

Smart Mobility: A Citizen's Perspective

PEDRO IVO SILVA DA NÓBREGA
UNIVERSIDADE FEDERAL DO RIO GRANDE DO SUL (UFRGS)

DAIANE LIPPERT TAVARES
UNIVERSIDADE FEDERAL DO RIO GRANDE DO SUL (UFRGS)

ALISSON DA SILVA LIMA

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Introdução

Rapid urban growth and the search for sustainable solutions have driven the concept of Smart Cities (SC), which aims to optimize urban services, promote sustainable development, and improve citizens' quality of life, in which urban mobility plays a fundamental role.

Problema de Pesquisa e Objetivo

This study aimed to analyze the Smart Mobility (SM) dimension in Campina Grande, based on the principles of Smart City (SM) according to the residents' perspective.

Fundamentação Teórica

Despite its relevance, Smart Mobility still lacks a single, universally accepted definition (Brownrigg Gleeson et al., 2025; Nam & Pardo, 2011), reflecting the complexity of the topic and the need for further research. Both the concept of "Smart City" and "Smart Mobility" lack a single, universally accepted definition, reflecting the complexity and multifaceted nature of these domains, which range from technological infrastructure to citizen participation and sustainability aspects (Nikitas et al., 2020; Dameri, 2013).

Metodologia

A quantitative, exploratory, and descriptive approach was employed, utilizing online questionnaires to assess the importance and performance of 23 variables related to SM. The analysis was conducted using IBM SPSS Statistics software, using the Importance-Performance Analysis Matrix (IPAM).

Análise dos Resultados

The results revealed five priority variables that require immediate attention to improving performance, in addition to nine other variables that performed well and align with the population's expectations. Among the challenges, areas such as Infrastructure for Electric Vehicles (V17) and Intelligent Parking Management (V6) stand out. The areas with the best performance include Digital Governance (V19) and Intelligent Surveillance and Road Safety (V10).

Conclusão

The results indicate that a more effective alignment between citizens' expectations and public policies is essential for the implementation of SM solutions. These results contribute to the literature on SM and SC, as well as providing input for public policy makers and managers, with a view to improving urban mobility and the sustainable development of more connected and sustainable cities.

Contribuição / Impacto

The research also offers a practical perspective on the context of Campina Grande-PB, which is characteristic of medium-sized cities and developing economies. The comparison with other global realities suggests that Campina Grande-PB still needs significant adaptations for SM to become a viable and functional reality, as well as providing perspective for cities with similar realities.

Referências Bibliográficas

- A. Arroub, A., Zahi, B., Sabir, E., & Sadik, M. (2016). A literature review on Smart Cities: Paradigms, opportunities and open problems. In 2016 IEEE/ACM International Conference on Wireless and Mobile Technologies for Smart Cities (Wireless&Mobile) (pp. 1-6). IEEE. doi: 10.1109/WINCOM.2016.7777211.
- Barbosa, W., Prado, T., Batista, C., Câmara, J. C., Cerqueira, R., Coelho, R., & Guarieiro, L. (2022). Electric vehicles: Bibliometric analysis of the current state of the art and perspectives. *Energies*, 15(2), 395. <https://doi.org/10.3390/en15020395>
- Boley, B. B., McGehee, N. G., & Hammett,