

ABSTRACT

The application of information and communication technology (ICT) in community development projects has great potential to improve societal well-being. However, challenges related to sustainability, community engagement, and the lack of structured guidelines often hinder the effectiveness of these projects. This research aims to develop Action design research (ADR) as the foundation for designing a comprehensive ICT-based community development guideline using a qualitative approach with grounded theory methodology. The designed guideline will focus on the development of technology with a Technology Readiness Level (TRL) between levels 3 and 6, reflecting the stages of applied research. The ADR method offers a collaborative framework that integrates design, action, and iterative Evaluation, enabling relevant and sustainable solutions. This study is conducted in three villages as case studies: Alamendah Village, Citeureup Village, and Lengkong Village, using a qualitative approach involving in-depth interviews. The research findings produce a guideline that outlines essential steps, from identifying community needs, designing solutions, implementation, to continuous Evaluation. This guideline is designed to enhance community engagement, ensure the relevance of solutions, and create a lasting impact. The primary contribution of this research lies in the development of a practical guide that can be utilized by researchers, practitioners, and other stakeholders to implement adaptive and effective ICT-based community development projects. By integrating ADR principles, this study is expected to address the challenges of sustainability and relevance in technology-based community development.

Keywords: Action design research (ADR), ICT-based community development, Guideline Design