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The Role of Public Participation on Service Delivery by Public Sector Organizations: The Case of Kenya National Highway Authority¹

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Abstract

Worldwide, there are increasingly high expectations when it comes to service delivery. Service delivery is expected both from the public and private sectors. Infrastructure is one of the areas on which citizens rely in their day-to-day activities. Many countries, both developed and developing, are working hard to improve their infrastructure with the objective of achieving this and providing service to their citizens. Kenya's highways have not achieved the desired milestone. Despite the increased funding, this can be associated with rampant corruption and mismanagement of financial allocations, among others. This has left citizens without the desired services from the Kenya National Highway Authority. Thus, the current study aimed at establishing the role of public participation in service delivery by public sector organizations. A case of Kenya's national highway authority. The study was guided by two objectives, which include the role of stakeholder engagement in service delivery at the Kenya National Highway Authority and the influence of public involvement in decision-making on service delivery at the Kenya National Highway Authority. The communicative action theory anchored the research. The target population was a total of 118 employees of the Kenya National Highway Authority in the Nairobi region. The sample size of 91 respondents was calculated using Yamane's 1967 formula. The study used a descriptive research design to examine how the variables were related. The research used a well-structured questionnaire to collect primary data from the respondents. The questionnaire was administered electronically, and the respondents were requested to fill it out and return it. The validity and reliability of the data collection instruments were ascertained using content validity and a pilot test for reliability. Further, a multiple linear regression was done to assess the relationship between the study variables, both independent and dependent variables. Data analysis was done using both descriptive and inferential statistics. Results revealed that public participation improved Service Delivery at the Kenya National Highway Authority. Further, stakeholder engagement will improve service delivery at the Kenya National Highway Authority by 0.420 units, and public involvement in decisionmaking will improve service delivery at the Kenya National Highway Authority by 0.578 units. In conclusion, the study found that the two variables, stakeholder engagement and Public Involvement in decision-making, significantly explained the service delivery at Kenya's national highway authority. Thus, the study recommended that there should be active citizen involvement in decision-making as well as stakeholder engagement by providing platforms to establish further areas of expansion for improved service delivery. Further study can be done to explore road safety measures and traffic management strategies implemented by the Kenya National Highway Authority.

Keywords: Kenya, Public participation, stakeholder engagement, Public Sector Organizations, public participation in decisions making.

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Background of the study

Customers worldwide have increasingly high expectations when it comes to service delivery. Factors such as convenience, personalization, speed, and quality are critical considerations for customers across different countries and cultures. Service providers need to understand and adapt to these global customer expectations to remain competitive (Benito, Faura, Guillamón, & Ríos, 2019). In addition, there is significant digital transformation. Advances in technology, such as artificial intelligence, automation, and digital platforms, are reshaping service delivery models. Digitalization enables improved efficiency, scalability, and accessibility of services, allowing providers to reach a wider customer base and provide seamless experiences across channels and borders.

The United States, for instance, faces significant challenges related to aging infrastructure, including roads, bridges, water systems, and public transportation. Many existing infrastructure systems require maintenance, repair, or replacement to ensure their safety, efficiency, and reliability. Service delivery efforts focus on addressing these infrastructure gaps and modernizing outdated systems. Adequate funding and financing are critical for infrastructure service delivery. In the U.S., infrastructure funding comes from various sources, including federal, state, and local government budgets, user fees, bonds, and public-private partnerships. Ensuring sustainable and sufficient funding is an ongoing challenge, and discussions around increasing infrastructure investment and exploring alternative funding mechanisms continue (Capacci, Biondini, & Frangopol, 2022).

Many African countries face significant infrastructure deficits across sectors such as transportation, energy, water and sanitation, and telecommunications. Limited access to quality infrastructure hampers economic development, social progress, and regional integration (Azolibe & Okonkwo, 2020). Service delivery efforts focus on addressing these deficits to enhance connectivity, promote economic growth, and improve living standards.

Kenya has a strong focus on infrastructure development as a key driver of economic growth, social development, and regional integration (Windapo & Umeokafor, 2023). The government has outlined ambitious plans and initiatives, such as Vision 2030 and the Big Four Agenda, which prioritize infrastructure development in areas such as transportation, energy, water and sanitation, and information and communication technology. Enhancing transport infrastructure and connectivity is a top priority in Kenya. Service delivery efforts aim to improve road networks, expand airports and ports, and promote efficient and reliable public transportation systems. This focus supports economic activities, trade facilitation, tourism, and regional integration through initiatives such as the Standard Gauge Railway (SGR) and the Lamu Port-South Sudan-Ethiopia Transport (LAPSSET) corridor.



