



Strategising Digital Access in Rural South Africa: Innovations for Bridging Inclusion Gaps

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Abstract

Digital inclusion in rural South Africa is a critical challenge due to geographical barriers and socio-economic disparities. A mixed-methods approach was employed, integrating qualitative interviews with quantitative surveys to assess current digital access levels and identify gaps. Among the surveyed communities, only 30% reported reliable internet connectivity, highlighting significant disparities in access and usage rates. The analysis underscores the urgent need for targeted interventions combining technological upgrades and community education initiatives. Policy recommendations include prioritising rural broadband expansion, fostering local entrepreneurship hubs, and implementing digital literacy programmes to bridge inclusion gaps effectively. digital inclusion, rural South Africa, technology infrastructure, community engagement Model estimation used $\hat{\theta} = \operatorname{argmin}\{\theta\} \operatorname{sumiell}(y_i, f\theta(\xi)) + \lambda \operatorname{Vert}\theta \operatorname{rVert} 2^2$, with performance evaluated using out-of-sample error.

Keywords: *Sub-Saharan, Africanization, DigitalLiteracy, Glocalization, RuralDevelopment, MultimodalAnalysis, CommunityEmpowerment*

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