



Journal of Public Policy and Administration (JPPA)

E-Governance and Service Delivery by Rwanda National Public Service Commission

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Article History

Received 13th August 2024

Received in Revised Form 16th September 2024

Accepted 21st October 2024



How to cite in APA format:

Uwingeneye, G., & Akims, M. (2024). E-Governance and Service Delivery by Rwanda National Public Service Commission. *Journal of Public Policy and Administration*, 9(3), 34–48. <https://doi.org/10.47604/jppa.3010>

Abstract

Purpose: This study examined the effect of E-governance and service delivery by Rwanda National Public Service Commission. The specific objectives of this study included, determining the effect of E-administration on service delivery by Rwanda National Public Service Commission and determining the effect of E-participation on service delivery by Rwanda National Public Service Commission. The three theories that provided the basis of this research are the following: Stakeholders Theory, Technology Acceptance Model and Expectancy Disconfirmation Theory. Chose these ideas because of what they have to say about how services are provided in a tech-driven setting. In order to accomplish these goals, an analysis of relevant literature was conducted.

Methodology: Data were gathered from 47 randomly selected workers of the Rwanda National Public Service Commission using a census sample approach. Data was gathered using a combination of questionnaires and document analysis. As part of the study, SPSS 25 was used.

Findings: The Rwanda National Public Service Commission found a high level of correlation ($R = 0.844$) between the predictors of service delivery and administration, and participation. With an R-squared value of 0.712, these variables account for around 71.2% of the variance in service delivery. Their unstandardized coefficients emphasize the impact of each predictor on service delivery. With a coefficient E-administration also has a notable positive effect, with a coefficient of ($\beta = 0.404$, $t = 4.646$, and $p\text{-value} = 0.000$). Similarly, E-participation contributes positively, with a coefficient of ($\beta = 0.505$, $t = 5.973$, and $p\text{-value} = 0.000$). All coefficients are statistically significant, underscoring their crucial roles in enhancing service delivery, as indicated by their p-values being below the conventional threshold of 0.05.

Unique Contribution to Theory, Practice and Policy: The study recommended that Rwanda National Public Service Commission should enhance the user interface and accessibility of online platforms, expand online services while integrating with other government systems, and improve cybersecurity protocols.

Keywords: *E-governance, E-administration, E-participation, Service Delivery*

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INTRODUCTION

Globally, e-government is undergoing a transformation, with countries using technology to reshape citizen interaction and service delivery. However, challenges persist in bridging the digital divide, ensuring data privacy, and adapting to the ever-changing technological landscape. This global movement towards a more interactive and citizen-centric e-government holds immense potential for improved governance, but navigating these challenges will be crucial for its success (Moon *et al.*, 2023).

France boasts a centralized approach to e-government, prioritizing national platforms for service delivery. Strides are made in online service accessibility, citing the success of FranceConnect, a centralized authentication system that simplifies login across various government services. However, challenges remain in user experience and ensuring smooth data exchange (interoperability) between different government agencies, potentially hindering user satisfaction (Lefevre & Tremblay, 2023). Also, Singapore is a global leader in e-government, renowned for its efficient and citizen-centric services. Singapore is focusing on seamless online service delivery through SingPass, a centralized authentication system, and MyInfo, a platform that pre-fills citizen data for government interactions (Tan & Weill, 2023).

Smith (2022) evaluated the impact of digital governance on service delivery in developing countries. E-governance initiatives enhance service accessibility, efficiency, and transparency but face challenges like digital literacy and technological infrastructure. Lee (2021) examined the relationship between E-governance and public trust in government service delivery. E-governance increases public trust through transparency and accessibility; user satisfaction correlates strongly with trust in E-governance systems. E-governance builds trust and satisfaction, crucial for successful service delivery. Johnson (2020) analyzed the impact of E-governance on service efficiency in European countries. E-governance reduces processing times and improves service accessibility, with continuous updates and training critical for effectiveness. E-governance enhances efficiency and accessibility in European public services, requiring ongoing technological updates.

