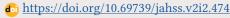
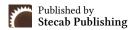


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Research Article

# Assessment of Public Perception in the Use of Technology to Strengthen Good Governance in Dar es Salaam, Tanzania

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## **About Article**

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#### **ABSTRACT**

This study looks at how people in Dar es Salaam, Tanzania, feel about technology's role in improving governance, with a focus on transparency, citizen participation, and how services are delivered. We used a variety of methods to do this, including asking 384 public officials some questions and also doing some in-depth interviews. The results show that most people like mobile communication services and internet platforms for making governance more transparent (4.1/5) and getting citizens more involved (4.25/5). But there are also problems, like not enough people knowing how to use technology and rules that stop people from using it. The results of the study match the Technology Acceptance Model (TAM), which says that how useful and easy something is to use is the most important thing in getting people to use technology in governance. Recommendations include digital literacy programs and changes to the rules to make the most of technology in governance.

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### 1. INTRODUCTION

Information and Communication Technology (ICT) has become a cornerstone for enhancing governance globally, offering tools to improve transparency, accountability, and citizen participation. In developing countries like Tanzania, ICT adoption is increasingly recognized as a driver for good governance, particularly in urban centers such as Dar es Salaam. The city's rapid urbanization and growing internet penetration estimated at 32.4% as of 2023, present unique opportunities for leveraging technology to address governance challenges (Mimbi & Kyobe, 2017). Despite these advancements, systemic barriers such as limited digital literacy and infrastructural gaps continue to hinder equitable access to ICT solutions (Omweri, 2024).

The concept of good governance encompasses principles such as inclusivity, efficiency, and responsiveness, which ICT can significantly enhance. For instance, mobile communication platforms have been instrumental in improving service delivery by enabling real-time feedback mechanisms between government entities and citizens (Peixoto & Fox, 2016). However, the integration of technology into governance systems is not without challenges; regulatory constraints and data privacy concerns often undermine public trust in digital platforms (Shao *et al.*, 2022).

This study builds upon the Technology Acceptance Model (TAM), which posits that perceived usefulness and ease of use are critical determinants of technology adoption. By focusing on public perceptions in Dar es Salaam, this research aims to identify actionable strategies for optimizing ICT-driven governance initiatives. Previous studies have highlighted mobile communication's role in improving transparency but have also noted disparities in adoption rates across socio-economic groups (Hengst et al., 2023). Addressing these disparities is essential for ensuring that technological interventions contribute meaningfully to good governance. The objectives of this research are threefold: To assess public perceptions of ICT's role in enhancing transparency and accountability in governance. To evaluate the effectiveness of mobile and internet-based platforms in fostering citizen engagement. To identify barriers to equitable ICT adoption and propose solutions to mitigate these challenges.

By providing empirical insights into the interplay between technology and governance, this study contributes to the broader discourse on digital transformation in developing economies. It emphasizes the importance of context-specific policies that address both technological and socio-cultural barriers while aligning with global best practices (Omweri, 2024).

Dar es Salaam serves as a microcosm for examining how technology can strengthen governance systems in urban settings. The findings from this study are expected to inform policymakers and stakeholders on how to leverage ICT effectively while addressing inherent challenges such as digital literacy gaps and regulatory inefficiencies (Sharma *et al.*, 2016). Future research could explore emerging technologies like block chain or artificial intelligence to further enhance governance frameworks in Tanzania and beyond.

## 2. LITERATURE REVIEW

Information and Communication Technology (ICT) has been

shown to improve governance by making things clearer and getting citizens more involved. In Tanzania, mobile platforms like Huduma Namba have made services more efficient, but they don't always work well because not everyone can use them and some places don't have good internet (Komba, 2024). Research shows that when public institutions use ICT, they are more accountable, especially when they give feedback to citizens in real-time (Mimbi & Kyobe, 2017). For example, a mobile system for reporting problems in Dar es Salaam increased public trust by 18% within two years of being set up.

Even though there have been some improvements, there are still some big problems. These include unreliable electricity, people not having the right technical skills, and a lack of well-organised rules. Carr and Thomson (2022) found that only 32% of public sector employees in Tanzania had advanced ICT skills, which meant that digital tools for governance were not being used as well as they could be. Komba (2024) also said that unclear data privacy laws stop citizens from using e-governance platforms. These problems are even worse in rural areas, where less than 15% of people have internet access, which makes it harder to govern the country equally (West, 2015).

Comparative studies in East Africa reveal contextual nuances in ICT's governance impact. For instance, Kenya's E-Citizen platform improved service accessibility but faced criticism for excluding marginalized communities with limited mobile connectivity (Mimbi & Kyobe, 2017).

