performance measurement systems (Askim, 2007). The level of performance measurement and accountability are positively associated with greater use of performance information (Cavalluzzoa & Ittner, 2003).

Local governments innovate in management by introducing performance-based accountability and innovate in service delivery (Shah, 2014). Recent efforts to improve governmental performance have also placed considerable emphasis on performance measurement as a means to increase accountability and improve decision-making (Cavalluzzo & Ittner, 2003). Performance measurement in the public sector is defined as the regular collection and reporting of information about the efficiency, quality, and effectiveness of government programs (Pollanen, 2005) ,it is the practice of public service managers using performance data to help them make decisions so as to continually improve services to their customers(Hatry, 2014).

The performance measurement improves the allocation of government resources and promotes governmental efficiency and effectiveness through improved performance-based decision-making

(Cavalluzzo & Ittner, 2003), many studies appear rather skeptical about the usefulness of performance information in decision-making, especially for politicians (Askim, 2007).

2.2 2.2 The need for a system of evaluation in public sector

The evaluation of system in public sector are recognized by governments to support countries' capacity building and institutional development. Countries are accumulating a growing volume of experience with national evaluation systems (Mackay, 1998). New Public Management (NPM) proposes public administration theories and practices whose ultimate objectives are to make the public administrative system more efficient, streamlined and consistent. ICT in the public sector has generally been discussed as a tool to help create new and better service delivery (Cordella & Carla, 2012), by increasing efficiency, transparency, and enhance the coordination of public administration procedures and management.

After years of debates with ad-hoc evaluations with failing utilization, there has been an increasing need to develop evaluation capacity in organizations (Dahler & Larsen, 2012) to enhance evaluation cultures, and to create systematic managerial and organizational approaches to ongoing evaluation so that evaluation is better integrated and mainstreamed into organizational processes.

2.3 2.3 Monitoring and Evaluation System for the Public administration

The introduction of performance measurement has been one of the most widespread international trends in public management (Pollitt, 2006), it use to capture the way in which performance information is being used in the public sector (Speklé & VerbeetenbaNyenrode, 2013). Monitoring systems are key components of permanent feedback mechanisms accompanying the whole policy or management cycle (Pintér, Hardi, André, & Jon, 2011) which assist decision makers to use evidence from monitoring and evaluation systems in making choices (Porter & Goldman, 2013).

2.4 E-government perspective in public management performance

Information and Communication Technology (ICT), has opened up many possibilities for improving managerial efficiency and the quality of public service delivery (Moon, 2002). E-government is one of the most interesting concepts introduced in the field of public administration in the late 1990s (Teicher, Owen Hughes, & Nina Dow, 2002), e-government includes the use of all information and communication technologies, from fax machines to wireless palm pilots, to facilitate the daily administration of government (Moon, 2002). E-government has become one of the core element of Public management, the use of e-government can enhance governmental performance, accountability, responsiveness and transparency (Halachmi & Greiling, 2014), and it has been predominantly focused on changing government operations, structures and services to boost productivity. Performance information is essential in New Public Management: it is needed to set targets in management contracts, to focus on efficiency, to compare the targets and actual performance and to emphasize outputs (JANSEN, 2008).

2.5 Rwanda Performance Contract (Imihigo)

Information and Communication Technology has been a performance success tool for many Countries, ICT is perceived as the main instrument to achieve the e-Government Goal (Cordella & Iannacci, 2010), information technology is a critical enabling factor for building and maintaining performance measurement systems (Askim, 2007). The level of performance measurement and accountability are positively associated with greater use of performance information (Cavalluzzoa & Ittner, 2003).

The government of Rwanda implemented a program (*imihigo*) to improve a set of overall development indicators (Basinga, et al., 2011), *imihigo* contains agreements between government institutions and the President of the Republic in order to reach certain targets on social-economic development indicators (Versailles, 2012). This approach has been adopted from an ancestral homegrown (IPAR-Rwanda, 2016), its modernization and use to setting objectives is one of the innovative approaches to development planning and evaluation ((IPAR-Rwanda), 2016).

Imihigo is defined as a cultural practice in the ancestral tradition of Rwanda where an individual would set him/herself targets to be achieved within a specific period of time and do by following

some principles and having the determination to overcome the possible challenges (GoR, 2010a, p1).