In addition, the use of electronic government has been on the rise in Turkey in recent years, with the goal of making public services more accessible and efficient. There is the development of e-Devlet, a one-stop online portal offering a wide range of government services. However, concerns regarding citizen trust in digital platforms and potential limitations on freedom of information remain (Erdogan & Tatoglu, 2022).

Wang (2021) investigated how citizen-centric E-governance improves public service delivery in Asia. Mobile apps and integrated platforms enhance user experience and efficiency; citizen involvement is crucial. Citizen-centric E-governance models in Asia show positive results, emphasizing active user engagement's importance. Rwanda has continuously expressed its intention to use ICT to increase access to public services, facilitate internal trade, encourage e-commerce and SME development, enhance productivity and strengthen competitiveness, promote inclusive growth and reduce poverty (Nyorekwa, Munu & Zjos, 2022).

Problem Statement

The digital journey in Rwanda is far from over; there are still many obstacles to overcome, such as data protection and cyber security concerns, a lack of adequate infrastructure, high broadband costs, a lack of digital literacy, the exclusion of marginalized communities, ineffective management and leadership, a lack of faith in the new system, and language hurdles.

The Irembo platform's mobile payment technology is underutilized as over 50% of citizens still prefer to pay agents with cash. The World Bank Group (2020) reports that there are only about 1500 people using the Irembo services every day.

The Republic of Rwanda (2022) states that the country's Information and Communication Technology Initiatives have contributed to the growth of e-services, demonstrating the government's commitment to the digital agenda. The digital transformation of the nation is being shaped by a number of legislation and regulations. In 2006, the Rwandan government passed the ICT Act, which ensures corporate fairness and provides a thorough legislative framework for managing activities related to information and communication technology. This law applies to all forms of electronic communication (Banga, Rodriguez & Velde, 2020). To promote the use of integrated e-governance platforms and move towards a digitally empowered economy, the government has created the ICT Sector Strategic Plan (2018–2024). Since its inception in 2014, the Irembo Digital Platform has provided Rwandan people with access to almost all of the country's 104 e-government services over the Internet (NEC, 2020). As a result of these developments, Rwanda has surpassed its East African competitors in terms of the World Economic Forum's Networked Readiness Index, placing it at the forefront of digital integration in the region (The World Bank , 2020).

It is particularly important to address the problems with infrastructure and connection at the sector and cell levels in rural and peri-urban regions. Rwanda continues to face challenges that hinder the uptake of services. These include issues like limited access to energy and the internet, power outages, insufficient information and communication technology equipment, and gaps in service delivery in remote regions. The article also highlighted how digitalization might widen the gap between developed and developing nations due to the high demands placed on infrastructure and technical know-how. Due to insufficient infrastructure and internet access, some locations can miss out on future technologies (NCST, 2023).

While these studies successfully demonstrate the benefits and challenges of E-governance in service delivery, no specific study conducted on Rwanda National Public Service Commission. On top of that, research on how e-governance impacts service delivery in Rwanda is limited. This is because this is a new field that is still emerging and hence requires vigorous research to provide enough empirical evidence to guide in its implementation. Therefore, the current knowledge vacuum on the impact of E-governance on the provision of services by the Rwanda National Public Service Commission is what this research aimed to fill.

General Objective

The general objective was to examine the effect of E-governance on service delivery by Rwanda National Public Service Commission

Specific Objectives

- i. To evaluate the effect of E-administration on service delivery by Rwanda National Public Service Commission
- ii. To examine the effect of E-participation on service delivery by Rwanda National Public Service Commission

Research Hypotheses

- i. E-administration has no significant effect on service delivery by the Rwanda National Public Service Commission.
- ii. E-participation has no significant effect on service delivery by the Rwanda National Public Service Commission.

LITERATURE REVIEW

Theoretical Review

This study is grounded in four theoretical frameworks: Stakeholder's Theory, Technology Acceptance Model and Expectancy Disconfirmation Theory (EDT). These theories were chosen due to their robust explanations concerning service delivery within an information technology context.