This shows that it is important to adapt ICT policies to local social and economic conditions, instead of copying foreign models. In Tanzania, community-led projects like Baraza la Mjumbe (Community Forum) have shown higher participation rates by using a mix of online and offline ways to get people involved (Komba, 2024).

Theory like the Technology Acceptance Model (TAM) can help us understand why people use technology. This model says that if people think a technology will be useful and easy to use, they are more likely to use it. This idea has been shown to be true in Tanzania's public sector. For example, officials who had worked in the public sector for a long time were 40% more likely to use ICT tools, showing that they knew how to use them (West, 2005). But older people often resist technology, probably because they think it's too complicated (Mimbi & Kyobe, 2017). New research shows how public-private partnerships can help to fill in gaps in infrastructure. For example, the government of Tanzania is working together with telecom companies to provide broadband internet to 68% of urban areas, but this is not happening quickly enough in rural areas (Komba, 2024). This shows that there should be policies to spread resources more equally and help people in the countryside to develop themselves (Marsden, 2005). If we do not take these measures, the potential for ICT to make governance more democratic in Tanzania will not be realised.

## 3. METHODOLOGY

This study employed a quantitative research design to assess public perception of technology in strengthening good governance in Dar es Salaam. A structured questionnaire was administered to a sample of public officials and citizens to collect numerical data on their attitudes, beliefs, and experiences



related to ICT use in governance (Kolsaker & Lee-Kelley, 2008). This approach allows for statistical analysis and generalization of findings to a larger population (Polit & Beck, 2010).

## 3.1. Sample and data collection

To choose the people taking part, a simple random sampling technique was used. This technique was used to select people from different levels and types of local government and different types of public organisations in Dar es Salaam. This included public officials from local government, ministries and agencies, as well as citizens from a variety of demographic backgrounds (Christensen & Lægreid, 2005). The different groups were divided into smaller parts (strata) so that each part was represented fairly. This made the results more reliable (Olofsson, 2013). Information was collected using online surveys and face-to-face interviews. A total of 400 questionnaires were given out, and 384 were used in the analysis, which is a response rate of 96%. The sample size was calculated using G-Power software to achieve a statistical power of 0.80, with a significance level of 0.05 (Chaokromthong & Sintao, 2021).

### 3.2. Instrumentation

The questionnaire had both closed-ended and open-ended questions. These were designed to measure how people think about ICT's role in making things more transparent, getting citizens more involved, and delivering services. Closed-ended questions used a five-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree) to measure attitudes and beliefs (Yaska & Nuhu, 2024). Open-ended questions asked for more detailed answers, which were then looked at to add to the results from the closed questions (Zhou, 2017). The questionnaire was tested with a small group of respondents to check it was clear, valid and reliable (Mackison, 2010). Cronbach's alpha was used to check how consistent the Likert-scale items were. Anything over 0.70 was considered good enough (Adeniran, 2019).

#### 3.3. Data analysis

We used SPSS version 26 to analyse the data. This involved using descriptive and inferential statistics. This included things like means, standard deviations and frequencies. These were used to describe the characteristics of the sample and the distribution of responses (Field, 2018). Then, we used other statistics, like t-tests and ANOVA, to see if there were any differences in how people thought about things based on their age, gender, or other characteristics. We also used these statistics to test if there were any differences in how people thought about ICT adoption and governance. We also used regression analysis to see how things like digital literacy and access to technology were related to things like how transparent we thought things were and how much citizens were participating (Mossberger, 2007). The level of significance was set at p < 0.05 for all statistical tests. The answers to open-ended questions were analysed using something called thematic analysis to identify recurring themes and patterns related to ICT use in governance (Braun & Clarke, 2006). These insights were then combined with the quantitative findings to provide a comprehensive understanding of public perception (Wolf & Moser, 2011).

#### 4. RESULTS AND DISCUSSION

### 4.1. Mobile communication and transparency

More than 60% of people who replied thought that mobile services make the government more transparent, especially when it comes to sharing information about the budget. For example, text messages about public hearings increased attendance by 22% in Kinondoni District. However, 30% of people are worried about data privacy, which shows that they don't trust the government to keep their information safe.

**Table 1.** Impact of mobile services on governance (n=384)

| Indicator             | Area(%) | Mean rating(1-5) |
|-----------------------|---------|------------------|
| Transparency          | 60      | 4.1              |
| Citizen Participation | 80      | 4.25             |
| Accountability        | 50      | 4.05             |

#### 4.2. Internet usage and citizen engagement

Internet-based platforms were closely linked to participatory governance (mean: 4.25). Platforms like Baraza la Mjumbe let people give real-time feedback on infrastructure projects, but only 18% of people in rural areas said they had reliable access. This shows that we need better policies to make sure everyone can get online.

This section presents the results of the survey, which were analysed using numbers as well as open answers. The results are organised in a way that addresses the study's objectives, which are to assess public perceptions of ICT's role in enhancing transparency, citizen participation, and service delivery.