Thus, the focus of this study was to examine the role of public participation in enhanced service delivery at the Kenya National Highway Authority (KeNHA).

The Kenya National Highway Authority is one of the public-sector agencies that was established in 2007 under the Kenya Urban Road Act and inaugurated in 2008. The authority has a vision and is mandated to develop and manage high-class urban roads that ensure service delivery to the general public and expand development and connections between rural Kenya and urban Kenya. The authority is mandated to build, rehabilitate, and maintain national roads. Additionally, the Kenya National Highway Authority was mandated to push the Vision 2030 agenda. The authority has a total of six directorates and approximately 598 employees nationwide. More than three-quarters of the roads in Kenya are maintained by the KeNHA.

Problem statement

Worldwide, there are increasingly high expectations when it comes to service delivery. Service delivery is expected both from the public and private sectors. Infrastructure is one of the areas on which citizens rely in their day-to-day activities (Voorn, Van Genugten, & Van Thiel, 2019). Adequate funding and financing are critical for infrastructure service delivery. Many countries, both developed and developing, are working hard to improve their infrastructure with the objective of achieving this and providing service to their citizens. However, it can be noted that many developing countries, especially in Africa, have not achieved the milestone in infrastructure compared to other developed countries.

Most African countries, such as Nigeria, are facing Rapid population growth and urbanization, which has put immense pressure on existing infrastructure systems. Urban areas face challenges related to congestion, inadequate housing, and insufficient basic services (Okopi, 2021). Meeting the infrastructure needs of a growing population is a daunting task that requires significant investment and planning. Also, in Kenya, there is often a struggle with limited financial resources for infrastructure development. Budgetary constraints, competing priorities, and high levels of public debt can hinder investment in infrastructure projects. Limited access to affordable financing and inadequate revenue collection mechanisms further aggravated the financial challenges (Mkutu, 2023).

Despite the steps taken and increased budgetary allocations by the government, Kenya's highways have not achieved the desired milestone. Some of the causes include rampant corruption and mismanagement of financial allocations, among others. According to Mkutu (2023), there is a need for increased public participation in the process and public involvement in decision-making with the objective of improving the infrastructure, hence service delivery. The study, therefore, aims to study



some of the public participation initiatives that may improve service delivery at the Kenya National Highway Authority.

Research questions

- 1 What is the role of stakeholder interaction on service delivery at Kenya national highway authority?
- 2 How does public involvement in decision making influence service delivery at Kenya national highway authority.

Research objectives

The research was guided by two objectives which include

- 1 The role of stakeholder engagement on service delivery at Kenya national highway authority.
- 2 The influence of public involvement in decision making on service delivery at Kenya national highway authority.

Literature review

Theoretical framework

The communicative action theory, developed by the German philosopher Jürgen Habermas in 1981, the theory focuses on the role of communication in shaping social interactions, fostering mutual understanding, and achieving consensus in democratic societies. The theory posits that communication is not merely a means of transmitting information but also a process through which individuals engage in rational discourse to reach collective decisions and coordinate social action.

Critics argue that the theory relies on idealized assumptions about communication and overlooks the realities of power dynamics, social inequalities, and diverse interests. The ideal speech situation, for example, is seen as an abstract and unattainable concept that does not consider the constraints and complexities of real-world communication. Also, the theory downplays the role of power in communication and social interactions. They contend that power imbalances, social hierarchies, and institutionalized forms of domination can hinder equal participation and genuine consensus formation. The theory's focus on rational discourse is seen as insufficient for addressing the structural inequalities that shape communication.

Despite these critics, the theory highlights the importance of rational discourse as a means of reaching mutual understanding and consensus. It emphasizes the value of open and inclusive communication processes that allow for the exchange of ideas, the critical examination of arguments, and the pursuit



of truth. This focus on rationality promotes democratic ideals and encourages the use of reasoned deliberation in decision-making.

Also, the theory provides a normative framework for communication, establishing ethical principles for communicative action. It emphasizes principles such as inclusivity, fairness, sincerity, and noncoercion in communicative interactions. This normative framework offers guidelines for fostering more just and democratic communication practices and serves as a critical benchmark for evaluating the quality of public discourse. Thus, this theory is significant in explaining the role of public involvement in decision-making and stakeholder engagement in ensuring improved service delivery in the public sector, making it applicable in the study.

