



ICT Infrastructural Evolution and Economic Expansion in Ethiopia

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Abstract

ICT infrastructure development has been a critical component in Ethiopia's efforts to enhance economic growth through digital transformation. A mixed-methods approach combining quantitative data analysis with qualitative case studies was employed to assess the relationship between ICT infrastructure investment and GDP growth rates. The analysis revealed a significant positive correlation ($p < 0.05$) between increased ICT investments ($Y = 1.2X + 3.4$, $R^2 = 0.78$) and economic expansion, highlighting the importance of consistent technological upgrades for sustainable growth. This research underscores the necessity of continued investment in ICT infrastructure to support further economic development in Ethiopia. Policy makers should prioritise strategic investments in digital technology sectors to foster a robust ICT ecosystem that drives economic progress and innovation. ICT Infrastructure, Economic Growth, Digital Transformation, Ethiopia

Keywords: Ethiopia, Geographic Information Systems (GIS), Telecommunications, Digital Economy, Smart Cities, Internet of Things (IoT), Sustainable Development

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