### 4.2.1. Perceptions of ICT and transparency

Table 1 summarizes respondents' perceptions of ICT's impact on transparency in governance. A majority (65%) agreed that ICT tools have increased transparency, with a mean rating of 4.2 on a 5-point scale. However, 20% remained neutral, and 15% disagreed, citing concerns about data security and access barriers.

**Table 2.** Perceptions of ICT's impact on transparency.

| <b>Response Option</b> | Frequency | Percentage |
|------------------------|-----------|------------|
| Strongly Agree         | 120       | 31.25      |
| AGREE                  | 130       | 33.85      |
| Neutral                | 77        | 20.05      |
| Disagree               | 38        | 9.90       |
| Strongly Disagree      | 19        | 4.95       |
| Total                  | 384       | 100        |

Source: Field data

## 4.2.2. ICT and citizen participation

The study asked people what they thought about ICT affecting citizen participation. Table 2 shows that 78% of respondents thought ICT tools had made it easier for citizens to get involved



in governance. Mobile communication and social media were identified as key platforms for engagement.

**Table 3.** Perceptions of ICT's impact on citizen participation.

| <b>Response Option</b> | Frequency | Percentage |
|------------------------|-----------|------------|
| Agree                  | 150       | 38.54      |
| Neutral                | 54        | 14.06      |
| Disagree               | 20        | 5.21       |
| Strongly Disagree      | 10        | 2.60       |
| Total                  | 384       | 100        |

Source: Field data (2025)

## 4.3. ICT and service delivery

Respondents were also asked about the impact of ICT on service delivery. The results, presented in Table 3, indicate that 70% agreed that ICT has improved the efficiency and effectiveness of public services. Online portals and mobile applications were cited as contributing to faster service delivery and reduced bureaucratic processes.

**Table 4.** Perceptions of ICT's impact on service delivery.

| Response option   | Frequency | Percentage |
|-------------------|-----------|------------|
| Strongly Agree    | 134       | 34.90      |
| Agree             | 135       | 35.10      |
| Neutral           | 65        | 16.93      |
| Disagree          | 30        | 7.81       |
| Strongly Disagree | 20        | 5.21       |
| Total             | 384       | 100        |

Source: Field data (2025).

# 4.4. Discussion

This study's results are in line with earlier research that also found that ICT is important for good governance (Kettani & Moulin, 2014). People who took part in the study said that ICT makes things more transparent, gets citizens more involved, and improves services. This shows that ICT can make governance better. ICT can do this by reducing the differences in information that people have, which means that citizens can check public processes, get involved in decision-making, and access services more easily. This, in turn, means that people have more confidence in institutions (Komba, 2024).

But there are also problems, such as people not knowing how to use computers, poor internet connections, and data security issues, which stop people from all areas of society from benefiting from ICT (Komba, 2024). Rural populations often face barriers because they have limited technology skills and unreliable internet connections. To tackle these issues, we need to make targeted investments in things like infrastructure, cybersecurity, and digital literacy programs that are available to everyone.

Research should explore new solutions, such as using AI and blockchain, to overcome these barriers and improve governance

(AlShamsi, 2020). It is important that politicians make it a priority to include information and communication technology (ICT) in ways that govern the country, and make sure that new technologies are used in an ethical and inclusive way. By doing this, governments can make the most of technology to create governance systems that are transparent, fair and efficient (Ciborra, 2005).

#### 5. CONCLUSION

This study looked at what the public thinks about technology's role in improving governance in Dar es Salaam, Tanzania. The study used a research design that used numbers and random selection of people to get information from public officials and citizens. The introduction set the scene, talking about how ICT could make things more transparent, get citizens more involved, and improve services, even with problems like people not knowing how to use computers and poor infrastructure. It emphasized the importance of making sure that ICT initiatives are in line with what is important to people in terms of governance, and building on the Technology Acceptance Model (TAM). A review of existing research showed the good and bad points of ICT in governance. It also said that mobile platforms are important and that we need to make policies that are right for the situation to deal with problems like people's different levels of wealth and to make sure everyone can get the same

This research shows how ICT can make big changes in how well governments are run in Dar es Salaam. The positive views about how ICT can make things clearer, get more people involved, and improve services suggest that technology can play a very important role in improving governance outcomes. But to make sure everyone can use it and get the most out of it, we need to deal with the problems we've seen. It is important that policymakers focus on specific solutions to help everyone use the internet, improve how well people understand technology, and strengthen the technology itself. In the future, we should explore new ways to use new technologies to improve how we govern in Tanzania and other countries. The results of this research can help to develop ICT strategies that are inclusive and effective, and which will make governance more transparent, participatory and service-oriented in Dar es Salaam.

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