

# ABSTRACT

Understanding rural development involves improving life in rural areas across economic, social, cultural, and political aspects. Initially, rural development in developing countries like India focused on grassroots innovations by entities such as NGOs. These organisations adapted existing rural practices in areas like craft production and agriculture. This method succeeded but faced limitations, mainly because these changes were too localised and couldn't be expanded due to the need for extensive external resources. With the rise of digital technology, potential for more widespread solutions to rural development challenges. However, experts caution that merely adopting digital tools, like e-commerce platforms, without considering the unique local social contexts might lead to ineffective solutions. In response to these issues, this doctoral thesis focuses on a pivotal concern in rural development, especially in developing nations like India.

The essence of this doctoral thesis lies in an innovative approach to these longstanding challenges through the development and implementation of a community-driven e-commerce platform tailored for rural artisans, NCoRe. This platform emerges from comprehensive research that integrates local insights, ensuring the technology is not only efficient but also resonates with its users.

The foundation of this doctoral thesis is the belief that technology in rural development should be intrinsically linked to the community it serves. The research begins with an in-depth analysis of rural artisan communities, identifying key challenges they face, such as restricted market access, logistical issues, and socio-economic barriers. NCoRe is designed to focus on accessibility, functionality, and cultural relevance, aiming to address these challenges while being artisan-friendly.

Much of the thesis explores how feedback and opinions circulate on this community-centric e-commerce platform. It emphasises the importance of feedback loops, enabling artisans and consumers to continually provide input, facilitating the platform's ongoing evolution to stay relevant and user-focused.

Furthermore, this research innovatively integrates blockchain technology into the platform. This strategic addition aims to digitise and secure artisans' assets, offering a robust, transparent, and reliable online transaction system. By adopting blockchain, the platform enhances security and efficiency and sets a new benchmark in rural development technology.

In conclusion, the thesis demonstrates how a collaboration of community-led design, technological advancement, and continuous user engagement can transform the economic landscape for rural artisans. It significantly broadens their market exposure, bolsters economic stability, and presents a sustainable model for rural advancement. The findings extend beyond the immediate context, providing valuable insights and a scalable method for integrating marginalised communities into the global digital economy. This research is particularly pertinent for future initiatives utilising technology in rural settings, highlighting the importance of cultural sensitivity, scalability, and adaptability in diverse rural environments.