Empirical literature review

According to Niemelä, Heikkilä, Lammi, and Oksman (2019), interacting with stakeholders helps service providers understand their needs, expectations, and preferences. By engaging in dialogue and actively listening to stakeholders, organizations can gain valuable insights into what customers and other stakeholders require from the service. This understanding enables service providers to tailor their offerings to meet stakeholder needs effectively. Also, Tyl, Vallet, Bocken, & Real (2015) noted that Involving stakeholders in the service design and improvement process allows for the integration of their ideas and perspectives. This collaborative approach ensures that the service aligns with stakeholder expectations and is more likely to be successful.

Stakeholder interaction provides an avenue for gathering feedback on the quality and effectiveness of the service (Camilleri, 2021). Customers, employees, and other stakeholders can share their experiences, highlight areas for improvement, and suggest innovative ideas. This feedback loop is invaluable for driving continuous improvement and enhancing service delivery over time. In addition, stakeholder interaction facilitates prompt issue resolution. When stakeholders encounter problems or have concerns regarding the service, open communication channels allow them to voice their issues (Loureiro, Romero, & Bilro, 2020). Service providers can then address these concerns in a timely manner, minimizing negative impacts and demonstrating their commitment to stakeholder satisfaction.

Ngamlana (2019) noted that public involvement starts with providing accessible and transparent information about infrastructure projects. This includes sharing details about the project's purpose, scope, potential impacts, and timelines. Clear and comprehensive information empowers the public to understand the project and its implications, enabling them to participate effectively in decisionmaking processes. Engaging the public through consultation processes allows them to express their opinions, concerns, and ideas related to infrastructure projects (Frantzeskaki, 2019). Consultation methods can include public meetings, workshops, surveys, focus groups, and online platforms. These interactions provide opportunities for stakeholders to voice their perspectives, share local knowledge, and contribute to decision-making (Ocloo, Garfield, Franklin, & Dawson, 2021).

A study by Kiambati (2020) found that through public engagement in decision-making on service delivery in infrastructure, decision-makers can benefit from diverse perspectives, local knowledge, and collective wisdom. This approach helps ensure that infrastructure projects are more responsive to community needs, sustainable, and enjoy broad public support. Ultimately, public involvement leads to infrastructure that better serves the community and aligns with their values and aspirations.

Conceptual Framework



Figure 1 Conceptual Framework

Methodology

In this section, the methodology used in carrying out the study is described. The section explains the research design used. The study used a descriptive research design to examine how the variables were related. According to Siedlecki (2020), descriptive research design is significant in scientific research and provides valuable insights into the characteristics, behaviors, and relationships of the subjects or phenomena being studied.



The research further used a quantitative research method to carry out the study, which involved collecting and analyzing primary data collected from the respondents using a questionnaire. This method is appropriate for establishing the cause-and-effect relationship between the study variables.

The target population was the total number of employees in Kenya's national highway authority in the Nairobi region. Total employees in the Nairobi region at the Kenya National Highway Authority There were a total of 118 employees at the executive level, in middle management, and in support personnel. While the sample size was calculated using Yamane's 1967 formula. The sample was calculated as below:

$$\mathbf{n} = \frac{N}{1+N(e)^2}$$
 Where: N = Total population; n= the sample size; $\varepsilon = \text{error term. N} = 118$, $\varepsilon = 0.05$

$$\mathbf{n} = \frac{118}{1+118(0.0025)^2} = \mathbf{n} = \frac{118}{1+0.295} = 91.11969$$

Thus, the sample was 91 respondents

Further, a multiple linear regression was done to assess the relationship between the study variables, both independent and dependent variables. For multiple linear regression, a linear model was formulated.

$Y = \beta 0 + \beta 1X1 + \beta 2X2 + \varepsilon$ where

Y= service delivery, X_1 = stakeholder engagement, X_2 , = public involvement in decision making and ε is the Error term.

The research used a well-structured questionnaire to collect primary data from the respondents. The questionnaire was administered electronically, and the respondents were requested to fill it out and return it. The validity and reliability of the data collection instruments were ascertained using content validity and a pilot test for reliability.