The Rwanda Planning system is informed by the national vision (vision 2020) and the 7 Year Government Development Plan (7YGDP) and the Economic Development and Poverty Reduction Strategy (EDPRS) 1 & 3, and the annual action plans and imihigo (IPAR-Rwanda).

The Performance contracts are measured against an agreed set of governance, economic and social indicators known as performance indicators (Versailles, 2012), which provide a clear framework to establish domestic accountability and participation at a level directly relevant to citizens (Rwiyereka).

3 Methodology

3.1 Conceptual framework

The perspective of this research is to interpret the current *imihigo* reporting and monitoring status and identify the key challenges which prevent an effective reporting and monitoring. The research identifies the gap between the current *imihigo* status and the desired status for the future; a qualitative research methodology, which is a narrative view of reality and relies on words and talks to create texts has been used to perform this research (Denzin & Lincoln, 2008). Interpretive research principally attempts to understand phenomena through the meaning that people assign to them (Savin-Baden & Niekerk, 2007). In Information System the interpretive methods of research produce an understanding of the context of the IS, and the process whereby the IS influences and is influenced by the context (Yazan, 2015) in this kind of research the researcher focuses on the full complexity of human sense-making as the situation emerges (Englander, 2012).

Gap analysis is a technique that enables you to identify the gap between your current status and how it will be in the future, along with the tasks that you need to complete the identified effort (Holdsworth, Glisson, & Choo, 2017). They use gap analysis as an appropriate approach for examining the evaluation of a professional service. The gap analysis aims to emphasize the deficiencies of today's solutions to improve their integration to tomorrow's ecosystems (Mineraud,

Mazhelis, Su, & Tarkoma, 2016). The gap between the actual status and the ideal status of *imihigo* process is identified by the use of the 7 dimensions of ITPOSMO model, as shown in Figure 1(Heeks, 2002).

