## ABSTRACT

The low adoption rate of digital technology in the agricultural ecosystem presents a major challenge in developing the Agreeculture platform by PT. Telkom Indonesia. This study aims to analyze the factors hindering agribusiness digitalization, design a suitable service design approach, and develop customer experience strategies to enhance the acceptance of digital technology. Using the Multilevel Service Design (MSD) framework, which enables the integrated development of service offerings at three hierarchical levels-service concept design, service system design, and service encounter design through Services Experience Blueprinting—this study incorporates in-depth stakeholder interviews, focus group discussions, and service prototype testing. The findings reveal that the main barriers include low digital literacy, limited infrastructure in rural areas, and a lack of education and technical assistance for farmers. The application of MSD successfully created service designs tailored to local needs, user-friendly interfaces, and accessible features. The resulting service prototypes enhanced farmers' trust in digital technology. Recommended strategies include continuous digital literacy training, the development of community-based support systems, a simplified platform design, and cross-sector collaboration to build a sustainable digital ecosystem. The study concludes that digital transformation in agribusiness requires a holistic and user-centered approach. The findings contribute significantly to the development of an integrated digital agricultural ecosystem, supporting the sustainability of the agricultural sector in Indonesia.

**Keywords**: Agribusiness Digitalization, Customer Experience, Multilevel Service Design, Agreeculture, Agricultural Ecosystem