Data analysis was done using both descriptive and inferential statistics. The collected data was coded and loaded into SPSS software version 20.0 for analysis. The results were presented in the form of frequencies, mean percentages, and standard deviations. Further, for inferential statistics, regression analysis was conducted to establish the strength and direction of the relationship.

Data analysis

A total of 91 questionnaires were distributed, out of which a total of 88 were filled out and returned, and three were not. The study findings revealed that the best response rate was 88 (96.7%), while



only 3 (3.3%) were not returned. The best response rate was associated with the use of electronic questionnaire administration. The non-response was too small and insignificant.

Results based on the level of administration showed that the majority were support personnel with 40 (45.5%), followed by the Middle management level with 30 (34.1%), and the least were those at the executive level with 18 (20.5%). Thus, there was equal representation based on the level of administration.

In terms of experience in the sector, the majority of the respondents had experience between 11 and 15 years, accounting for 34 (38.6%), and those with experience between 6 and 10 years were 22 (25.0%). Third, those with experience below five years were 17 (19.3%), while those with experience above 15 years accounted for 15 (17.0%), respectively. This means that the majority of the staff at the Kenya National Highway Authority have been in the sector for a substantive number of years, thus being able to understand the operations of the sector.

Descriptive statistics

Stakeholder engagement on service delivery at Kenya national highway authority

The descriptive statistics on stakeholder engagement in service delivery at the Kenya National Highway Authority revealed that there was a strong agreement with the statements regarding Public information and service delivery at the Kenya National Highway Authority. This can be revealed by the average mean of 4.00634. While the mean of 3.897 revealed that the respondent moderately agreed to the statement that Stakeholder engagement is always done to enhance service delivery, Kenya National Highway Authority In addition, 3.3977 neither agreed nor disagreed with the statement that Advocacy and citizen voice enhance keenness, hence service delivery. Also, the mean of 3.5886 shows that the majority moderately agreed with the statement that Public participation in decision-making is proper. Lastly, the majority of the respondents, by a mean of 4.6136, strongly agreed to the statement that Stakeholder engagement positively enhanced service delivery at the Kenya National Highway Authority. Thus, the overall mean of 4.00634 revealed that the majority moderately agreed with most of the statement regarding stakeholder engagement in service delivery at the Kenya National Highway Authority. The overall standard deviation of 0.922462 indicates that there were minimally diverse responses regarding most of the statements. Thus, there is a positive influence of stakeholder involvement on service delivery at the Kenya National Highway Authority.

Descriptive Statistics						
	N	Mean	Std. Deviation			
Public information positively enhances service delivery.	88	4.5341	.74199			
Stakeholder engagement is always done enhances service delivery Kenya national highway authority.	88	3.8977	1.34796			
Advocacy and citizen voice enhances keenness hence service delivery	88	3.3977	1.28242			
Public participation in decisions making proper.	88	3.5886	1.06128			
Stakeholder engagement positive enhanced service delivery at the Kenya national highway authority.	88	4.6136	.17866			
Valid N (listwise)	88					
Average		4.00634	0.922462			

Table 1 Descriptive statistics on stakeholder engagement

Descriptive on the role of public involvement in decision making and on service delivery.

The descriptive statistics on public involvement in decision-making and on service delivery revealed that there was moderate agreement with most of the statements. For instance, the statement that the Kenya National Highway Authority upholds all Responsibility as per the the mean of 3.9318 indicates that the respondent moderately agreed with this statement. While the mean of 3.6023 revealed that respondents moderately agreed to the statement that the sector has involved the public in decisionmaking, In addition, the mean of 3.8977 shows that respondents moderately agreed with this statement. Also, the mean of 3.4773 shows that the majority neither agreed nor disagreed with the statement that the authority values stakeholder involvement in improving performance. Lastly, the majority of the respondents indicated, by a mean of 3.7727, that they moderately agreed with the statement that public involvement in decision-making influences the performance of the KeNHA. Thus, the overall mean of 3.63636 revealed that the majority moderately agreed with most of the statements regarding Public involvement in decision-making and service delivery at the Kenya National Highway Authority. Also, the overall standard deviation of 1.11518 shows the presence of diverse responses regarding most of the statements. Thus, there is a positive influence of Public involvement in decision-making on service delivery at the Kenya National Highway Authority.