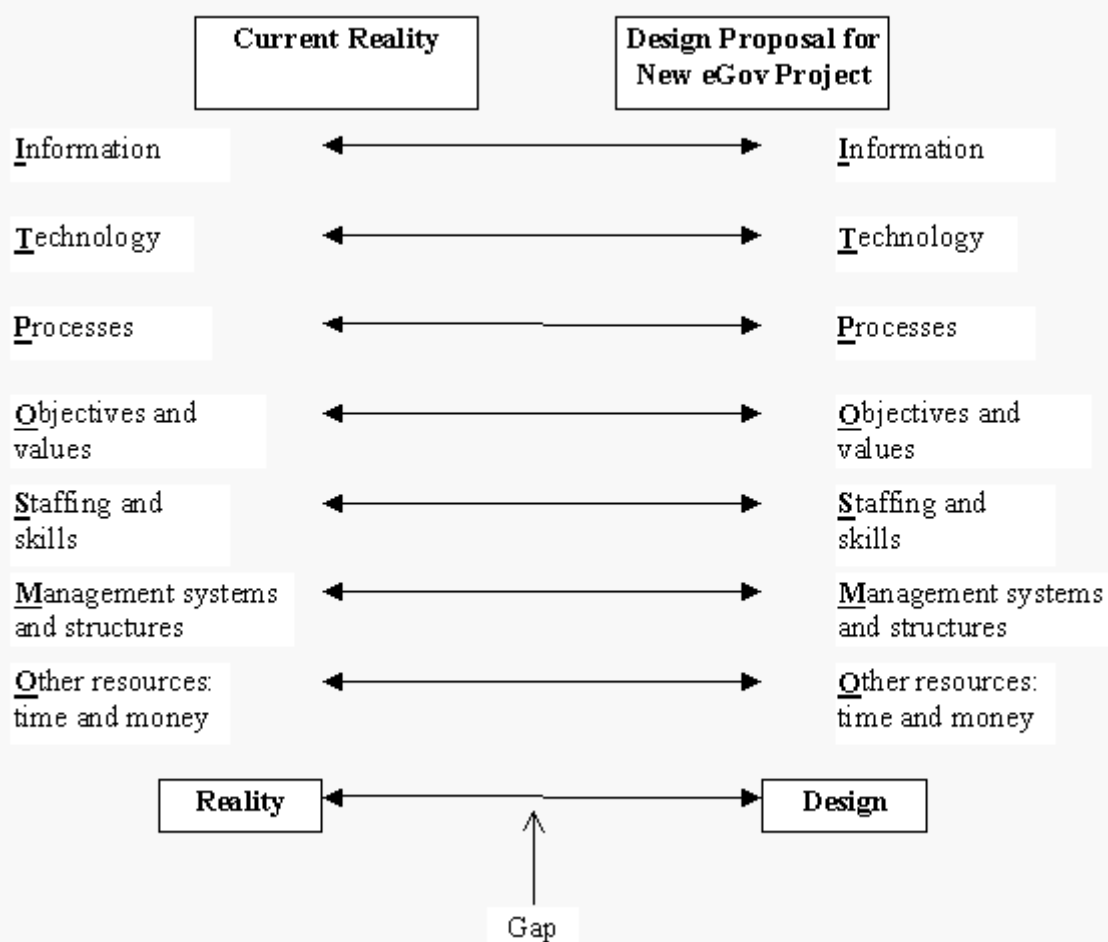


Figure 1: The ITPOSMO dimensions of e-government project design-reality gaps

3.2 Data analysis

The City of Kigali is the Capital City of Rwanda, it has a surface area 730 km², and it has three

Districts: Gasabo, Kicukiro and Nyarugenge, 35 sectors (National Institute of Statistics, 2012), due to time constraint our study will be limited to Nyarugenge district. Nyarugenge is the heart of the city center of Kigali (which is towards the west of the urban area and the City of Kigali), and contains most of the city's businesses. Nyarugenge district is divided into 10 sectors. Here is the district demographic data:

- Total Area: 134 km²
- Population: 284,561 (2012 census)
- Total Density: 2,100/km²

Data collection is crucial in research, as the data is meant to contribute to a better understanding of a theoretical framework (Bernard, 2011), the population used in data collection was sampled using a purposive sampling technique also called judgment sampling, is the deliberate choice of an informant due to the qualities the informant possesses (Tongco, 2007). The data collection was done using: literature review, observation, and interviews.

- **Literature review:** a literature review of papers published on previous researchers in order to understand how far previous researchers have gone through the issue related to local government performance, the reviews of *imihigo* reports, policies and government strategies in line with the local government performance.

- **Interview:** interviews have been conducted by three different categories: the implementers, the supervisors, and advisors for *imihigo* performances in local government. The interview questions have been designed and developed in a way to allow respondent to give as more information as possible with quality to address our research question and allow us to interpret the result easily (Appendix 2).

The targeted population for the interview was 32 people, the selected target group for interview was based on people who are directly involved in *imihigo* implementation, supervision and, among contacted persons only 27 (84% of the total targeted population) responded to my request and accepted to have the interview. Among those who responded only 14 (52% of responders) accepted to have a full interview as planned and 12 (48% of responders) preferred to have informal interviews in order to discuss on a specific point without going into the whole interview as designed. For those who decided to have informal interviews, it was due to time constraints and

wanted to focus on their main business area. The interview was done with 13 people interviewed out 16 people contacted and all categories mentioned above was represented; the following table shows the number of interviews done and their roles.

Role	Number of contacted people	Number of formal interviews done	Number of informal interviews done
Implementing role	15	7	5
Advisory role	10	4	5
Supervisory role	7	3	2
TOTAL	32	14	12
%	100%	84%	

Table 1: Participants and roles

- **Observation:** People are most likely to behave naturally when they don't know that they are being observed. Observation helped us to complete data collected through interview.

In this study, we have identified different actors and their roles in the imihigo process. In order to get a complete and quality information for our research we formulated questions based on the actor role for a specific purpose.

1. Advisory role
2. Supervisory role
3. Implementation role

All questions are adapted to the role that the actor is playing based in the above mentioned categories.

4 Results & discussions

This section discusses in details our findings during our study. All identified gaps will be discussed and certain factors behind our results are highlighted. In order to get details on each aspect we have conducted interviews with different stakeholders, analyzed different type of

documents, and other sources in order to complete our study. The gaps are identified during interviews and analysis of different imihigo documents.

Those aspects of the discussion are grouped into 4 major groups, and all identified gaps are grouped based on them. Our grouping is based on the imihigo process, meaning the entire business process flow of imihigo has four subdivisions, the four subdivisions are analyzed basing on the conceptual framework. Here are the four main subdivisions:

- 1) Planning process
- 2) Activity harmonization, standards, and policies
- 3) Stakeholders role and collaboration
- 4) Monitoring, reporting and feedback mechanism

The next section will discuss our findings on each of the above elements. We shall discuss the current situation, identified gaps.

