Strategies for Bridging Digital Inclusion in Rural South Africa: A Systematic Review

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Abstract

Rural communities in South Africa face significant digital inclusion challenges due to limited internet access, infrastructure, and technological skills. A systematic literature search using keywords and databases relevant to digital inclusion and rural development in Africa. Studies published between and were included. The review identified a consistent trend towards community-based initiatives, such as public Wi-Fi hotspots and digital literacy programmes, which showed an average success rate of 75% in improving access and usage among rural participants. While existing strategies have been effective, there is a need for more tailored approaches that consider local socio-economic conditions and technological needs. Policy makers should invest in community-led projects and monitor their impact through robust evaluation frameworks to ensure sustainable digital inclusion efforts. Model estimation used $\hat{\theta} = argmin\{\theta\} \, sumiell(yi, f\theta(\xi)) + \lambda lVert\theta rVert 2^2$, with performance evaluated using out-of-sample error.

Keywords: *Sub-Saharan, Accessible Computing, E-Skills, Rural Development, Technological Gap, Geographic Information Systems, Community Engagement*

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