EXPLORING THE MODALITY AND IMPACT OF INTEGRATING BUS RAPID TRANSIT WITH DALADALA SERVICES IN DAR ES SALAAM

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ABSTRACT

The rapid urbanization of Dar es Salaam has led to significant transport challenges, including severe congestion and inefficiencies affecting daily commutes. In response, a Bus Rapid Transit (BRT) system was introduced to modernize the city's public transport infrastructure. However, integrating this formal scheduled service with the existing informal paratransit services, particularly daladala minibuses, remains problematic. This study examines the operational and economic impacts of integrating BRT with daladala services, focusing on how the two systems interact, and exploring opportunities for a more effective multimodal public transport network. A mixed-methods approach was employed, including quantitative surveys of 160 daladala operators and 196 daladala passengers, alongside qualitative interviews with key stakeholders, such as government regulators, daladala operators, and BRT officials. The findings reveal that the current integration model has negatively affected daladala operators, reducing daily profits for many. However, a segment of operators who adapted as feeders for the BRT experienced increased passenger loads. Passengers expressed dissatisfaction with long wait times and uncoordinated schedules, highlighting the need for better integration at transfer points. This research advocates for a more coordinated and strategic integration of daladala infrastructure, addressing policy and planning gaps to ensure the systems complement each other and improve overall urban mobility.

Keywords: Bus rapid transit, Daladala, Transport integration, Dar es Salaam, Multimodal systems.

1. INTRODUCTION

1.1 Background

Dar es Salaam, in Tanzania is one of the fastest-growing cities in East Africa, with a current population exceeding five million and projected unprecedented urbanization. This growth has placed immense pressure on the city’s transport infrastructure, resulting in chronic traffic congestion, environmental degradation, and inefficiencies in daily travel. For decades, informal paratransit services, particularly daladala (the term for minibus-taxis in Tanzania), have been the backbone of urban mobility in the city, serving large segments of the population that formal systems have often failed to reach (Kessy & Tinali, 2012; Melbye et al., 2015; Nhundu, 2013; Olvera et al., 2003).

In response to these challenges, a Bus Rapid Transit (BRT) system was introduced as a flagship project to modernize the city’s transport infrastructure and alleviate urban mobility challenges (Mzee & Chen, 2010; World Bank, 2017). The Dar es Salaam Rapid Transit

(DART) system, launched in 2016, represents a significant effort to reduce congestion, improve travel reliability, and establish an efficient public transport system.

The integration of BRT with paratransit services is vital for ensuring mobility in underserved areas where formal infrastructure remains limited. Effective integration has the potential to enhance route coverage, optimize resource utilization, and create a seamless multimodal public transport network. However, this requires deliberate planning, infrastructure investments, and coordinated governance to align the operations of these two distinct services (Adewumi & Allopi, 2013; Plano & Behrens, 2022; Schalekamp, 2017). With numerous Sub-Saharan Africa cities planning to implement similar BRT or mass transit systems, the insights gleaned from Dar es Salaam's integration efforts have broader relevance.

1.2 Research Problem

The introduction of the BRT system, managed by DART, represents a transformative effort to address Dar es Salaam's long-standing transport challenges. With operations currently limited to the Kivukoni-Kimara corridor and plans for future expansion, the BRT aims to reduce travel times, enhance reliability, and improve passenger service quality (Mzee & Chen, 2010; World Bank, 2017). Despite its promise, its interaction with the city's dominant informal transport systems – particularly daladala minibuses and boda-boda motorcycles – raises critical questions about the potential for harmonization.

Daladala services have been the backbone of urban mobility in Dar es Salaam for decades, offering flexibility and coverage unmatched by formal systems. However, the coexistence of structured, scheduled BRT services alongside informal, decentralized transport has introduced significant challenges. Service overlaps, competition for passengers, and a lack of coordination have led to operational inefficiencies, economic losses for daladala operators, and dissatisfaction among passengers. Yet, the integration of these systems holds potential to optimize the city's transport network, reduce congestion, and improve the overall passenger experience.

This study investigates the interaction between BRT and daladala services in Dar es Salaam to assess operational, economic, and social impacts. It seeks to uncover the challenges of integrating these systems, and identify opportunities for enhancing multimodal connectivity. By evaluating the operational realities of BRT-daladala interactions, examining passenger preferences and patterns, and proposing practical coordination strategies, this research aims to highlight pathways toward a more cohesive and sustainable urban transport network. It deepens understanding of the challenges and opportunities associated with integrating formal and informal transport systems in a rapidly urbanizing African context.

2. METHOD

This study employs a methodological framework to investigate the integration of the BRT and daladala systems in Dar es Salaam. The methods are designed to explore the operational, economic, and passenger impacts of this integration.

2.1 Study Design

The study adopts a mixed-methods approach, combining quantitative surveys and qualitative interviews to provide a holistic understanding of the integration process. This design was selected to ensure the study captures the multidimensional impacts of BRT-daladala interactions, encompassing both numerical trends and contextual narratives.