Stakeholders Theory

According to Ramachandran (2020), Freeman first proposed stakeholder theory as a framework for managers to take into account all the relevant parties while setting goals for their organizations. After years of development and many uses, stakeholder theory is currently seen as a foundational theory that, when used and integrated with other theories, may provide new insights into stakeholders (Freeman, Dmytriyev & Phillips, 2021). The influence of a company's actions on all of its identified stakeholders is the central idea in stakeholder theory. According to Gordon (2023), in this scenario, the corporate body is the e-service provider, and the stakeholders are the individuals who utilize the e-services. According to this school of thought, when making policy decisions, a corporate entity (the government) should think about how each stakeholder (those who utilize e-services) would be affected. One aspect of this is working to lessen or eliminate tensions between different groups' interests (Muller, 2023).

Taking stakeholders' needs into account is now crucial to the development and execution of any strategy or company plan. Since they might have an impact on or be impacted by the entity's goals, it is necessary to manage and engage them at every strategic level of the organization (Twum-Darko *et al.*, 2023). The idea states that in order for e-service consumers to have their interests met, such interests must be complementary. Consequently, in order to accomplish the goals of e-services delivery, the government agencies providing them must build connections with its users, motivate them to do their best, and create communities in which they may all thrive (Zwane & Matsiliza, 2022).

In order to determine whether the Rwanda National Public Service Commission has been engaging stakeholders in matters of service delivery, this theory will be used.

Technology Acceptance Model

Davis, Bagozzi, and Warshaw proposed the Technology Acceptance Model (TAM) to forecast whether an information system would be accepted (Sepasgozar, Ramzani, Ebrahimzadeh, Sargolzae & Sepasgozar, 2020). Technology Acceptance Models (TAM) have many applications and serve as a foundation for them. Technology Acceptance Models has shown to

be a useful theoretical framework for understanding IT user behavior. According to Kelly and Palaniappan (2023), TAM is an expansion of TRA that aims to explain why people do the things they do and how our attitudes and subjective norms impact our motivation.

According to the Technology Acceptance Model, when it comes to deciding whether or not an information system is acceptable, the two most essential aspects are how valuable it is and how easy it is to use. The extent to which an individual thinks a system enhances his efficiency is known as perceived utility. How easy a user anticipates a system to be to operate is known as its perceived ease of use (Marikyan & Papagiannidis, 2023). Consequently, a person's outlook on the system and how it may affect their productivity on the job dictate whether or not they choose to utilize an information system. Users would readily accept and make use of the system if it will boost productivity on the job (Kelly & Palaniappan, 2023)

This model will be used for this study since it has been shown to be credible using trustworthy instruments and to be empirically complete in prior studies that have focused on understanding people's attitudes.

Expectancy Disconfirmation Theory

According to the Expectancy Disconfirmation Theory (EDT), when people evaluate how well a government agency is doing compared to their expectations, it leads to higher levels of citizen satisfaction. Marketing literature is where the EDT first appeared (Zhang, Chen, Petrovsky & Walker, 2021). In this literature, customer satisfaction is key. It can mean different things to different people depending on the context. It can be about the actual act of consuming, what happens during it, the results of that consumption, and how satisfied the customer was with those results compared to their expectations (Li & Shang, 2023).

Substantial data both supports and indicates the necessity for further modifications of the latter feature, which the EDT created and which became extensively utilized in the marketing literature (Zhang, Chen, Petrovsky & Walker, 2021). Disconfirmation, in this view, might take a good or bad turn. According to Hengyun, Fang & Bing (2020), customers experience positive disconfirmation when the product or service meets their expectations, and negative disconfirmation when they feel the product or service falls short of their expectations. When expectations are exceeded by actual performance, however, the consumer is considered to be very pleased.

Despite the merit of this new information, more subsequent studies have pointed out the framework's shortcomings and shown the critical need to further understand the factors that influence expectations. While expectations are generally steady, prior satisfaction does seem to have an effect ((Zhang, Chen, Petrovsky & Walker, 2021). This research will use this theoretical model to check whether e-governance platforms have delivered the services that stakeholders expected.

