

KEKE NAPEP BUSINESS SERVICE ON CAMPUS AS A MEANS OF TRANSPORTATION: A CONCEPTUAL VIEW

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ABSTRACT

This research work is centered on the impact of Keke Napep as replacement of using bus in the campus as a means of transportation services and means for internal revenue generation in Federal Polytechnic Kaura Namoda, the research aimed to evaluate the feasibility and benefits of using Keke Napep as a campus transportation solution at the Federal Polytechnic Kaura Namoda. Quantitative research design is adopted in the study, a sample size of 307 respondents were used in the study, five-point likert scale questionnaires containing sets of closed ended questions were used to collect data, inferential statistics were used to analyzed the data. The result shows that cost-effectiveness is the most significant factor influencing Keke Napep transportation implementation, followed by user convenience, maintenance requirements, and infrastructure needs, all of which significantly contribute to its success. It was recommended that the polytechnic should look for ways of expanding its revenue base by investing in Keke Napep mode of transportation due to the existing market in the campus and that a serious attention should be given to the business in order to ensure that the aims and objectives of the investment are realized.

Keywords: Transportation Service, Keke Napep, Campus, Tricycle, Okada, Infrastructure

Introduction

A multitude of students worldwide relies on transportation systems for commuting to and from educational institutions. In various nations, a considerable number of students utilize school buses rather than public transport, recognizing it as a vital service in both rural and urban settings. Transportation facilitates the efficient execution of activities by individuals and organizations across

different locations. It is a crucial factor in the operational efficiency of organizations and is often viewed as a reflection of complex organizational activities and economic development within societies. This underscores its definition as the movement or conveyance of individuals, goods, ideas, and information from one location to another. Similarly, transportation is indispensable for the sustenance of contemporary society, as urban life would be untenable without it (Onakala, 2001). The public transportation system serves as the most effective means of relocating economic agents within and between urban areas, including those within the educational sector. Beyond enhancing user wellbeing, public transportation significantly contributes to urban productivity, which directly influences national economies (Lyndon & Toda, 2006). The preference for bus transportation among higher education institutions in Nigeria stems from the challenges students encounter in accessing their lecture venues, particularly at the Federal Polytechnic Kaura Namoda, where classes are held at a distant permanent site. Nevertheless, the growing demand for off-campus housing has prompted the necessity for daily inter-campus travel. Scholars concur on the importance of lecture attendance for academic success at the collegiate level (Dolton et al., 2003). A substantial proportion of students rely on public transportation to access lecture halls and other destinations. However, the transportation services provided by most institutions are inadequate (Daggett & Gutkowski, 2003). Despite the existence of numerous transportation programs across various institutes, many experts recognize that these initiatives positively influence students' lecture attendance.

The recent removal of the fuel subsidy has increased fuel prices, adversely affecting student attendance and academic performance. Consequently, the researchers aim to investigate and propose solutions to the campus transportation issue. The campus bus service operates for both students and staff at Federal Polytechnic Kaura Namoda. The distance from the school campus to Kaura Namoda town is approximately three kilometers, with many students residing off-campus in the town. Students primarily rely on motorcycles (okadas) for transportation. Therefore, the researchers are interested in studying the effectiveness of campus bus shuttling services.

Literature Review

Concept of Transportation and Infrastructure

Transportation is a measure of relationships among various agents and regions. It is vital for societal functions that affect economic activities and land uses, including residential and recreational locations. Transportation significantly impacts quality of life, as development is invariably linked to it. The need to transport people, goods, and services is constant (Oyesiku, 2002). The primary aim of transportation is to ensure the safe arrival of social and economic agents at their destinations (Adeniji, 1985). Transportation's role is to facilitate the movement of individuals and goods to preferred locations based on relative value and importance. Ensuring the safe and undamaged arrival of passengers and goods is paramount. Safe arrival is a principal objective of the transportation sector.

While profit generation is a goal for transport organizations, the ultimate aim remains the secure and satisfactory delivery of passengers and goods, alongside sustainability considerations.

As a crucial component of social and economic progress, transportation infrastructure—including roads, railways, and airports—plays a significant role in the distribution of materials and population movement during agglomeration and diffusion (Gase et al., 2014). According to OECD (2013), transportation infrastructure is essential for economic development at all levels, enhancing personal well-being and growth. From a functional perspective, transportation infrastructure constitutes large-scale public works that significantly influence a nation's politics, economy, society, science, technology, environmental protection, public health, and national security.