The quantitative component involved surveys of daladala operators and passengers to assess operational metrics and satisfaction levels, offering statistical insights into the integration's effectiveness and challenges. Qualitative data were gathered through semi-structured interviews with key stakeholders, including transport regulators and operators, to explore their experiences, perceptions, and recommendations.

2.2 Data Collection

The study involved multiple stakeholders to capture comprehensive insights into the transport dynamics. Survey data were collected from 160 daladala operators and 196 passengers, complemented by interviews with institutional stakeholders, including DART, the Land Transport Regulatory Authority (LATRA), Shirika la Usafiri Dar es Salaam Rapid Transit (UDART) and 10 other daladala operators. Table 1 summarizes the key attributes of the primary data collected from different stakeholder groups. The sample sizes were guided by feasibility and target population estimates, using a purposive and convenience approach. Operators and passengers were surveyed at key terminals and transfer points along the BRT Phase 1 corridor – including Mbezi Mwisho, Ubungo, Mawasiliano, Gerezani, and Kivukoni – to ensure spatial variation.

Table 1: Summary of primary data collected

Stakeholder Group	Number of Surveys (n)	Number of Interviews	Estimated Target Population (N)[1]	Estimated Margin of Error[2]
Daladala operators	160	10	1,800	7.4%
Passengers	196	-	210,000	7.0%
DART	-	1	-	-
LATRA	-	1	-	-
UDART	-	1	-	-
Sum	**356**	**13**	**-**	**-**

Notes:
1. The estimated daladala target population is based upon unpublished World Bank project appraisal documents. The estimated passenger target population is based upon DART operational data from 2022 and 2023.
2. The margins of error are calculated with a confidence level of 95%.

2.3 Data Analysis

The study applied quantitative and qualitative data analysis methods:

- Quantitative analysis:
  - Descriptive statistics profiled passenger satisfaction and operational changes.
  - Inferential, regression andcorrelation analyses examined relationships between operational metrics and impacts on passenger experiences.

- Qualitative analysis:
  - Thematic analysis of interview transcripts revealed recurring themes in stakeholder perceptions and integration challenges.

While modal choice modeling (e.g., MNL) could offer deeper insight into passenger decision-making, the survey was not structured with alternative-specific attribute data (e.g., mode-level travel times or fares). As such, we did not implement a discrete choice model in this study. However, the findings provide a foundation for future choice modeling efforts, especially for studies evaluating service-level tradeoffs and fare integration scenarios.

3. RESULTS

Research results are presented in terms of: impacts on daladala operators; impacts on passengers; and BRT and daladala service integration.

3.1 Operational Impacts of BRT on Daladala Services

Findings reveal that BRT implementation has significantly influenced daladala operations, particularly in terms of profitability, route adjustments, and operational metrics, with varied impacts across different operator groups. Daladala operators reported significant economic challenges and operational adjustments in response to the BRT. One operator stated in the interview, *"We are struggling because BRT took over our main routes, and we have been left with routes that are not profitable".* A majority (87%) of respondents indicated that the BRT system had impacted their operations, while only 13% reported no effect, likely due to operating on peripheral routes or serving niche markets. As presented in Figure 1, among those impacted, 96 operators (60%) experienced a decrease in daily profits due to reduced passenger demand and increased competition, while 47 operators (29%) saw increased profits, often by adapting to feeder roles or strategically targeting less competitive routes. Additionally, 53 operators (33%) reported a reduction in daily trips, reflecting the broader challenges of adapting to the altered transport landscape. In contrast, nine operators surveyed managed to increase daily trips, indicating resilience through operational optimization, such as focusing on shorter, high-turnover routes.