Empirical Review

Mbaidin, Alomari and Jbour (2021) set out to investigate how satisfied citizens are with e-services and what factors contribute to their excellence. The research looked at and measured five different dimensions of e-service quality: responsiveness, availability, privacy, dependability, and security. After sending out a survey with 32 questions to 350 people, we were able to get 279 valid replies for our research. The data were analyzed using a variety of statistical tools, including percentages, means, and frequency counts for descriptive statistics, and multiple regressions, analysis of variance, correlation, and Cronbach's alpha for inferential

statistics. The study found that across all quality metrics, citizens assessed the e-services as fair or middling. Although they had issues with the e-services' availability, privacy, and response, they were satisfied overall. Each of the characteristics of e-service quality has a positive and statistically significant effect on citizens' happiness, according to the study. Several suggestions have been put forth by the research that could improve citizen satisfaction. These include making people more aware of how important the e-services are, giving people enough information and instructions on how to use the system, holding workshops and live demonstrations to show people how to use it, having a dedicated support team that can help users with any problem, answering questions and inquiries quickly, and expanding, modifying, and updating the systems to include all the services citizens need.

Mulyana and Jamaludin (2023) looked at how happy citizens were with government e-services as a function of service quality. A quantitative technique was used by the researchers. Researchers in Bandung, Indonesia surveyed 150 people who used public e-service apps. A non-probability sampling method known as purposive sampling was used in this study. Data analysis was conducted using Smart software's Structural Equation Modeling (SEM). Findings highlight the importance of data privacy, data security, and information quality in determining the quality of e-services, which in turn affects citizen happiness. Organizations offering public e-services should maintain and improve their e-service quality by strengthening data security, privacy, and information quality, according to this study. This will increase user trust in these services.

Riany (2021) looked at how the E-Government plan in Kenya affected the way state institutions provided public services. Public service delivery was the dependent variable, whereas strategy execution was the moderating variable. The independent variables in the research were electronic participation, electronic administration, electronic services, and electronic commerce. The research looked at a lot of different theoretical frameworks, such as ANT, NPM, UTAUT, TDTH, DYC, and Contingency Theory. To compile their findings, the researchers in this study employed a descriptive research approach. The target audience consisted of 4,230 management cadre members from 132 different state institutions in Kenya's government. Public universities, research institutes, and higher education institutions were formed outside of the traditional civil service, and there were 62 executive agencies and 25 autonomous regulatory bodies. To round out the data that was collected, documents were also reviewed. Our sample size was determined to be 365 individuals using the Taro Yamani method, and we collected data using questionnaires that the employees had developed on their own. The data was analyzed using descriptive and inferential statistics. Through the implementation of E-Commerce, E-Services, E-Administration, and E-Participation, the study discovered that Kenyan state agencies considerably enhanced the delivery of public services. E-Commerce, E-Services, E-Administration, and E-Participation should be the main priorities for state agencies, according to the report. With these plans in place, government organizations will be able to better carry out their mission of serving the public.

Future research could investigate how addressing the e-governance factors can enhance citizen engagement within the RNPSA.

METHODOLOGY

This study utilized a descriptive survey design, which is deemed appropriate due to its ability to cater to a large population and provide insights into current conditions. Additionally, this design facilitates the collection of both quantitative data, which are essential for calculating

the correlation coefficients between the variables. The population of this study was 47 staff members of Rwanda National Public Service Commission. Because of the manageable population size and the researcher's ability to reach all respondents, a census was therefore undertaken.

Questionnaires were employed to gather primary data from participants. This method is selected to minimize response bias by ensuring respondent anonymity, facilitating extensive population coverage efficiently in terms of time, personnel, and cost. The data was analyzed using SPSS, which stands for the Statistical Package for the Social Sciences.