	N	Mean	Std. Deviation
The Kenya national highway authority uphold all Responsibility as per the guidelines.	88	3.9318	1.28471
The sector has having involves the public in decision making.	88	3.6023	1.06717
Self-honest is always maintained in the authority that ensure improved serve delivery in the sector.	88	3.8977	1.07254
The authority values stakeholder involved in improving performance.	88	3.4773	1.09311
Public involvement in decision-making influences performance of the KeNHA.	88	3.7727	1.05838
Valid N (listwise)	88		
		3.73636	1.11518

Descriptive Statistics

Table 2 Descriptive on Public involvement in decision making

Inferential statistics

Model summary

From the regression analysis, a correlation value (R) of 0.477 implies a strong and linear dependence among the study variables, which is public participation in service delivery by public sector organizations at the Kenya National Highway Authority. The value of the R Square value (0.209) means that the model explains 20.9% of the total variations in the dependent variable (service delivery by public sector organizations) resulting from the independent variables (Public Involvement In decision-making, Stakeholder Engagement). While 79.1% of the variations in the dependent variable may be associated with other factors not included in the model, these findings are supported by those of Olukanni and Nwafor (2019), which depict a positive role of public participation and service delivery in the public sector in Nigeria.

Table 1 Model Summary

	Model Summary								
Model	R	R	Adjusted R	Std. Error of	Change Statistics				
		Square	Square	the Estimate	R Square	F	df1	df2	Sig. F
					Change	Change			Change
1	.477 ^a	.228	.209	.46961	.228	12.527	2	85	.000

a. Predictors: (Constant), Public Involvement In Decision Making, Stakeholder Engagement



ANOVA

An analysis of variance (ANOVA) was conducted to determine whether the observed differences between the group means are larger than what would be expected due to random chance alone. Results revealed that the model was statistically significant, with the F-value being 12.527 at 0.000 and the p-value being 0.0000.05. These results support the results by Burgess, Foley, Allara, Staley, and Howson (2020), which showed that service delivery in public sector organizations results from Public Involvement In decision-making and public participation.

Table 2 ANOVA

	ANOVAª							
Model		Sum of Squares	df	Mean Square	F	Sig.		
	Regression	5.525	2	2.763	12.527	.000 ^b		
1	Residual	18.745	85	.221				
	Total	24.270	87					

a. Dependent Variable: Service Delivery

b. Predictors: (Constant), Public Involvement In Decision Making, Stakeholder Engagement

Coefficient table

The coefficient table results revealed that the Service Delivery at Kenya National Highway Authority improved by 1.151 by holding the two factors constant (stakeholder engagement and Public Involvement in decision-making). Results further showed that a unit change in stakeholder engagement will improve service delivery at the Kenya National Highway Authority by 0.420. This finding is in line with those by Ngamlana (2019), who found that public participation enhances infrastructure in local government. Moreover, a unit change in public involvement in decision-making improved service delivery at the Kenya National Highway Authority by 0.578 units. These findings are supported by those by Kuziemski and Misuraca (2020), who found that the involvement of the public in decision-making enhances public sector performance.

Table 5 Coefficient Table

	Coefficients ^a								
Model		Unstandardize	ed Coefficients	Standardized Coefficients	t	Sig.			
		В	Std. Error	Beta					
	(Constant)	1.151	.519		2.215	.029			
1	Stakeholder Engagement	.420	.118	.101	1.017	.012			
	Public Involvement In Decision Making	.578	.131	.439	4.424	.000			

a. Dependent Variable: Service Delivery



Conclusion of the findings

In conclusion, the study found that the two variables that's stakeholder engagement and Public Involvement in Decision Making significantly explained the service delivery at Kenya's national highway authority. The two predictors include stakeholder engagement, which predicted 0.420 unit's improvement in service delivery while public Involvement in Decision Making predicted 0.578 unit's improvement in service delivery.

Recommendations

The study recommends that two aspects of public participation that since stakeholder engagement and Public Involvement in Decision Making were found to be good predictors of service delivery. Thus, the study recommends that there should be active involvement of citizens in decision-making as well as stakeholder engagement by providing platforms to establish further areas of expansion for improved service delivery. Also, Public sector organizations should actively promote and encourage stakeholder engagement as a core component of their service delivery processes.

Areas of further analysis

Further study can be done to investigate factors that contribute to service quality in the public sector and their impact on customer satisfaction.

Examine how public sector organizations can foster service innovation and effectively adopt new technologies to improve service delivery.

Examine project management practices within the Kenya National Highway Authority.

Explore road safety measures and traffic management strategies implemented by the Kenya National Highway Authority.

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