

PUBLIC SATISFACTION LEVEL WITH BUS RAPID TRANSIT SERVICE: A CASE OF DAR ES SALAAM, TANZANIA

¹Gift Bardo Nyangulu, ²Dr. Prosper Nyaki

National Institute of Transport

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Abstract: This study examines the level of public satisfaction with the BRT service in Tanzania, with a case study focusing on Dar es salaam city. Recognizing that high quality of service is vital for enabling public satisfaction, the research specifically assessed the level of reliability with BRT services in Dar es salaam, determined the level of assurance provided by the BRT Service in Dar es salaam and assessed the level of empathy shown by the BRT Service in Dar es salaam. A quantitative research design was employed, targeting BRT users as key stakeholders, given their critical role as consumers. Data were collected using structured questionnaires from 384 BRT users, with analysis conducted through descriptive statistics using SPSS software. Descriptive results highlighted mixed perceptions about service quality. The study's findings were interpreted using SERVQUAL model, which emphasizes on the gap theory, which posits that customer satisfaction arises when there is no significant gap between Customer expectations of a service and Customer perceptions of the actual service delivered. The low mean scores in the study, clearly show that passengers perceive the BRT system in Dar es Salaam as unreliable, particularly in terms of punctuality and frequency, underscores the need for sustained investment in Bus rapid transit to ensure public satisfaction. findings show that the BRT service in Dar es salaam is not meeting passenger expectations on the Assurance dimension of service quality. Specifically in Safety concerns, especially regarding accidents. Based on the findings, the study recommends Timetable enforcement, Staff training, Awareness campaigns, Customer service training and install or enhance feedback platforms (digital or in-person) for users to report staff behavior reward excellent service and correct poor conduct. Finally, further research is required, particularly in specific route, further more In-depth qualitative research.

Keywords: Level of reliability with BRT services, Level of assurance provided by the BRT Service, Level of empathy shown by the BRT Service, Level of public satisfaction with the BRT service.

1. INTRODUCTION

public transit becomes essential for ensuring mobility, reducing traffic congestion, lowering emissions, and promoting sustainable development (Zhao & Chen, 2021). In response to these growing demands, cities around the world have adopted various forms of mass transit solutions among them, Bus Rapid Transit (BRT) systems have gained significant popularity due to their cost-effectiveness, flexibility, and relatively fast implementation timelines compared to rail-based systems (Saunders, Lewis, and Thornhill 2023). In recent years, sub-Saharan African cities have also begun to adopt the BRT model as a solution to increasing traffic congestion and poor public transport services. Cities such as Lagos (Nigeria), Nairobi (Kenya), and Cape Town (South Africa) have introduced BRT systems with varying degrees of success. For example, the Lagos BRT, launched in 2008, was Africa's first BRT system and has served as a model for other African cities.

Dar es Salaam, Tanzania's commercial capital and one of the fastest-growing cities in Africa, faces significant urban transport challenges, including traffic congestion, long travel times, and inadequate public transport options. To address these issues, the DART (Dar es Salaam Rapid Transit) system was launched in May 2016, becoming the first BRT system in East Africa. The project was implemented in multiple phases, with Phase I covering a 21 km corridor with 29 stations, supported by dedicated bus lanes, a central control system, and a feeder network. The DART system aimed to provide high-quality public transport that is fast, safe, and affordable for the city's rapidly expanding population (World Bank, 2016).

Initial feedback on DART was positive, with users appreciating shorter travel times, dedicated bus lanes, and the relatively modern infrastructure (Mfinanga et al., 2019). However, as ridership increased and system expansion stalled, concerns began to emerge regarding overcrowding, inconsistent schedules, ticketing inefficiencies, and customer service issues.

2. PURPOSE

The purpose of the study was to examine the level of public satisfaction with the BRT service in Tanzania. A case study of Dar es salaam city. Specifically, the study sought to assess the reliability level of BRT services, assurance level provided by the BRT service and level of empathy shown by the BRT service on level of public satisfaction with the BRT service.

3. RESEARCH METHODOLOGY

This study adopts a positivism research philosophy as it emphasizes objective measurement, observable phenomena, and statistical analysis to derive conclusions. This philosophy ensures reliability and validity by using structured surveys and quantifiable data to investigate the Public Satisfaction Level of BRT Service. study adopts a deductive research approach. The deductive approach focuses on collecting and analyzing numerical data to investigate the Public Satisfaction Level with BRT Service. This approach it is useful when you use the literature to help you to identify theories and ideas that tested using data. As Creswell (2023) suggests, the deductive approach ensures a holistic understanding of complex phenomena, providing robust and actionable findings.

The population sample covered in study was 384 BRT users from BRT terminals. The study employed both primary and secondary data. Before administration, the questionnaire was pre-tested to ensure collection of valid and reliable data. Primary data were gathered through questionnaires, whereas secondary data were obtained through reports obtained from the DART official reports, TANROADS or Traffic Police statistics and published academic papers. This was supplemented by the primary data received from questionnaires.

