

## **Perceptions and Effectiveness of Mobile Technology Among Extension Workers in Kwara State: Implications for Digital Extension Delivery in Nigeria.**

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### **Abstract**

This study investigated the perceptions and effectiveness of mobile technology among Extension workers in Kwara State, Nigeria. Using purposive sampling, sixty-seven Extension workers were selected for the study. Primary data were collected with the aid of a structured questionnaire and analysed using descriptive statistics (frequency counts, means, and charts). The Kruskal-Wallis test was employed to examine the formulated hypotheses. The results revealed that mobile phones were predominantly used for scheduling meetings with farmers to facilitate agricultural information dissemination (Mean = 2.79), exchanging SMS with researchers and farmers regarding pertinent agricultural practices (Mean = 2.79), and submitting daily activity reports to supervisors (Mean = 2.73). Mobile technology was mostly effective for scheduling farmers' meetings (Mean = 2.75), SMS communication on agricultural matters (Mean = 2.52), and accessing diverse information such as weather updates and market prices (Mean = 2.51). The identified constraints to effective mobile technology usage included limited network coverage (WMS = 2.52), irregular electricity supply for device charging (WMS = 2.48), and absence of institutional policies regulating mobile phone use within extension service delivery (WMS = 2.45). The Kruskal-Wallis test revealed no significant differences in effectiveness of mobile phone ( $\chi^2 = 0.563$ ;  $p > 0.05$ ) or extent of usage ( $\chi^2 = 0.327$ ;  $p > 0.05$ ) across zones. Conversely, perceptions differed significantly among zones ( $\chi^2 = 6.453$ ;  $p < 0.05$ ). It is recommended that extension institutions implement targeted training and workshops in zones exhibiting lower perception scores to bridge the skills gap and enhance mobile technology adoption for effective extension service delivery.

**Key Words:** *Effectiveness, Extension Workers, Digitalization, Perception.*