4.1 Planning process

The local government entities consider the planning process as the foundation of the entire process. It's all about brainstorming on what they would like to achieve, share visions and organize ideas in order to give birth to activities.

The local government entities receive initial instructions from two ministries, the Ministry of Local Government (MINALOC) and the Ministry of Finance (MINECOFIN), which elaborate guidelines that will be used on *imihigo* planning process. The following diagram provides details on the steps and main tasks recommended during the planning process:



Figure 2: Planning Process, Source: City of Kigali Documentation

From the above diagram (Figure 2) the process starts with a historical review of the past performance and uses different reports and programs guidance at this brainstorming stage.

Goals are set for the review and it follows all the central level guidance. From this stage, different stakeholder consultations happen in order to keep collecting inputs contributing to the planning process. After having all activities well defined, a budget can be drafted and reviewed in order to finalize the planning.

The planning is done with some assumptions and open to change when needed. Changed might be due to corrective adjustments or any new development that needs to be captured in the development. The above-described process involves a collaboration of all stakeholders and it happens within a limited time.

From our interviews, observation and different consultations in order to know how the planning process is done in the district of Nyarugenge, here are how the district drives the planning process:

- Sector ministries provide key national priorities to guide districts by linking their targets with the citizen needs and the national priorities.

- The City of Kigali in collaboration with MINALOC identifies key priorities for *imihigo* and priorities are communicated to the district.
- Using national priorities as guidance, during the planning process the district conducts meetings from the lowest level (village) to the top Local Government level (City of Kigali). This helps the district to get inputs from its served population.
- There is an involvement of stakeholders like the private sector and civil society on *imihigo* planning process. The district cannot ignore the presence and collaboration with development partners because they play a key role in the implementation and their plans should be harmonized with the district objectives.
- Ministries and districts meet to produce draft *imihigo* together with other stakeholders and the report is sent to MINECOFIN for consolidation and submission to the Prime Minister office and then the *imihigo* is signed between the districts and the President of the Republic.

Here are identified gaps in the planning process:

- There is no standard planning framework used by all the local government entities and the process is time-consuming.
- No central repository to capture all planning inputs from different stakeholders
- Multiple versions of the plan, and not easy to track changes and progress

From our analysis, there are factors behind the above gaps identified in the planning process:

Due to undefined and manual process, the planning took them more time than planned. The extra time was estimated to be between 20% - 25% of their normal time.

Inputs for the planning process are provided verbally, emails, meeting minutes, group discussions and reviews from different stakeholders. No, IT solution to consolidate and share all inputs.

Due to parallel inputs going to more than one person, in some cases, multiple versions of the working document are presented and it takes some time in order to merge them into a single version. Due to this some important elements unexpectedly might be forgotten or changed.

4.2 Activity Harmonization, Standards and policies

For every system made by several actors, it is very important to have certain rules which regulate and govern their interactions and activities.

The activity harmonization in our context refers to the uniformity of doing things in the same way for the same purpose, in another term having well-defined processes governed by same principles. Those principles are formulated in form of standards or policies.

The central level (ministry level) has defined a framework that every district should follow from planning up to post-implementation periods, in addition to that reference programs are defined in order to match with all the national priorities. The following describes briefly all fundamental guidance used in the process. Among them, we have policies, national programs, long terms district programs, short terms district programs, executive’s orders, etc....