Tricycle Transportation

The commercial use of Keke in Nigeria began under military Governor Mohammed Buba Marwa from 1996 to 1999. He introduced tricycles for transportation in Lagos. This gave rise to the term Keke Marwa, still in use today. The term Keke originates from the Yoruba language. The widespread adoption of Keke nationwide is linked to the National Poverty Eradication Programme (NAPEP) initiated by President Olusegun Obasanjo for poverty alleviation. Consequently, the term Keke NAPEP became well-known throughout Nigeria. In 2001, NAPEP launched two thousand green tricycles labeled Keke NAPEP for transportation in Abuja. This initiative aimed to transform idle youths into a productive workforce. NAPEP justified the nationwide Keke distribution, and in 2004, five thousand additional tricycles were allocated to all thirty-six states to further the program's goals. Nonetheless, NAPEP was not the sole provider of Keke in Nigeria. Following the NAPEP distribution, entrepreneurs began importing and operating Keke for intra-city transport across various cities. Keke, particularly the yellow model from Bajaj Group, is imported from India. Initially, Keke cost between three hundred fifty to four hundred thousand naira, but current prices have risen to between six hundred fifty to seven hundred fifty thousand naira due to inflation and exchange rates.

Tricycle Vehicles

The tricycles are robust vehicles equipped with diesel or petrol engines, a 10.5-liter fuel tank, a passenger capacity of three to four individuals, and a payload capacity of 320kg, with additional luggage space and a maximum speed of 80km per hour, primarily suited for intra-city commuting and commercial transport with a low fuel consumption rate of 38km per liter. The petrol engine variant operates with reduced noise and vibration, albeit with a smaller capacity than diesel models, while producing cleaner emissions. Known by various names globally, such as auto rickshaw and tuk-tuk, the tricycle functions as a versatile motor vehicle for both private and commercial transport, serving as a motorized iteration of the traditional rickshaw. The overarching aim of transport policy worldwide is to foster sustainable transport development, which entails the provision of economically viable and socially acceptable transportation solutions that ensure safety and minimize non-renewable energy consumption.

In essence, the interconnection of economic, environmental, and social factors is crucial for achieving sustainable transport, necessitating eco-friendly services that prevent environmental pollution from vehicle emissions. Angira (2013) advocated for walking and cycling as sustainable urban transport methods due to their non-reliance on fuel, with sustainable transport achievable through climate mitigation, energy efficiency, and urban zoning strategies to alleviate vehicular congestion (Srinivas, 2015).

TRICYCLE (KEKE NAPEP)



Source; Yuri, (2018)

Inter Campus Movement: Inter-campus movement refers to the transfer between campuses within the same institution. This movement is necessitated by the institution's size or multiple campuses. In developing countries, inter-campus transportation has emerged as a significant challenge. This issue stems from inconsistent management and lack of commitment from operators. Additionally, dwindling financial resources have exacerbated this inefficiency. Consequently, acquiring new vehicles and maintaining existing ones has become increasingly difficult (Adesanya, 1994). Numerous higher learning institutions in Nigeria have implemented strategies to enhance inter-campus transport services. This includes engaging private operators to facilitate the transport of students and staff to various locations within their campuses. Regarding FEDPONAM, while inter-campus transportation remains a significant challenge for staff and students, it is essential to recognize the need for commuter buses that meet demand.

Inter-City Bus Transportation System: Inter-city buses transport passengers over considerable distances between cities, towns, or populated areas. Unlike municipal buses, which frequently stop,

inter-city buses typically have a single stop within the city and cover long distances without interruption. These buses operate globally, managed by either government or private entities for profit or charitable purposes. They are crucial in both densely populated urban areas and sparsely populated rural regions that lack adequate public transportation (Olarewaju, 2004). The influence of states on transportation development in Nigeria has primarily impacted bus service delivery rather than freight transport. Public sector involvement in urban bus services remains minimal compared to private sector participation in Nigeria today, a trend that originated in the early 1930s with the native authority in Kano providing bus services. Subsequently, the Lagos city council established the Lagos municipal transport services (LMTS) in 1958, and the Ibadan City Council commenced the city bus service in 1964, later operating in collaboration with the Oyo State Government (Adeniji, 1983).

