ABSTRACT

The development of Information and Communication Technology (ICT) has provided significant opportunities to support community development. However, its implementation still faces various challenges, including the lack of theory-based guidelines to ensure program effectiveness and sustainability. This study aims to formulate a best-practice framework for university-led community development based on Technical Action Research (TAR) with the utilization of Information Technology, using case studies of community development programs in Indonesia. The research employs the Grounded Theory method, which enables the inductive development of theory based on empirical field data. Data were collected through in-depth interviews with 23 stakeholders, including lecturers, students, and target community members from three villages (Citeureup, Lengkong, and Alamendah), as well as through literature reviews and direct observations of community development program implementation. The analysis process followed the stages of open coding, axial coding, and selective coding to identify patterns, key themes, and relationships among emerging categories. The findings indicate that the success of ICT implementation in community development is influenced by active community engagement, iterative solution development cycles, and data-driven approaches to ensure program sustainability. The resulting TAR model consists of five key stages: Problem Investigation, Treatment Design, Design Validation, Implementation, and Implementation Evaluation. This model emphasizes the importance of community involvement in every stage, as well as iterative processes that allow continuous refinement of ICT-based solutions. Through this approach, the study contributes a conceptual model based on TAR that can serve as a practical guide for academics, practitioners, and policymakers in optimizing ICT utilization for effective and sustainable community development.

Keywords: Information and Communication Technology, Technical Action Research, Grounded Theory, Community Development