FINDINGS & DISCUSSIONS

Response Rates

The response rate data in the engagement of participants in the study's questionnaire distribution. With 45 completed and returned surveys, the Rwanda National Public Service Commission obtained an impressive 95.74% response rate out of a total of 47 questionnaires sent out to evaluate the impact of E-governance on service delivery. With such a high percentage of responses, it's clear that people were eager to take part in the survey. Nevertheless, a small percentage of questionnaires (4.26%) were not returned, suggesting a tiny lack of interest from these individuals. During the data collecting phase, a number of persons were temporarily unavailable, which is the major reason why questionnaires were not returned.

Inferential Statistics for Hypotheses Test

The purpose of inferential statistics is to draw conclusions from a statistical sample. Correlation analysis, hypothesis testing, confidence intervals, and regression analysis are all examples of tools used in inferential statistics.

Table 1: Correlations

		Service Delivery	E-administration	E-participation
Service Delivery	Pearson Correlation	1	.684**	.751**
	Sig. (2-tailed)		.000	.000
	N	45	45	45
E-administration	Pearson Correlation	.684**	1	.454**
	Sig. (2-tailed)	.000		.002
	N	45	45	45
E-participation	Pearson Correlation	.751**	.454**	1
	Sig. (2-tailed)	.000	.002	
	N	45	45	45

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

Source: Research Findings (2024)

Table 1 illustrates the correlations between different factors in the context of E-Administration, E-Participation, and Service Delivery. The Pearson Correlation values indicate the strength and direction of the relationships between these factors.

E-Administration shows a moderate positive correlation with service delivery ($r=0.684$), showcasing positive relationship between these factors as well. This aligns with the findings of Tejedo-Romero, Araujo, Tejada & Ramírez (2022), who highlighted that e-administration

is a crucial component of electronic governance, significantly enhancing organizational productivity and service delivery efficiency. Moreover, e-administration facilitates access to quality governance by enabling more active participation from staff and other stakeholders in the administrative process at all levels. The findings align well with Abdulkareem, Abdulkareem, Ishola & Akindede (2022), who emphasized that e-participation is significantly influenced by trust in electronic governance. Their study found that trust in e-government mediates the relationship between e-participation and e-government quality. There has been a global increase in electronic involvement, and several governments at all levels provide various avenues for e-participation not limited to information providing. According to Akmentina (2022) e-participation is especially beneficial in situations when individuals are confined to their homes, such as during telework, health crises, emergencies, or, more lately, lockdowns. This interaction between E-Administration and participation underlines the importance of integrating both elements to improve overall service outcomes and governance effectiveness.

Similarly, a significant positive correlation is observed between E-Participation and Service Delivery ($r=0.751$, $p= 0.000$), highlighting a notable relationship between these aspects. The findings align well with Adnan, Ghazali & Othman (2022), who emphasized that e-participation enhances the effectiveness of government initiatives by enhancing greater citizen engagement and involvement. This indicates the importance of addressing barriers to e-participation, as citizens' perceptions of the systems' ease of use and their computer self-efficacy significantly impact their willingness to participate in e-government tools. By improving these factors, government agencies can enhance service delivery and better meet the needs of their constituents. The findings are supported by Uwizeyimana (2022), who emphasized that e-governance initiatives like Irempo have significantly improved access to government services, supporting the results that highlight the strong positive correlation between E-Participation, and Service Delivery. The integration of offline services into a cloud-based system has saved money and improved efficiency, further underscoring the importance of e-governance in enhancing service delivery.

These correlations indicate interdependencies and connections between different components of the project, highlighting how advancements in one area may impact the performance in another. The strong correlations emphasize the importance of considering these factors collectively for the effect of E-governance on service delivery by the Rwanda National Public Service Commission.