Descriptive statistical tools were used in the data analysis. Descriptive statistical tools included frequencies, percentages, mean and standard deviation. Whereby descriptive statistics were used to determine and describe the status of the variables under study.

4. RESULTS AND DISCUSSION

The reliability level of BRT services in Dar es salaam

The first objective of the study was to analyze the reliability level of BRT services in Dar es salaam, Tanzania. Respondents were asked to rate on reliability level of BRT services in Dar es salaam city. A five-point scale was used 1 represents strongly disagree, 2 represents disagree, 3 represents no extent, 4 represents agree, 5 represents strongly agree. Based on the mean values, the five-point scale ranges are as follows: mean scores of less than 1.5 represents strongly disagree; mean scores of 1.5 but less than 2.5 represents disagree; mean scores of 2.5 but less than 3.5 represents no extent; mean scores of 3.5 but less than 4.5 represents agree; mean scores of 4.5 to 5 represents strongly agree.

Table 1: Respondent's opinions of reliability level of BRT services in Dar es salaam city

| Statements | Mean | Std. Deviation |
|---|------|----------------|
| Punctuality of service | | |
| BRT buses arrive and depart in time as scheduled | 2.73 | 1.006 |
| BRT service is reliable even during bad weather or traffic conditions | 2.76 | 1.016 |
| Frequency of service | | |
| the frequency of BRT buses is sufficient during peak hours | 2.68 | 0.967 |
| dependence on punctuality of the BRT service | 2.78 | 1.026 |

Source: Field data, (2025)

With low satisfaction with punctuality have score a Mean 2.73, the average response for whether BRT buses arrive and depart on time is 2.73, which is below the neutral point (3.0). This suggests that users are generally dissatisfied with the timeliness of the BRT system. Reliability under challenging conditions scores mean of 2.76, the mean score for reliability during bad weather or traffic conditions is also below 3, at 2.76. This indicates that passengers do not strongly perceive the BRT service as dependable when external conditions are less favorable.

These findings clearly demonstrate that key operational factors such as punctuality, reliability, and peak hour frequency are not meeting public expectations. This reflects a gap between user needs and actual service performance. Addressing these issues could directly improve satisfaction and increase ridership, which aligns with the goals of urban mobility in rapidly growing cities like Dar es Salaam.

Supporting literature also validates these findings. A study by Litman, 2020; Cervero, 2013 emphasize that predictability and timeliness are key indicators of a successful transit system. The low mean (2.73) on this aspect indicates that the BRT system does not meet international standards for reliability. In Dar es Salaam, long queues and inconsistent headways have been frequently reported, especially during peak hours (UN-Habitat, 2022).

According to the SERVQUAL model, reliability is a critical determinant of service quality. The low mean scores in the study ranging from 2.68 to 2.78, clearly show that passengers perceive the BRT system in Dar es Salaam as unreliable, particularly in terms of punctuality and frequency. This is consistent with findings in the literature, which highlight that African BRT systems often suffer from operational inefficiencies. As a result, public satisfaction remains low, and the ability of the BRT system to serve as a dependable alternative to private transport is undermined.

The Assurance level provided by BRT service in the city

Table 2: Respondent’s opinion on the Assurance provided by BRT service

| Statements | Mean | Std. Deviation |
|--|------|----------------|
| Perceived safety and security | | |
| Safe from crime at stations | 3.07 | 1.008 |
| safety from accident when riding with BRT buses | 2.88 | 1.009 |
| Competence and helpfulness of staff | | |
| BRT staff (drivers and attendants) behave professionally | 2.84 | 1.015 |
| staff are willing to help passengers when asked | 2.85 | 1.033 |

Source: Field data, (2025)

The above table 2 exhibit that, Safety from crime at stations has a mean of 3.07, this is the only statement with a mean slightly above the neutral point (3.0), it indicates that passengers generally feel somewhat safe from crime at BRT stations. However, the score is only marginally above neutral, suggesting room for improvement in security infrastructure and visible enforcement. Perceived safety from accidents has mean of 2.88, a mean score below 3 implies that passengers have concerns about safety from accidents. This might relate to driving practices, boarding procedures, or road conditions, enhancing vehicle maintenance, safety training, and emergency response systems may be necessary.

Professionalism of Staff has the mean of 2.84, this result suggests that users are dissatisfied with the professional behavior of BRT staff. It points to a lack of adequate training or enforcement of service standards, which could negatively impact customer experience and trust. Willingness of staff to help have score mean of 2.85, this low score indicates that many passengers feel staff are not approachable or helpful. In a customer-facing public service like transport, staff support and courtesy are crucial for overall satisfaction. Standard deviations 1.0, all items have standard deviations around 1.0, indicating moderate variation in passenger opinions, this reflects that while a portion of users may have had positive experiences, a significant number reported dissatisfaction.