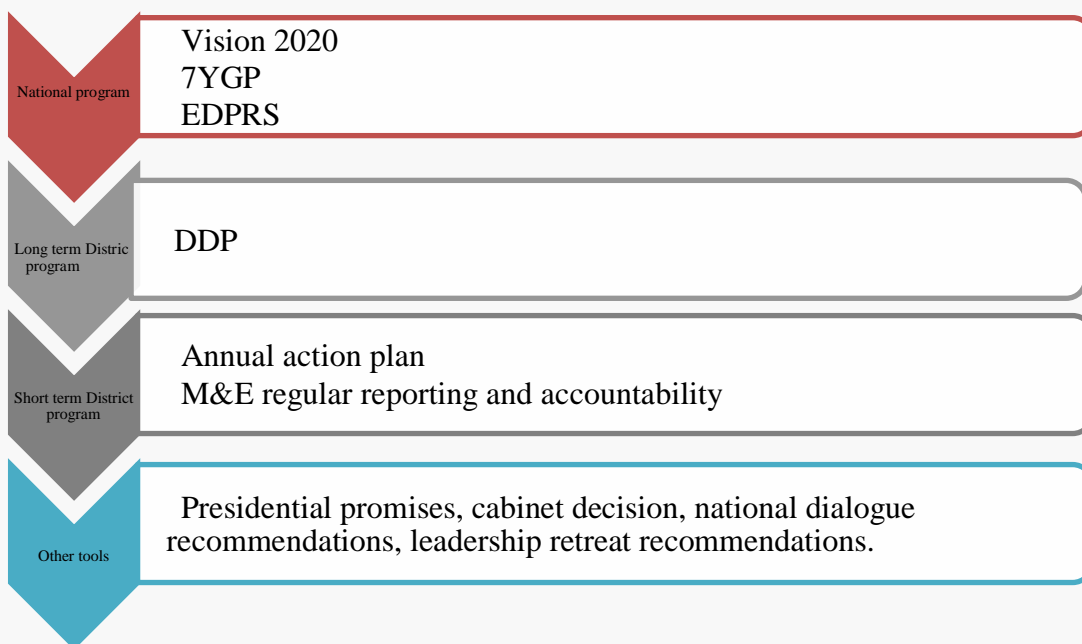


Figure 3: Fundamental guidance to use while defining imihigo

From the above figure 3, the following are the fundamental guidance that are used in order to define *imihigo*:

National programs: The Vision 2020 is a long term strategy for the development of Rwanda with main objectives of transforming Rwanda into a middle-income country by 2020 based on a thriving private sector and a knowledge based economy (Rwanda, Vision 2020, 2012), The Economic Development and Poverty Reduction Strategy (EDPRS) stems from Rwanda’s Vision 2020 and guides medium term actions that will lead to the achievement of the Vision (Rwanda, 2013) and

finally the Seven Years Government Program (7YGP) is the Government program for the President's 7-year mandate to both chambers of Parliament.

Long-term district program: Every district are given power of autonomous management inclined towards the determination of their own 5 years priorities relevant to the national policies of development and expressed by the local community members those five years priorities are called District Development Program (DDP) (Gasabo, 2012)

Short term district: District annual action plan, Monitoring, and Evaluation regular reporting and accountability.

Other programs: Presidential promises, cabinet decisions, national dialogue recommendations, leadership retreat recommendations.

Here are identified gaps in activity harmonization, standards, and policies:

- ✓ Lack of clear standards and policies on how to plan and manage *imihigo*
- ✓ There're periodic changes to how *imihigo* are planned and managed
- ✓ The defined framework is detailed but leaves room for personal interpretation in order to get to details.
- ✓ No standard formats when it comes to information collection and presentation.

From our analysis, there are factors behind the above gaps identified in activity harmonization, standards and policies:

- The district uses guidance from the City of Kigali (CoK) and Ministries, these guidance are not provided in a format that can enforce compliance. Another important element to highlight, they are not posted in a central repository for the benefit of all stakeholders.
- Any change in the guidance, standards or policies is not communicated to all stakeholders at the same time, so you find people working based on different assumptions and understanding.
- Due to the way inputs are collected, people use a different format to present information, they just ensure that all needed details are captured. When it comes to the document consolidation, it is a nightmare (different data format, time-consuming, etc...).

4.3 Stakeholders role and collaboration for imihigo planning and reporting

The process of *imihigo* involves several stakeholders from different levels, each playing his/her own role and acting at a specific level. This requires a highly effective collaboration between all stakeholders. We have identified the following roles:

- Policymaking: Defines how *imihigo* should be defined and implemented based on the national priorities. They also define what should be used as a reference to define district level activities. Eg: Ministry (Minaloc...)
- Advisory role: they also act at the central level, sometimes provide inputs on how the process should be conducted with less authority, they are more playing an advisory role. Eg: Rwanda Association of Local Government Authorities (RALGA), Rwanda Governance Board (RGB)...
- Supervisory role: Some of the actors in this category, acts at the national level, like the Prime Minister office in order to ensure that the process is moving within agreed boundaries and national priorities. Others, such the CoK looks after the City priorities and make sure all districts comprises.
- Implementer role: Being accountable for all the process outcome. Are primary owners of the process in terms of defining what needs to be planned and done in order to respond to defined priorities and identified challenges? This is the role of each district and all its sectors.
- Collaborator role: There several developmental actors who work at the national or district levels and who have to be part of the district development journey. This requires that they align their priorities with the ones of the district. And the district also makes sure all of them are involved properly. These collaborators include the private sector, NGOs, Civil society and other development agencies acting the district.
- Beneficiary role: All challenge and priorities and defined based on the wellbeing of the citizen. All implemented activities aims and improving the well-being of the citizen.

