

# Crypto-Driven Solutions: Transforming Mobility through Blockchain for Smartness and Sustainability

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**Abstract.** This paper explores the integration of crypto-based blockchain interventions in evolving smart and sustainable mobility systems. The research mainly focuses on lower-income countries and limited resources settings. It investigates different challenges of transportation problems and negative environmental impact. The research highlights the impact of successful implementations of blockchain technologies to enhance operational efficiency for current transportation systems through systematic literature review and comparative case study analysis. It proposes a conceptual framework that synthesizes various insights from previous practices. Findings aim to provide applicable recommendations for decision makers to facilitate integrating blockchain technology with urban mobility in lower-income countries, with special emphasis on the potential of crypto-enabled solutions greener urban future. Insights in the presented work target decision-makers like urban planners, technologists and policy makers, presenting a structured guide for innovative crypto-solutions to enhance urban mobility systems.

**Keywords:** Blockchain technology; Smart mobility; Smart sustainable solutions.; Smart cities