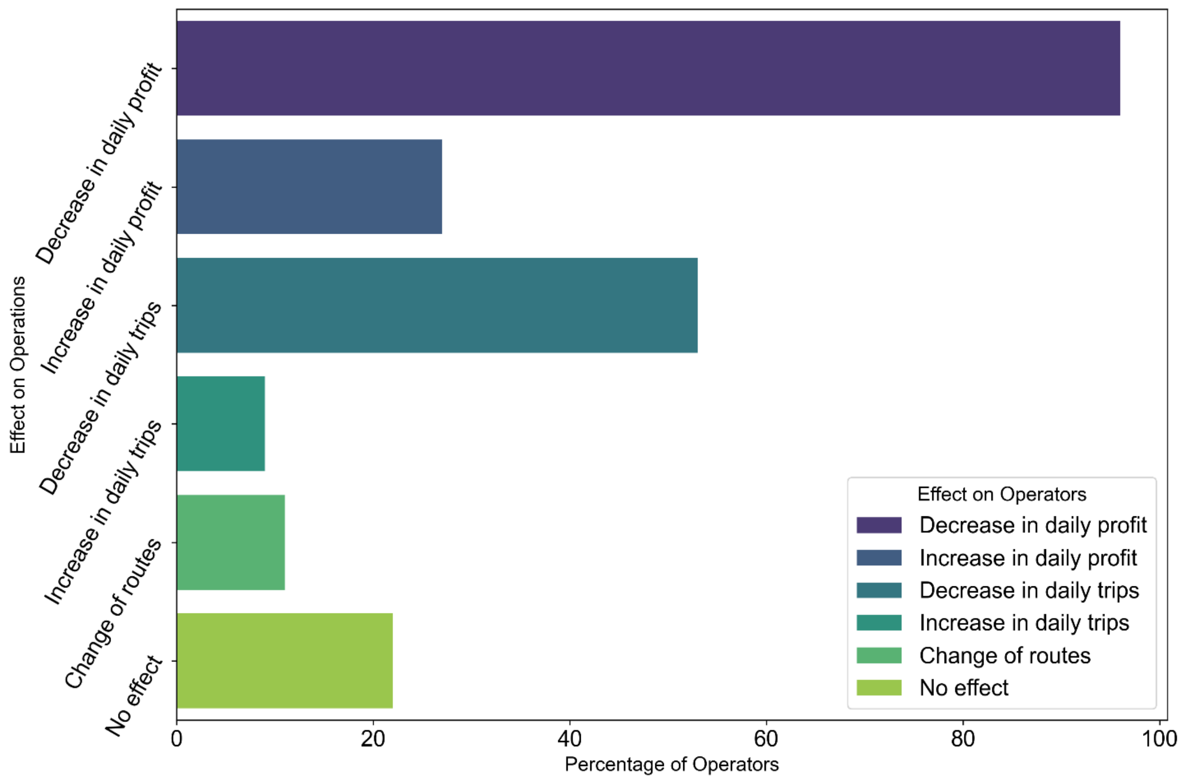

Figure 1: Economic and operational impact of BRT on daladala operators

Before the development and operation of the BRT system, daladala operators serving the current BRT corridor were required to vacate the route and re-route to alternative areas of their choice. This re-routing process was neither planned nor negotiated by the authorities, leaving operators to independently determine their new routes. Such an approach missed the opportunity to integrate re-routing into a broader strategic framework that could have enhanced the overall transport network while maintaining operational and economic benefits for the operators.

Further analysis highlighted differences between re-routed (those displaced from the BRT corridor) and non-corridor operators (see Figure 2). Among re-routed operators, 60% reported profit declines compared to 48% of non-corridor operators, underscoring the heightened challenges of displacement. Meanwhile, only 14% of re-routed operators reported increased profits, compared to 16% of non-corridor operators, suggesting that non-corridor operators were better positioned to maintain stable operations. Re-routed operators also experienced greater variability in daily trips and passenger loads, reflecting the operational disruptions caused by displacement. This *ad hoc* approach, coupled with the lack of planned re-routing strategies, perpetuates a cycle where daladala operators are displaced into peripheries or other cities as the BRT system expands in Dar es Salaam.

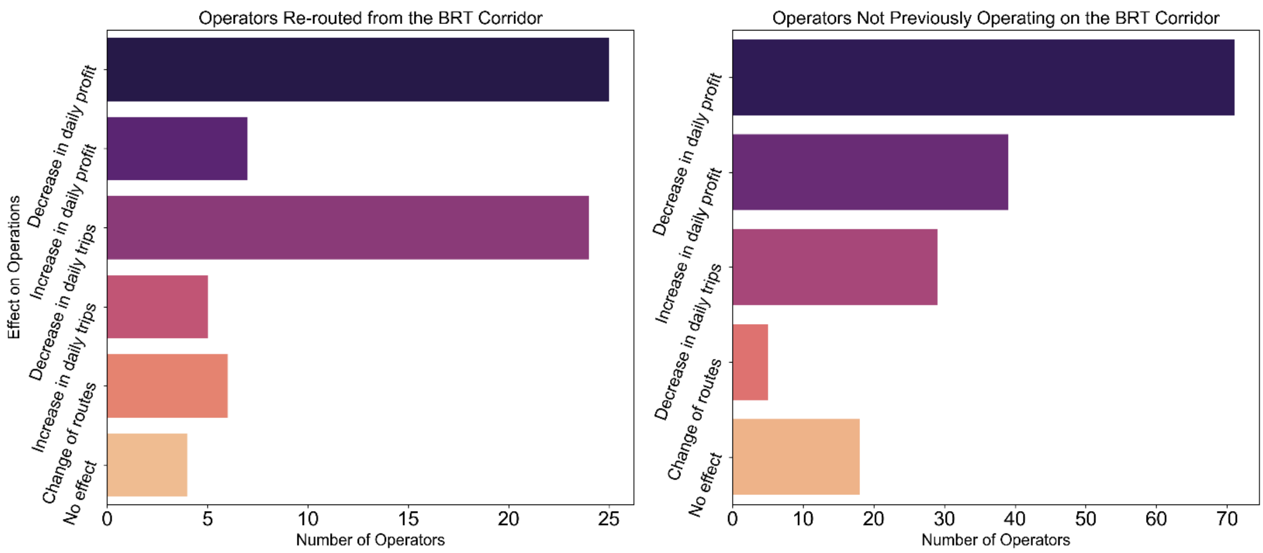

Figure 2: Impact comparison: 'Re-routed' (left) vs. 'non-corridor' (right) daladala operators