#	Stakeholder	Role
1	City of Kigali (CoK)	Implementation of imihigo of the City of Kigali and ensure a proper coordination of districts to better achieve their respective
2	Ministry of Local Government (MINALOC)	Identifies national priorities to be implemented at local levels and identifies how the resources, whether financial or non-financial, can be mobilized.
3	Rwanda Governance Board (RGB)	Support the local governance on Capacity building and Advocacy on imihigo implementation.
4	Institute of Policy Analysis and Research (IPAR)	Evaluation of imihigo and provide recommendations on way forward.
5	Rwanda Association of Local Government Authorities RALGA	They play an advisory role and play role to capacitate local government with skills to achieve imihigo.
6	Village	Implementation of imihigo and coordination of imihigo implementation by the citizens.
7	Sector	Implementation of imihigo of the sector and ensure a proper coordination of cell to better achieve their respective imihigo.
8	Cell	Implementation of imihigo of the cell and ensure a proper coordination of village to better achieve their respective imihigo.
9	Ministry of Finance and Economic Planning (MINECOFIN)	Participate on planning of imihigo, oversight of imihigo implementation and provides funds for imihigo implementation.
10	PRIMATURE	
11	Citizen	Provide their priority needs during the planning phase of imihigo and receive feedback on why certain priorities were either maintained or removed from imihigo, they take part in implementation of imihigo and as beneficiary they participate also in evaluation of imihigo.
12	Private Sector Federation	They play role on imihigo implementation.
13	Ministry of ICT	Provide infrastructure, develop ICT policies and strategies that support imihigo implementation.
14	Civil Society and non-governmental organizations	Play role in imihigo implementation, they participate in planning and evaluation of imihigo and they provide funds for imihigo.

Table 2: List of imihigo stakeholders and their roles

Here are identified gaps in Stakeholders role and collaboration:

- ✓ Duplication of efforts while defining activities and managing *imihigo*. This is due to a disconnection between different actors.
- ✓ Lack of a collaboration platform which can speed up the collection and dissemination of information among all stakeholders
- ✓ It is time-consuming to get everyone's inputs as most of the inputs are provided manually and not a centralized process.

4.4 Monitoring, Reporting and feedback mechanism

The monitoring process helps to check the progress of all defined activities in order to ensure that all are on time, budget and under the same expectations. It also helps to identify challenges and deviations which can lead to a failure. The monitoring goes together with the evaluation which is the systematic way to assess activities. Both monitoring and evaluation can be conducted physically or based on reports.

The reporting is defined as a feedback on the implementation situation. Ideally, the report provides a clear image of the current situation in terms of current progress, challenges, needed support or suggestions for updating the strategy. Information shared as part of different reports are also used by decision makers for actions. one interviewer stated that “we have a network of planners under the Ministry of Finance and the Ministry of Local Government, with that network we can track *imihigo* implementation and if there are any changes they communicate through this forum; we have a WhatsApp group and an email group”, another interviewer also was very clear about the feedback mechanism used in *imihigo* “To follow up the implementation of *imihigo* we use different tools like phone calls, WhatsApp group as well as email”

Here are identified gaps in Monitoring, reporting and feedback mechanism:

- ✓ Lack of systems which collects data on all defined activities under implementation
- ✓ No defined and harmonized monitoring framework
- ✓ Deviations are not identified on time for corrective measures
- ✓ Different types of reporting format
- ✓ No way to make a deep analysis of generated reports/data. Hard to extract insight from generated data.

- ✓ Week storage of information and possibility to lose them

5 Conclusion & Recommendations

5.1 CONCLUSION

In this study, we analyzed the existing performance contract system (*imihigo*) in Rwanda, specifically in Nyarugenge District. The performance system in Rwanda play a vital role in achieving a remarkable prosperity In all sectors of development, the Nyarugenge District located in Central Capital City of Rwanda, with its huge Information Technology infrastructure and its big number of educated population, Nyarugenge District actually use a purely manual system to plan, monitor and report the *imihigo*. We identified a number of gaps caused by the absence of an Information System for *imihigo* Performance management. The local government performance management (*imihigo*) should be strengthened by putting in place an information management system to the *imihigo* from its planning, implementation, monitoring and evaluation to reporting, this will save time, improve the quality of *imihigo* end result and most importantly speed the development of Rwanda.