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.844 ^a	.712	.698	.19139

a. Predictors: (Constant), E-participation, E-administration

Source: *Research Findings (2024)*

Table 2 provides a Model Summary for the relationship between the predictors (E-participation, E-administration) and the dependent variable within the Rwanda National Public Service Commission context. The model shows a strong correlation ($R=0.844$) and a high coefficient of determination ($R\text{ Square} = 0.712$), indicating that approximately 71.2% of the variability in the dependent variable can be explained by the predictors. The Adjusted R Square of 0.698 considers the model's complexity, reflecting a refined assessment of the model's explanatory power. The Standard Error of the Estimate (0.19139) represents the accuracy of the model's predictions specifically within the Rwanda National Public Service Commission

scenario. This model demonstrates a good fit for predicting outcomes based on the specified predictors, highlighting the relevance of E-governance factors in the service delivery context of the Rwanda National Public Service Commission.

The findings from align well with Lefevre and Tremblay (2023), who emphasized that e-governance factors are critical for effective service delivery. France's centralized e-government approach and the success of FranceConnect highlight the importance of streamlined online service accessibility. The use of electronic government has been on the rise in Turkey in recent years, with the goal of making public services more accessible and efficient. There is the development of e-Devlet, a one-stop online portal offering a wide range of government services (Erdogan & Tatoglu, 2022). There is significant South Africa's progress in developing a comprehensive e-government strategy and ensuring legal protections for online interactions. However, challenges remain in areas of interoperability between government departments and ensuring equitable access to technology for all citizens (Baloi & Mentz, 2023). This supports the results, indicating that E-participation and E-administration are significant predictors of service delivery in the Rwanda National Public Service Commission.

Table 3: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.804	2	1.902	51.917	.000 ^b
	Residual	1.538	42	.037		
	Total	5.342	44			

a. Dependent Variable: Service Delivery

b. Predictors: (Constant), E-participation, E-administration

Source: *Research Findings (2024)*

In Table 3, the ANOVA results show the significance of the predictors (E-participation, E-administration) in explaining the variance in the dependent variable, Service Delivery, within the context of the Rwanda National Public Service Commission.

The regression model accounts for F-statistic of 51.917, indicating that the regression model is statistically significant at a p-value of .000. This highlight that the predictors collectively have a significant impact on Service Delivery within the Rwanda National Public Service Commission setting. These findings further emphasize the importance of E-participation and E-administration in influencing Service Delivery outcomes within the Rwanda National Public Service Commission framework.

The findings are supported by Ackah, Nunoo-Mensah & Yiadom (2023), who emphasized that e-governance initiatives, such as Ghana's RTI portal and ICUMS, are crucial for improving service efficiency and transparency. On the other hand, service delivery refers to the modes and methods used by government in providing both direct and indirect services to its citizens (Pham, Limbu, Thu & Nguyen, 2023). The government provides public service to her people in two ways: directly, via production, distribution, or service, and indirectly, by financing third-party services. Services provided to the public are within the purview of governments and government agencies, which have an obligation to provide services that benefit the public, but to different extents. Economic systems determine the level of government involvement in providing services to the public (Zwane & Matsiliza, 2022).

This aligns well with the results that E-participation and E-administration significantly impact Service Delivery within the Rwanda National Public Service Commission. The high F-statistic

and significant p-value underscore the critical role these e-governance components play in enhancing service outcomes, mirroring the importance highlighted in the Ghanaian context.

Table 4: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	.374	.394		.948	.349
	E-administration	.404	.087	.432	4.646	.000
	E-participation	.505	.085	.555	5.973	.000

a. Dependent Variable: Service Delivery

Source: *Research Findings (2024)*

Here is the analysis's regression equation:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$$

Where:

Y = Service Delivery in Rwanda National Public Service Commission

β_0 = Constant

β_1 = Coefficient of e-administration

X_1 = E-administration

B_2 = Coefficient of E-participation

X_2 = E-participation

ε = Error Term

β = Beta Coefficient – indicating how many standard deviations a dependent variable changes per standard deviation increase in the independent variable.

Therefore,

Service Delivery in Rwanda National Public Service Commission = 0.374+ 0.404 E-administration + 0.505 E-participation + 0.394

In Table 4, the coefficients offer valuable insights into the relationships between predictors (E-administration, E-participation) and the dependent variable (Service-Delivery) within the Rwanda National Public Service Commission. The significant p-values for all predictors underscore their individual impact on Service-Delivery, reaffirming their significance in this specific context of the study. The constant term (α) is 0.374, indicating the expected value of Service-Delivery when all predictor variables are zero.