The study also explored the characteristics of 'better off' and 'worse off' daladala operators to identify factors contributing to successful adaptation following the introduction of the BRT system. For the purposes of this analysis, 'better off' operators refer to those who demonstrated resilience and maintained or improved their operational performance and profitability post-BRT implementation. In contrast, 'worse off' operators experienced significant challenges, including reduced profitability and operational inefficiencies. Comparative plots are shown in Figure 3. 'Better off' operators, representing 30 surveyed respondents, achieved higher passenger loads per trip (mean = 33.2) and operated shorter routes (mean = 22.4 km), which minimized operational costs and improved turnover. 'Worse off' operators, accounting for 108 respondents, faced greater variability in performance, with longer routes (mean = 29.8 km) and lower passenger loads per trip (mean = 28.2), indicating inefficiencies in service delivery. These patterns suggest that route optimization and aligning service schedules with passenger demand were key factors for success.

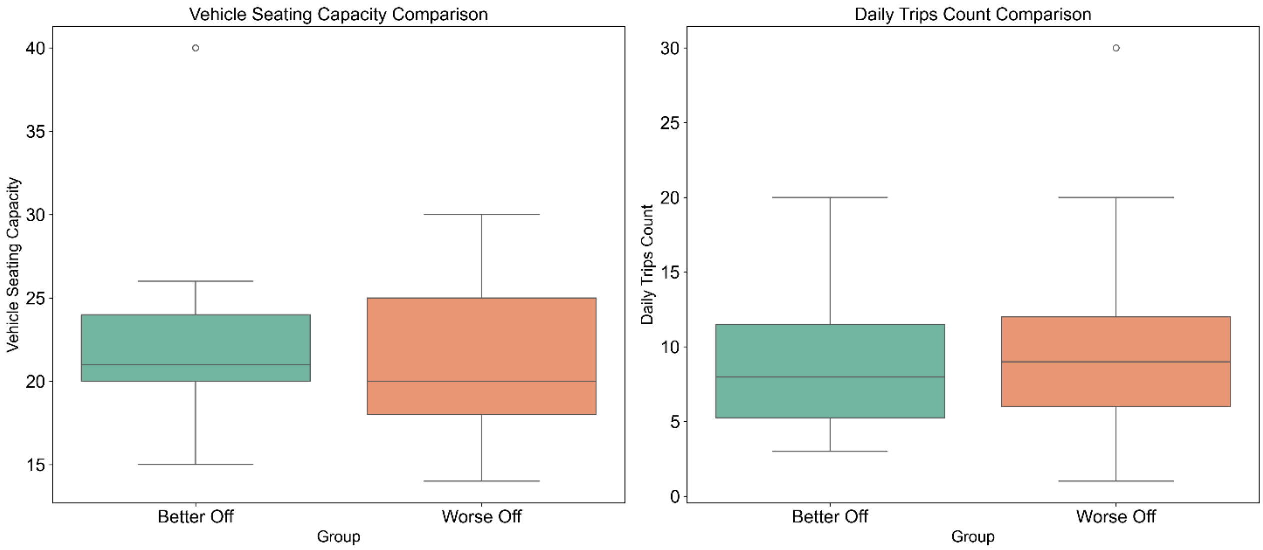

Figure 3: Operational metrics for 'better off' and 'worse off' operators

To explore operational adaptation, we conducted a linear regression to examine whether route length is influenced by operator behavior and vehicle attributes. The model ($R^2 = 0.41$, $p < 0.01$) showed that vehicles with higher overloading factors were more likely to operate shorter routes, while those with larger seating capacities and more passengers per trip tended to serve longer distances. This suggests a strategic adaptation by operators – those on shorter, congested corridors increase turnover through overloading, while others seek to retain passengers by maximizing capacity on longer routes. These patterns align with qualitative accounts of operational shifts following BRT implementation. While the model provides useful insights, the R^2 value also suggests that additional contextual or economic factors may be required to fully explain operator routing decisions.

3.2 Passenger Experience and Travel Patterns

The implementation of DART has brought both benefits and challenges to passengers, significantly affecting their travel costs, time use efficiency, and modal preferences. Data from the passenger survey, which captured responses from 196 participants, provides insights into these dynamics.

3.2.1 Travel Costs and Time Use Efficiency

The survey reveals that the BRT system has contributed to reduced travel time for a significant proportion of passengers. Approximately 40% of surveyed passengers reported shorter travel times when using the BRT compared to earlier use of daladala services for the same trip. This improvement is primarily due to the BRT's dedicated lanes, which bypass congested traffic. However, travel cost implications present a mixed picture. While some passengers benefitted from lower fares on direct routes, 29% of respondents noted an increase in their overall travel costs due to the need for intermodal transfers, particularly when accessing areas not directly served by BRT.

3.2.2 Modal Preferences and Weekly Mode Use Frequency

Passenger preferences reflect the competition between the BRT and daladala systems. The analysis of weekly usage frequencies shown in Figure 4 reveals distinct differences in the utilization patterns of the two systems. Passengers reported using the BRT system for an average of 1.99 days per week, while the daladala system was used more frequently, averaging 4.48 days per week. This discrepancy in usage frequency reflects the continued dependence on daladala services for regular daily commutes, even with the introduction of the BRT system.