Business processes cannot be automated without proper policy and standards framework to regulate the entire ecosystem. People, activities and context to be well regulated in order to pave the way for the use of ICT in the government processes and services. The legal part of this process would speed up the automation process and puts away major challenges that the sector would suffer from. Guidelines are provided to those in charge of managing *imihigo* but there's a big room for personal interpretation which can cause deviations from the original idea.

Rwanda has made a great step towards the use of ICT in public sector service delivery, public institutions should leverage on current infrastructures and other initiatives that the government is putting in place in order to easy the public service delivery.

We know that we can extract insights from all data generated from *imihigo* process, so due to the format and diverging standards used during the process, it is hard to run deep analysis on generated

data. The *imihigo* process in nyarugenge District is entirely done manually, which cause delay and poor output in imihigo.

5.2 Recommendations

We have identified gaps and factors behind those gaps. We would like to formulate our recommendations as follow:

To the government:

- The government to conduct a process optimization on the imihigo process. This implies to revise the current process in order to eliminate efforts duplications and waste of time/resources in order to maximize efficiency.
- The government should put in place policies and standards which promote and regulate the use of ICT in imihigo planning, monitoring, evaluation and reporting processes.
- The government to run an awareness campaign aiming at promoting the best practices in services digitalization.
- The government to move from paper based systems to digital systems.
- The government to put in place a data management framework that can be used to collect, store and use (deep analysis) of data generated during imihigo process.
- Promote 3P (Public Private Partnership) in order to find solutions to the current challenges in eGov solution adoption and use.

To future researchers and private sector actors:

- This research looked at gaps from an urban setting, so in order to get a conclusive way forward on what should be the solution, the future research in eGov domain should also look at the gaps in rural districts because each setting presents its own challenges.
- The private sector should develop eGov solutions based on the country's challenges without waiting the public sector to express the need.

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Appendices

Appendix 1

Interview Questionnaire for the supervisory agency

1. What's your role and expectations in the overall planning process of imihigo from a supervisory perspective?
2. What are the main inputs needed in the imihigo planning process?
3. What are tools used in imihigo process?
4. Are stakeholders roles in imihigo well defined?
5. What are the main challenges you face in imihigo planning process?
6. How do you track inputs and changes in imihigo planning process?
7. How do you ensure that districts are complying with government development programs and stay aligned to them during the entire imihigo planning process?
8. At your level how are priorities defined and how are they used to guide the imihigo planning process?
9. Do you get enough data/information for supporting imihigo prioritization?
10. Do you have suggestions on how imihigo planning process can be improved?
11. At your level, how do you track the implementation progress?
12. Do you have a well-defined feedback mechanism on implementation?
13. At your level, how soon do you realize that there's a deviation in the implementation, and what the main causes of the observed deviations.
14. Are all reports generated and shared in harmonized way and how are they aggregated?
15. Does imihigo have a standard feedback mechanism?

16. At your level, what are the main challenges in monitoring the implementation of Imihigo?
17. Do you have any suggestion for improvement in monitoring and reporting of Imihigo?
18. Is there any ICT tool used in the monitoring and reporting of Imihigo?
19. Can ICT add a value in the process?
20. Do you have any additional input that can contribute to this survey?

Appendix 2

Target goal (information to extract) from the question

- Identify the actor's role in the process
- Validate if the actor understands his/her role clearly
- Expected inputs from the actor
- Tools used in the process
- Any eGov solution
- Challenges on the used tools
- Do they know what they are called to do in the process?
- What are the main challenges from an actor point of view
- What are needed improvement in order to make the process more smooth
- How inputs from actors are managed
- Is there a way to track actors inputs and changes on existing ongoing process without calling for physical meeting?
- Are they aware of any best practice
- Compliance and aligning with existing priorities and challenges to achieve it.
- How priorities are defined and managed among all actors
- Data/information for decision support
- Suggestions for improvement
- Check if there's any platform used to track the implementation progress
- What are tools used
- How soon deviations are identified
- How deviations are managed
- Any methodology or tool used to identify deviations
- Challenges in monitoring process of imihigo