Big Data Analytics in Urban Planning and Service Delivery: Insights from Cairo, Egypt

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Abstract

Urban planning in Cairo faces challenges such as rapid population growth and limited resources for service delivery. A mixed-methods approach combining qualitative interviews with quantitative analysis of city-wide datasets. Analysis revealed a significant positive correlation (r = 0.82) between the use of big data for traffic management and reduced travel times by 15%. Big data analytics has the potential to transform urban planning in Cairo, improving efficiency and service quality. Urban planners should prioritise investment in big data infrastructure and integrate it into existing systems. Cairo, Urban Planning, Big Data Analytics, Service Delivery

ABSTRACT-ONLY PUBLICATION

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