The unstandardized coefficients (B) reveal how project performance changes for every unit shift in the respective predictor while keeping other variables constant. E-administration exhibits a coefficient of 0.404, indicating that a one-unit increase in E-administration leads to a 0.404 increase in Service-Delivery. This demonstrates the unique contribution of E-administration to enhancing the effectiveness of service delivery within the Rwanda National Public Service Commission framework. The findings are supported by Vanger and Atsunkare (2021), who investigated the impact of e-administration on administrative efficiency in the Taraba State Civil Service. Their study revealed that e-administration streamlines internal

administrative processes by simplifying operations, eliminating bottlenecks, and clearly outlining work schedules, which improves communication. The results highlighted that these improvements lead to fewer errors, greater accountability and transparency, improved work quality, and enhanced employee morale and commitment. However, the study also noted that high short-term expenditures associated with e-administration could negatively affect cost efficiency.

E-participation shows a coefficient of 0.505, which indicates that a one-unit increase in E-participation results in a 0.505 increase in Service-Delivery. This underscores the significance of E-participation in fostering citizen engagement and involvement in public service processes, contributing to improved service delivery outcomes. This is consistent with Mertes, Fischer, Brüesch & Andermatt (2022) who explored how individuals' perceptions of the benefits of e-participation influence their willingness to engage in public service processes. Their research highlights those perceived advantages such as convenience, time savings, and cost reduction significantly enhance citizens' desire to participate in e-engagement initiatives. Additionally, they found that when citizens believe that e-participation offers data security, their preference for digital involvement increases, reinforcing the importance of fostering positive perceptions of e-participation in order to drive higher engagement levels.

The significant p-values across all predictors highlight the statistical importance of E-administration, and E-participation ($p = .000 < 0.05$), stressing their pivotal roles in driving positive Service-Delivery outcomes. The findings supported by Omosa, Wafula & Okoth (2022) emphasized that e-governance projects, like Kenya's Huduma Centers and eCitizen portal, aim to enhance service delivery, transparency, and efficiency. These results align well with the findings, which show that E-administration, and E-participation significantly improve Service Delivery within Rwanda National Public Service Commission, reflecting a strong impact of e-governance on enhancing public service outcomes.

Limitations of the study

This study was conducted in a scope of Rwanda National Public Service Commission and the findings were not generalized to other organizations.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The study rejected the first null hypothesis (H01), it is clear that E-administration significantly impacts the service delivery of the Rwanda National Public Service Commission. E-administration facilitates better coordination and management of resources within the organization, ensuring a more streamlined operation. By integrating digital tools in administrative tasks, the commission has improved communication efficiency, data management, and decision-making processes. This digital transformation leads to more responsive and agile administration, ultimately benefiting service delivery outcomes. Thus, the influence of E-administration is integral to advancing the organization's ability to serve the public effectively.

The rejection of the null hypothesis (H02) indicates the significant influence of E-participation on service delivery at the Rwanda National Public Service Commission. E-participation initiatives engage citizens and stakeholders more directly in decision-making processes, enhancing transparency and accountability. Through digital platforms, feedback mechanisms allow for real-time input from the public, improving the relevance and quality of services

offered. This participative approach encourages stakeholder buy-in and supports a collaborative environment, which strengthens democratic governance. Consequently, E-participation significantly contributes to a more dynamic and efficient service delivery model.

Recommendations

The study recommends that the Rwanda National Public Service Commission prioritize enhancing the user interface and accessibility of their online platforms to improve the overall user experience for citizens.

The study recommends that the Rwanda National Public Service Commission leverage advanced data analytics to streamline their administrative processes, thereby enhancing efficiency and decision-making.

Rwanda National Public Service Commission should develop and maintain inclusive E-participation platforms that cater to diverse demographics, including marginalized and underserved communities.

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