The significant overlap in system usage, as indicated by 68% of respondents who reported using both modes within a single day, suggests that the BRT system has not entirely replaced the need for daladala services. Instead, many passengers rely on a combination of BRT and daladala trips to access different parts of the city. This pattern highlights the need for improved integration between the BRT and daladala services to improve the multimodal travel experience for passengers.

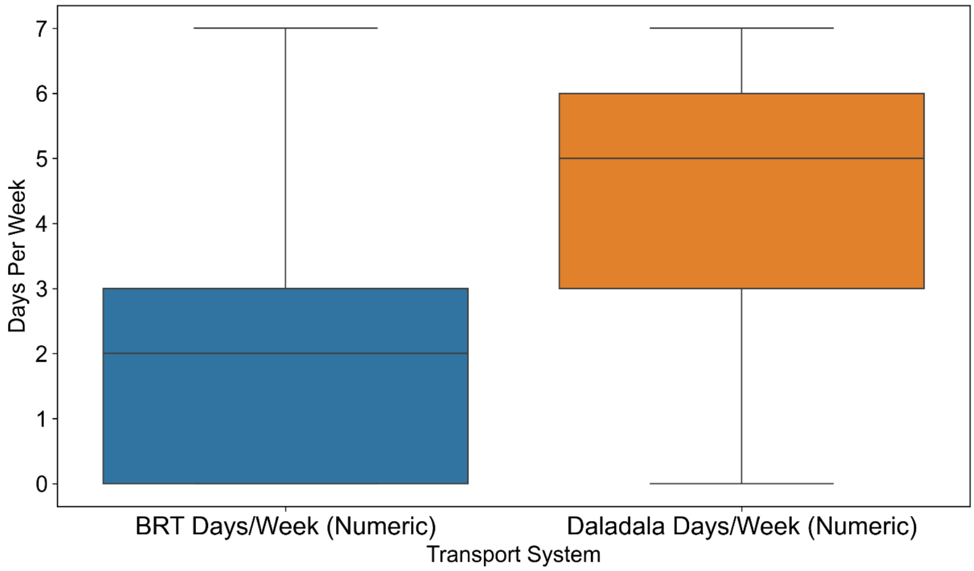

Figure 4: Weekly service use frequency of daladala and BRT services

3.2.3 Factors Influencing Modal Choice

The survey identified the factors driving passengers' choices between the BRT and daladala systems. Respondents were asked to select the single most important reason influencing their modal choice. For BRT users, 88% selected travel time as the most important factor, reflecting the system's reputation for efficiency due to dedicated lanes, fewer stops, and shorter wait times. This underscores the BRT's appeal to passengers prioritizing time savings. For daladala users, 61% prioritized service availability, emphasizing the network's flexibility and reach in areas not served by the BRT. Additionally, 19% cited service proximity, highlighting the convenience of stops closer to homes and destinations, while another 19% selected cost, reflecting the affordability of daladala fares for budget-conscious passengers.

3.3 Integration Challenges and Opportunities

The integration of DART with the daladala network has been marked by significant governance and infrastructure challenges. These issues have hindered the development of a seamless multimodal transport system and highlight critical gaps in planning and coordination.

3.3.1 Governance and Planning Gaps

The integration efforts between DART and LATRA have been constrained by fragmented governance. While DART is tasked with overseeing BRT development, LATRA is responsible for regulating the broader public transport network, including daladala services. This division of responsibilities has resulted in inconsistent policies and conflicting priorities. For instance, while DART initially sought to phase out daladala services in BRT corridors, LATRA's regulatory framework allowed daladala operators to continue serving high-demand routes, leading to operational overlaps and increased competition.

Interview data further illuminated the fragmented governance that undermined integration efforts. LATRA and DART representatives described inconsistent mandates – one mobilizing Daladala owners into cooperatives, the other procuring BRT operators under separate frameworks. This disjointed structure created uncertainty and limited coordination. Daladala operators consistently expressed feeling sidelined in the process: "They [BRT] treat themselves as higher value," one operator said, "we were not involved in any planning." The UDART CEO admitted, "We are taking their bread… they'll fight. For sure, they'll fight," underscoring the depth of operator resistance and institutional disconnect. Although some operators received compensation and shares, they viewed the approach as symbolic rather than substantive. "It felt like a box-ticking exercise," one insider remarked, pointing to the limited operational role for Daladala within the BRT structure. These perspectives reveal that the challenges of integration are not merely technical, but deeply rooted in institutional mistrust, uneven power dynamics, and poorly executed reform processes.