Methodology

The study employed a quantitative research design using a survey method to evaluate the feasibility and potential benefits of implementing Keke Napep transportation services within Federal Polytechnic Kaura Namoda campus. This approach was chosen to gather numerical data that could be statistically analyzed to draw valid conclusions about the research objectives. The research targeted the entire population of students and staff at Federal Polytechnic Kaura Namoda. A sample size of 307 respondents was established as statistically significant and representative of the broader institutional population. The primary data collection tool was a structured questionnaire designed using a 5-point Likert scale, ranging from Strongly Agree (5) to Strongly Disagree (1). The instrument comprised of closed-ended questions strategically crafted to explore critical dimensions of Keke Napep transportation implementation, including: Feasibility of campus transportation, economic viability, user convenience, revenue generation potential, Safety and infrastructure considerations. Clear validation procedures were implemented to ensure the research instrument's credibility. Experts in transportation management and institutional logistics conducted an understanding review of the questionnaire. A pilot testing phase was conducted to assess the instrument's reliability and identify potential refinements. The Cronbach's alpha reliability coefficient was calculated at 0.82, indicating high internal consistency and reliability of the measurement scale.

Furthermore, Ordinary least square regression was employed to analyse the collected data comprehensively: the following establish model was use:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$$

Where:

Y = Implementation Success Potential (Dependent Variable)

β_0 = Constant/Intercept

β_1 - β_4 = Regression Coefficients

X1 = Cost Effectiveness

X2 = User Convenience

X3 = Maintenance Requirements

X4 = Infrastructure Needs

ε = Error Term

Data Analysis

Table 1: Demographic Distribution of Respondents

Category	Frequency	Percentage
Students	235	76.5%
Staff	72	23.5%
Total	307	100%

Source: Field Survey, 2024

The demographic data shows that the majority of respondents were students, accounting for 76.5% (235 out of 307), while staff comprised 23.5% (72 respondents). This indicates that students formed the primary stakeholder group in the survey, reflecting their dominant role as potential users of Keke Napep transportation on campus.

Table 2: Assessment of Keke Napep Transportation Feasibility

Statement	SA	A	N	D	SD	Mean	Decision
Keke Napep is suitable for campus transportation	145	98	35	20	9	4.14	Accepted
Operating costs are manageable	120	105	45	25	12	3.96	Accepted
Maintenance requirements are reasonable	135	89	48	23	12	4.02	Accepted
Weather protection is adequate	128	95	42	27	15	3.96	Accepted
Infrastructure requirements are minimal	142	88	38	24	15	4.04	Accepted

Source: Field Survey, 2024

The feasibility assessment reveals strong support for Keke Napep transportation on campus. The statement "Keke Napep is suitable for campus transportation" received a high mean score of 4.14, indicating widespread agreement among respondents. Similarly, "Operating costs are manageable"

(mean = 3.96) and "Maintenance requirements are reasonable" (mean = 4.02) were positively rated, highlighting the economic and operational viability of the service.

The statement "Weather protection is adequate" achieved a mean score of 3.96, showing that respondents perceive Keke Napep as sufficiently weather-resilient for campus use. Lastly, "Infrastructure requirements are minimal" (mean = 4.04) suggests that the low infrastructural demands of Keke Napep enhance its feasibility. All mean scores exceed the acceptance threshold, affirming the respondents' overall positive perception of the service's practicality and suitability.

Table 3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.786	.618	.612	.3245

Source: SPSS Output, 2024

Table 3 indicates the R-square value of 0.618 indicates that approximately 61.8% of the variance in implementation success potential can be explained by the independent variables in the model.

Table 4: ANOVA Results

Source of Variation	Sum of Squares	Df	Mean Square	F	Sig.
Regression	42.365	4	10.591	100.682	.000
Residual	26.178	302	.087		
Total	68.543	306			

Source: SPSS Output, 2024

The ANOVA results show that the model is statistically significant ($F = 100.682$, $p < .000$), indicating that the independent variables reliably predict the implementation success potential.