From a theoretical standpoint, these findings are strongly supported by the SERVQUAL model, the assurance dimension plays a critical role in shaping public satisfaction. My findings show that passengers do not feel adequately assured by the BRT system in Dar es Salaam. Scores below 3.0 for safety from accidents and staff professionalism indicate that the system lacks the trust and dependability that public transport should offer. These findings are consistent with existing literature that emphasizes the importance of safety and human interaction in building user confidence in public services.

Supporting literature also validates these findings. A study by Litman (2020), perceived safety from accidents is closely tied to vehicle conditions and driver behavior. A low score of 2.88 suggests that BRT users are concerned about the risk of accidents, possibly due to driver conduct or poor road conditions. Lack of safety assurance erodes the sense of trust, which directly affects satisfaction and retention.

Empathy level demonstrated by BRT service in the city

Table 3: Respondent’s opinions on the Empathy level demonstrated by BRT service in the city

| Statements | Mean | Std. Deviation |
|---|------|----------------|
| Responsiveness to user feed back | | |
| BRT management listens and respond to passenger complaints | 2.74 | 1.027 |
| BRT adequately provides services and facilities for disabled passengers | 2.76 | 1.072 |
| Consideration for accessibility | | |
| BRT facilities support mobility for disabled passengers | 2.96 | 1.015 |
| there is clear channel for giving feedback to BRT service | 2.86 | 0.988 |

Source: Field data, (2025)

The findings indicate that, Responsiveness to complaints has scored a mean of 2.74, a mean score below 3.0 indicates passengers do not feel heard by BRT management, there is a perceived gap in how the system handles complaints and concerns, possibly reflecting weak customer service, lack of accountability, or slow response mechanisms. Adequacy of services for disabled passengers scored mean of 2.76, this score shows that passengers perceive the BRT system as falling short in providing necessary services or facilities for people with disabilities. These may include ramps, designated seating, audible and visual aids, and boarding assistance.

Mobility support through BRT facilities has scored a Mean of 2.96, this is the highest score in this group, and it's very close to the neutral point (3.0), while it suggests that some facilities for mobility exist, they may not be consistently available, accessible, or functional. The result implies partial satisfaction, but also highlights potential for improvement in universal design and accessibility. Clarity of feedback channels has scored mean of 2.86, this result suggests that most passengers are not aware of, or find unclear, the available channels for giving feedback, without clear, user-friendly mechanisms (e.g., suggestion boxes, hotlines, digital platforms), passenger engagement and system improvement are hindered. Standard deviations 1.0, moderate variability in responses indicates differences in individual experiences, likely due to inconsistent implementation across routes or stations.

The empathy dimension of SERVQUAL stresses the importance of treating users with care and understanding their unique needs. In my study, the BRT service in Dar es Salaam scored poorly across most empathy indicators. Passengers feel unheard, and services for people with disabilities are perceived as inadequate. Literature supports that inclusive and responsive service delivery is central to public transport success. Therefore, improving empathy through better feedback systems, staff training, and accessible infrastructure is crucial for increasing public satisfaction

Supporting literature offers some insights into this paradox. Gauteng, South Africa (2024) Disabled users (physical, visual, hearing impairments) criticized BRT accessibility: issues included lack of drop-off announcement systems, absence of driver support, and communication barriers. Deaf users appreciated some stop-calling buttons, but overall BRT was far from inclusive

5. CONCLUSIONS

The study’s purpose, which was to examine the level of public satisfaction with the BRT service. In terms of the first objective, which was to assess the reliability of BRT services in Dar es salaam city, according to study findings, the majority of customers were dissatisfied like in arrival and departure as according to the schedule and the majority of users also were dissatisfied in the frequency of BRT buses in peak hours.

In terms of the second objective, study data revealed the majority of BRT users were neutral following with large proportion of dissatisfied in aspects like willingness of BRT staff to help passengers when they are asked.

In the third objective, which was to assess the empathy shown by the BRT service, according to the findings, the majority of BRT users were dissatisfied with the empathy demonstrated by the service, like BRT management failed to listen to the customers complaints.

Ultimately, the study confirms that adjustment of time tables and displaying them to customers, professionalism must be encouraged among BRT staff and management should listen to complaints and act upon them, is essential for ensuring high customer satisfaction and to create trust among BRT users.

6. RECOMMENDATIONS

Base on the study findings, the following recommendations for improvement were made:

Timetable enforcement, BRT officials should review and revise bus scheduling to reduce delays and improve frequency during peak hours. Staff training, there should be trainings to all staff on safety procedures, customer communication, and crisis response to boost user confidence. Awareness campaigns, BRT should Educate users on safety protocols and improvements made so as to build trust and perception of security and assurance. BRT should provide Customer service training Focusing on empathy, communication, and helpfulness in ongoing staff training programs. Feedback systems Installment or enhancing feedback platforms (digital or in-person) for users to report staff behavior reward excellent service and correct poor conduct.

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