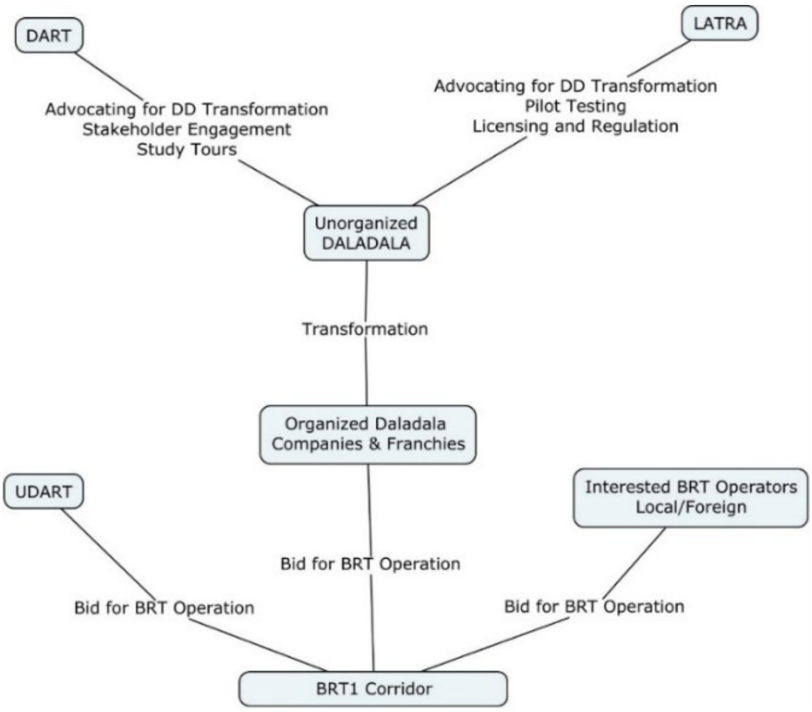

Figure 5: Dar es Salaam's initial integration model

The initial integration model for the BRT, as illustrated in Figure 5, envisioned a streamlined process where daladala services would be absorbed or phased out entirely from BRT corridors. However, the realities on the ground have diverged significantly from this vision. One major issue was resistance from daladala operators, who were concerned about losing income and control over their operations. Some operators mentioned perceived unfair treatment by the government. A daladala operator lamented, *"The government supports the BRT more because it's their project, but we are also part of the transport network. We need to be respected and included in their plans".* Additionally, many daladala operators lacked the capacity to meet the operational and service standards required by the BRT system. These difficulties were further compounded by unclear legal and regulatory frameworks, which hindered efforts to formalize and contract daladala operators effectively within the BRT structure.

3.3.2 Infrastructure Challenges

The inadequacy of transfer points between the BRT and daladala systems has further complicated integration efforts. According to the passengers surveyed, despite the lack of formal transfer infrastructure, the overall transfer experience is not a significant deterrent for most users. This assessment by respondents likely stems from the proximity of daladala stops to BRT stations, rather than the presence of formal transfer stations. Thus, the perceived convenience is derived from geographical closeness rather than infrastructure provision. The current BRT feeder arrangement uses BRT buses to serve as feeders to the main corridors, excluding daladala services from direct access to feeder stations. This forces passengers to disembark from daladala vehicles and walk to BRT stations, thereby lengthening transfer time.

3.3.3 Shift to Financial Inclusion Strategies

As efforts to phase out daladala services met resistance, the government adopted financial inclusion strategies as an alternative approach. These strategies aim to integrate daladala operators into the BRT system through compensation and shareholding mechanisms. According to the data collected from institutional interviews and stakeholder reports, 400 out of 1,800 re-routed daladala operators were offered financial packages, including a disturbance allowance of TZS 1,000,000 (~ZAR 7,000) and a mandatory share purchase in UDART valued at TZS 3,000,000 (~ZAR 21,100). This approach, detailed in Table 2, represents a shift from exclusionary practices to financial integration.

Table 2: Compensation and shareholding mechanism for daladala operators

Compensation Type	Number of Operators	Amount (TZS)	Purpose
Cash payment	400/1800	1,000,000	disturbance allowance
Automatic share purchase	400/1800	3,000,000	converted to shares in UDART
Total compensation per operator		4,000,000	total compensation for participating in UDART

Despite these efforts, questions remain about whether financial inclusion constitutes true integration. While it provides a pathway for daladala operators to participate in the BRT system, it does little to address operational coordination, fare harmonization, or the broader infrastructure deficiencies that impede multimodal connectivity. This shift appears to be a reactionary measure to the resilience of the daladala sector, rather than a proactive integration strategy.

Dar es Salaam’s current integration model, depicted in Figure 6, reveals a fragmented system where BRT and daladala services operate in parallel with minimal coordination. This model reflects the broader challenges of aligning informal and formal transit systems to create a cohesive network. An interviewee from UDART acknowledged this sentiment, stating that "*The integration model seemed more like a box-ticking exercise for the World Bank rather than a genuine attempt to harmonize the transport system.*"

The challenges of governance, infrastructure, and financial inclusion underscore the complexities of integrating formal and informal transit systems. While the move toward financial inclusion represents progress, it falls short of creating a truly unified public transport network. The following discussion section explores these challenges further, offering insights into governance reforms, infrastructure investments, and strategies for stakeholder collaboration.