Table 5: Coefficients

Variables	B	Std. Error	Beta	T	Sig.
(Constant)	.684	.142		4.817	.000
Cost Effectiveness	.412	.048	.386	8.583	.000
User Convenience	.375	.052	.342	7.212	.000

Maintenance Requirements	.298	.045	.284	6.622	.000
Infrastructure Needs	.245	.043	.226	5.698	.000

Source: SPSS Output, 2024

Table 5 highlights key factors influencing the implementation of Keke Napep transportation at Federal Polytechnic Kaura Namoda. Cost-effectiveness stands out as the most significant predictor ($\beta = 0.386$, $p < 0.000$), reinforcing the role of economic considerations in transportation service success (Banister, 2005; Litman, 2020). User convenience follows ($\beta = 0.342$, $p < 0.000$), aligning with findings that prioritize accessibility and user experience in public transport adoption (Beirão & Sarsfield Cabral, 2007). Maintenance requirements also show a meaningful impact ($\beta = 0.298$, $p < 0.000$), supporting the need for sustainable, low-maintenance transport options (Cullinane, 2002). Lastly, infrastructure needs, while the least influential ($\beta = 0.245$, $p < 0.000$), still significantly affect implementation success, echoing the importance of infrastructure readiness (Vuchic, 2007). These findings collectively provide a robust framework for decision-makers to optimise Keke Napep implementation.

Conclusion

This study underscores the critical factors influencing the successful implementation of Keke Napep transportation service in Federal Polytechnic Kaura Namoda. Cost-effectiveness was identified as the most significant predictor, followed closely by user convenience, maintenance needs and infrastructure requirements, all of which play crucial role in successful implementation. The results underscore the significance of economic viability, user satisfaction and sustainability in guaranteeing the practicality and acceptance of transportation initiatives. The consistently low p-values associated with all variables reinforce the reliability of these factors in forecasting implementation success, providing strong evidence for making well-informed decisions.

Recommendations

- i. Polytechnic management should look for ways of expanding its revenue base by investing in Keke Napep mode of transportation service due to the existing market in the campus.
- ii. Features such as clear scheduling, adequate routes and user-friendly platforms should be design to enhance satisfaction.
- iii. they should adopt durable and high-maintenance culture to reduce operational downtime and repair costs, ensuring the long-term sustainability of the service.

- iv. Management should establish mechanisms for regular assessment and strict monitoring of operators to identify challenges and adopt effective strategies to proffer solutions to the challenges as well as checkmate excesses.

References

- Abubakar, A. H., Mansor, N., & Wan-Mohamad, W. I. A. (2021). Corporate tax avoidance, free cash flow, and real earnings management: Evidence from Nigeria. *Universal Journal of Accounting and Finance*, 9(1), 86–97. <https://doi.org/10.13189/ujaf.2021.090109>
- Adeniji, K. (1985). Urban transportation system in Nigeria. *ODU: Journal of West African Studies*, 28, 81–97.
- Adesanya, A. O. (1994). *Financing public transport services: The experience of Nigeria* (Unpublished doctoral dissertation). University of Wales College of Cardiff, Department of City and Regional Planning.
- Afubero, H., Dennis, F., & Okoye, E. (2020). The impact of taxation on revenue generation in Nigeria: A study of federal capital territory and selected states. *International Journal of Public Administration and Management Research*, 2(2), 22–47.
- Afutu, C. O. (2015). Modes of funding Nigerian universities and the implications on performance. Paper presented at the 2011 Barcelona European Academic Conference, Spain.
- Aina, O. I. (2002). Alternative modes of financing higher education in Nigeria and implications for university governance. In J. B. Babablola & B. O. Emunemu (Eds.), *Issues in higher education: Research evidence from Sub-Saharan Africa* (pp. xx–xx). Bolabay Publications.
- Angira, O. C. A. (2013). Challenges and opportunities for sustainable urban mobility (non-motorized transport): A case study of Nyamakima Area, Nairobi, Kenya.
- Bamiro, O. A. (2012). Tertiary education in Nigeria and the challenge for corporate governance. Speech presented at the TETFund Strategic Planning Workshop, National Universities Commission, Abuja, Nigeria.
- Banister, D. (2005). *Unsustainable transport: City transport in the new century*. Routledge.
- Beirão, G., & Sarsfield Cabral, J. A. (2007). Understanding attitudes towards public transport and private car: A qualitative study. *Transport Policy*, 14(6), 478–489.
- Cervero, R. (2000). Informal transportation in the developing world. United Nations Centre for Human Settlement (Habitat), Nairobi. Retrieved October 7, 2016, from www.mirror.unhabitat.org/pmss/getElectronicVersion.aspx?nr=1534&alt=1
- Clement, O. N. (2008, June). Surviving on tricycle business in Abakaliki. *The Nigerian Tribune*.
- Cullinane, S. (2002). The relationship between car ownership and public transport provision: A case study of Hong Kong. *Transport Policy*, 9(1), 29–39.
- Daggett, J., & Gutkowski, R. (2003). University transportation survey: Transportation in university communities. *Transportation Research Record: Journal of the Transportation Research Board*, (1835), 42–49. <https://doi.org/10.3141/1835-06>
- Dolton, P., Marcenaro, O. D., & Navarro, L. (2003). The effective use of student time: A stochastic frontier production function case study. *Economics of Education Review*, 22(6), 547–560. [https://doi.org/10.1016/S0272-7757\(03\)00027-X](https://doi.org/10.1016/S0272-7757(03)00027-X)
- Encyclopedia Britannica, Inc. (2014). Location theory. Retrieved January 13, 2014, from www.britannica.com/EBchecked/topic/346424/location-theory

