



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

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Abstract

Rural areas in South Africa often face significant digital inclusion gaps due to limited internet access and technological infrastructure. A comprehensive search of academic databases was conducted using specific keywords related to digital inclusion in rural settings. Studies were filtered based on quality and relevance, with data synthesized through thematic analysis. The findings indicate that community-led initiatives have demonstrated the most effective strategies for bridging the digital inclusion gap, particularly when involving local leaders and leveraging existing resources. This review highlights the importance of collaborative efforts in addressing rural digital exclusion, underscoring the need for tailored approaches based on local contexts. Recommendations include fostering partnerships between government bodies, non-governmental organizations (NGOs), and community groups to implement feasible and sustainable solutions. Model estimation used $\hat{\theta} = \underset{\theta}{\operatorname{argmin}} \{ \theta \} \operatorname{sumiell} (y_i, f\theta(\xi)) + \lambda I \operatorname{Vert} \theta \operatorname{rVert}^2$, with performance evaluated using out-of-sample error.

Keywords: *Digital Divide, Rural Development, Technological Infrastructure, Access Studies, Socio-Technical Systems, Empirical Research, Policy Analysis*

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