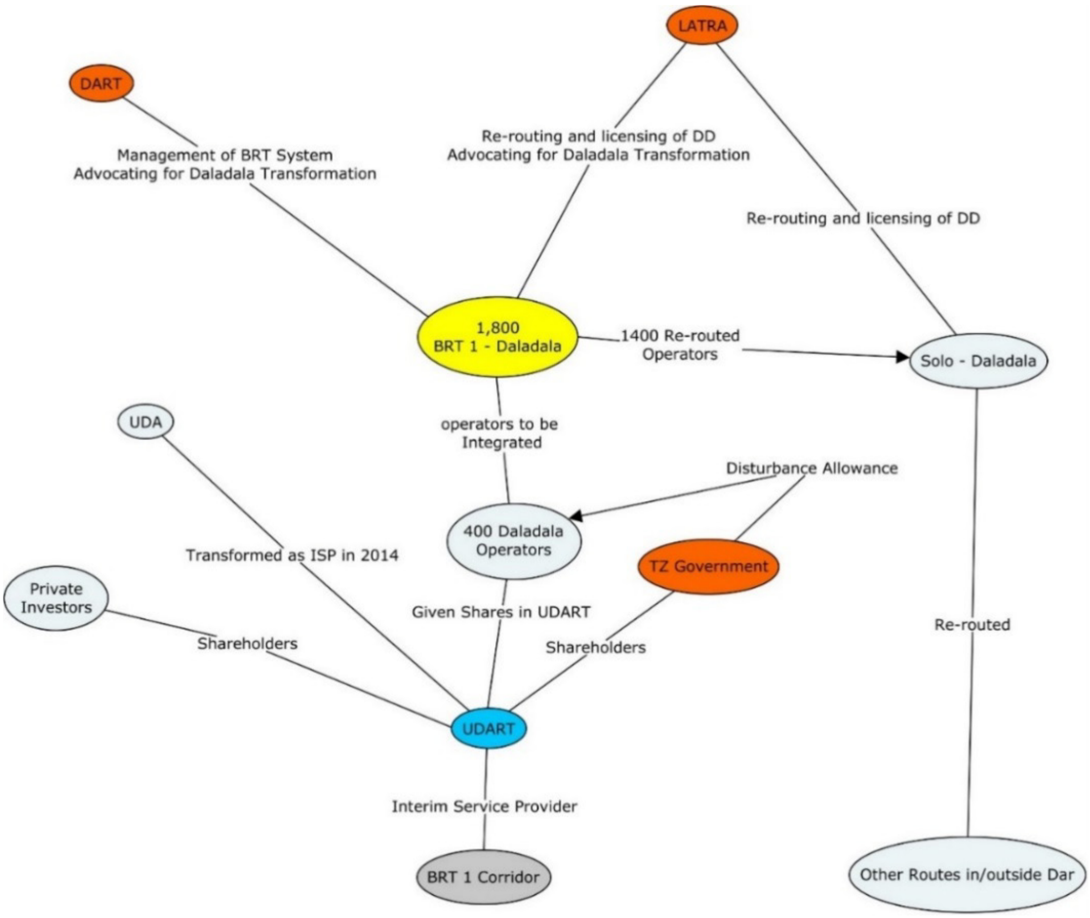

Figure 6: Dar es Salaam's current integration model for BRT 1 Corridor

4. DISCUSSION

The findings presented in the results section highlight the complexities of integrating DART with the daladala network. This discussion interprets these results, emphasizing their broader implications and relevance to urban transport planning in rapidly urbanizing contexts.

4.1 Integration Challenges and the Informal Sector's Resilience

The results demonstrate that attempts to phase out daladala services underestimated their adaptability and resilience. The persistence of daladala services, even within BRT corridors, highlights the informal sector's role in meeting mobility needs unmet by formal systems. This resilience underscores the necessity for transport policies to engage with informal operators as partners in achieving multimodal integration, rather than framing them solely as competitors to formal transit.

Governance gaps between DART and LATRA exacerbate these challenges, as misaligned priorities lead to conflicting strategies. For example, while DART sought to eliminate daladala competition within BRT corridors, LATRA allowed daladala services to continue operating. This conflict not only undermines the effectiveness of BRT implementation but also perpetuates operational inefficiencies and passenger dissatisfaction. A unified governance framework, with clear, shared objectives, is essential to resolve these conflicts.

4.2 Implications for Passenger Mobility

The survey data reveal that while BRT reduces travel time for many passengers, increased costs due to intermodal transfers remain a significant barrier to affordable access. This finding highlights the importance of fare harmonization as a critical component of integration. Without addressing cost disparities, the BRT risks excluding lower-income passengers who depend on affordable daladala services. Furthermore, the continued reliance on daladala services for first- and last-mile connectivity emphasizes the need for planned intermodal transfer facilities, equipped with proper infrastructure and coordination mechanisms as proposed by (Nnene et al., 2023; Schalekamp, 2017).

The mixed modal preferences observed – where passengers frequently use both BRT and daladala services – indicate an opportunity to leverage the strengths of each mode. BRT offers time efficiency on primary corridors, while daladala provides the flexibility to access underserved areas. Strategic integration can capitalize on these complementary attributes, enhancing overall system efficiency and passenger satisfaction.

4,3 Operational Adaptation of Daladala Services

The findings regarding 'better off' and 'worse off' daladala operators offer insights into adaptation strategies. Successful operators optimized their routes, aligned schedules with peak demand, and targeted high-turnover areas. This adaptive behaviour highlights the potential for informal operators to complement formal systems when provided with the right incentives and support.