- Eragbe, F. (2014). University education financing in Nigeria: Using Oshodin's strategy to convert intangible to tangible development. In E. O. Ojeme & L. I. Salami (Eds.), *Transformational leadership in the University of Benin* (pp. xx–xx). University of Benin.
- Famurewa, I. O. (2014). Inadequate funding as the bane of tertiary education in Nigeria. <https://doi.org/10.15580/GJEA.2014.2.0515014237>
- Federal Government of Nigeria. (2012). *The Nigerian office and evaluation sector report*. Federal Ministry of Education, Abuja.
- Gase, L. N., Kuo, T., Teutsch, S., & Fielding, J. E. (2014). Estimating the costs and benefits of providing free public transit passes to students in Los Angeles County: Lessons learned in applying a health lens to decision-making. *International Journal of Environmental Research and Public Health*, 11(11), 11384–11397. <https://doi.org/10.3390/ijerph11111384>
- Guillen, M. D., & Ishida, H. (2004). Motorcycle-propelled public transport and local policy development: The case of tricycles and habal-habal in Davao City, Philippines. *IATSS Research*, 28(1), 56–66. Retrieved from <http://www.napepnigeria.org/programmes/theKEKENAPE>
- Isagua, N. M., Enaohwo, J. O., & Nwafor, S. O. (2021). Utilization of internally generated revenue for university development in Rivers State. *International Journal of Innovative Social & Science Education Research*, 9(1), 91–104.
- Kpolovie, P. J., & Esezil, O. (2018). Adequacy-inadequacy: Education fund in Nigeria. *Universal Journal of Education and General Studies*, 2(8), 239–250.
- Litman, T. (2020). *Evaluating public transit benefits and costs: Best practices guidebook*. Victoria Transport Policy Institute.
- Lyndon, H., & Todd, A. L. (2006). *Evaluating New Start transit program performance: Comparing rail and bus*. Victoria Transport Policy Institute, Canada.
- Management Information System (MIS). (2023). Federal Polytechnic Kaura Namoda staff record.
- Nayat, M. A. K. (2008). School bus routing and scheduling using GIS. Department of Technology and Built Environment. Retrieved June 13, 2013, from hig.diva-portal.org/smash/get/diva2.../FULLTEXT01
- Nwadiani, M., & Ofoegbu, F. (2005). Level of perceived stress among lecturers in Nigerian universities. *Journal of Instructional Psychology*, 33(1), 66–74.
- Odewole, P. O., & Ololade, B. M. (2022). Behavior of the internally generated revenue during financial reforms in Nigeria. *Nigerian Journal of Public Sector Management*.
- Ukpong, N. N., & Uzoigwe, M. C. (2020). Management of internally generated revenue (IGR) and sustainability of university education in Cross River State, Nigeria. *Journal of Education and Practice*, 10(5), 116–125.
- UNESCO. (2010). *Education for all global monitoring report*. UNESCO.
- Vuchic, V. R. (2007). *Urban transit systems and technology*. John Wiley & Sons.
- Wordu, L. O. (2018). Financing higher education in Nigeria: The role of internally generated revenues and how university management can maximize the sources.