Conversely, the challenges faced by 'worse-off' operators reveal the risks of excluding the informal sector from planning processes. These operators struggled with inefficiencies, longer routes, and lower passenger loads, demonstrating the importance of equipping operators with resources and training to navigate evolving competitive landscapes.

4.4 Financial Inclusion Strategies: Progress and Limitations

The government's shift from phasing out daladala to financial inclusion strategies represents a pragmatic acknowledgment of the sector's resilience. However, the limited scale of these efforts – reaching only 400 out of 1,800 operators – raises questions about sustainability and inclusiveness. While compensation and shareholding mechanisms provide a pathway for integration, their focus on financial transactions neglects the operational and infrastructural reforms necessary for seamless multimodal connectivity. True integration will require moving beyond financial inclusion to address systemic challenges, such as fare harmonization, operational coordination, and shared infrastructure investments. Without these elements, financial inclusion risks becoming a stopgap measure rather than a foundation for sustainable integration.

The Dar es Salaam experience highlights the complexities of aligning formal and informal transit systems. While DART has achieved significant time-saving benefits, its full potential remains constrained by governance gaps, infrastructure deficiencies, and limited financial inclusion efforts. Moving forward, a comprehensive approach that addresses these systemic issues is essential to create an equitable, efficient, and sustainable urban transport network.

5. CONCLUSION

This paper set out to understand the interaction between BRT and daladala services in Dar es Salaam, and to explore challenges in integrating these systems. It has been illustrated that, the implementation of DART brought both benefits and challenges to passengers, significantly affecting their travel costs, time use efficiency, and mode choices. While DART has delivered significant time-saving benefits, its broader success will require addressing accessibility, affordability, and operational coordination challenges. Key findings reveal that fragmented governance, inadequate infrastructure, and limited financial inclusion hinder the realization of a cohesive multimodal transport network. The resilience of daladala operators and their continued role in urban mobility emphasize the need for deliberate engagement with the informal sector to achieve sustainable integration.

Case-specific recommendations for Dar es Salaam include:

- *Infrastructure upgrades*: Investigate modifying feeder stations to accommodate daladala buses, enabling their formal integration as first-mile and last-mile connectors. Additionally, transfer hubs should support both BRT and daladala operations, with seating, shelter, and real-time passenger information to enhance passenger convenience.
- *Fare integration*: Investigate a unified ticketing system that allows seamless transfers between BRT and daladala services. Incorporate affordable pricing models to maintain accessibility for low-income users while leveraging smart technologies for efficiency.
- *Governance and stakeholder engagement*: Investigate a unified regulatory framework to align DART and LATRA operations. Institutionalize regular forums for dialogue between policymakers, BRT authorities, and daladala operators to foster trust and collaboration.

Dar es Salaam's experience provides valuable lessons for other rapidly urbanizing African cities, where the majority of residents rely on informal transport to navigate congested urban settlements. This study not only identifies gaps in Dar es Salaam's integration efforts but also offers insights into possible policy reforms, infrastructure planning, and stakeholder collaboration in similar contexts. The findings underscore the need to balance the formalization of urban transport systems with the adaptability and accessibility that informal networks provide, ultimately contributing to the development of equitable and efficient transport systems across Sub-Saharan Africa.

Policy Recommendations: The findings from Dar es Salaam's BRT integration experience offer valuable lessons for other rapidly urbanizing African cities facing similar challenges. Based on the evidence presented, we recommend the following actions for Dar es Salaam and comparable SSA contexts:

- Upgrade transfer infrastructure at BRT terminals to support daladala operations as formal feeder services, enhancing multimodal connectivity.
- Implement fare harmonization and smart ticketing to reduce transfer costs and promote seamless passenger journeys across formal and informal modes.
- Contract daladala services into formal feeder roles through phased restructuring, avoiding abrupt exclusion and leveraging existing service coverage.
- Establish joint integration bodies involving regulatory authorities and informal operator associations to improve policy coherence and reduce conflict.
- Broaden financial inclusion schemes by facilitating cooperative ownership and equity-based participation in mass transit operations.

These recommendations emphasize the importance of integrating informal operators not through displacement, but through deliberate planning, financial empowerment, and inclusive governance. As cities across SSA modernize public transport systems, balancing the strengths of informality with the efficiency of formal systems will be key to equitable urban mobility.

Dar es Salaam's integration challenges mirror patterns seen in other African BRT systems. In Lagos, integration with informal minibuses (danfo) has faced similar resistance, with fragmented authority between Lagos Metropolitan Area Transport Authority (LAMATA) and local councils complicating implementation. Johannesburg's Rea Vaya system encountered political pushback and had to incorporate affected minibus taxi operators into formal structures through compensation and equity shares. Compared to these cities, Dar's integration efforts have been more ad hoc, with limited legal restructuring and narrower financial inclusion. These contrasts highlight the importance of early-stage governance alignment and structured stakeholder compensation in formalizing urban transport systems across Sub-Saharan Africa.

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