

## VILLAGE ECONOMIC DEVELOPMENT THROUGH THE DIGITALIZATION OF TRADITIONAL GROCERY STORES IN PALUR KULON

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**Abstrak:** Digitalisasi toko kelontong tradisional merupakan pendekatan transformatif untuk mendorong pembangunan ekonomi di daerah pedesaan. Studi ini berfokus pada Palur Kulon, sebuah dusun di Kabupaten Sukoharjo, di mana toko-toko tradisional berjuang melawan inefisiensi yang berasal dari metode operasional manual dan terbatasnya adopsi teknologi digital. Dengan menggunakan aplikasi Loyverse POS, inisiatif ini bertujuan untuk meningkatkan operasional toko, meningkatkan manajemen keuangan, dan meningkatkan daya saing di tengah dinamika ritel modern. Penelitian ini mengadopsi metode kualitatif deskriptif partisipatif, yang melibatkan wawancara, observasi, dan lokakarya dengan pemilik toko lokal. Hasilnya menunjukkan peningkatan signifikan dalam akurasi transaksi, manajemen inventaris, dan pencatatan keuangan, yang menunjukkan potensi perangkat digital untuk mendorong efisiensi dan keberlanjutan bisnis. Studi ini menggarisbawahi peran transformasi digital sebagai katalisator pertumbuhan ekonomi lokal, yang menawarkan model yang dapat diskalakan untuk memberdayakan UMKM pedesaan.

**Kata Kunci:** Digitalisasi, Toko Kelontong Tradisional, POS Loyverse, Pembangunan Ekonomi.

**Abstract:** The digitalization of traditional grocery stores represents a transformative approach to fostering economic development in rural areas. This study focuses on Palur Kulon, a hamlet in Sukoharjo Regency, where traditional stores struggle with inefficiencies stemming from manual operational methods and limited adoption of digital technologies. Employing the Loyverse POS application, this initiative aims to improve store operations, enhance financial management, and increase competitiveness amidst modern retail dynamics. The research adopts a participative, descriptive qualitative method, involving interviews, observations, and workshops with local store owners. Results indicate significant improvements in transaction accuracy, inventory management, and financial record-keeping, demonstrating the potential of digital tools to drive business efficiency and sustainability. This study underscores the role of digital transformation as a catalyst for local economic growth, offering a scalable model for empowering rural MSMEs.

**Keywords:** Digitalization, Traditional Grocery Stores, Loyverse POS, Economic Development.

## INTRODUCTION

The development of village economies is a vital step in supporting the achievement of sustainable development goals, particularly in the area of “Decent Work and Economic Growth” (SDGs). This goal emphasizes the need to improve productivity, promote inclusive economic growth, and create decent and sustainable jobs. Palur Kulon, located in Palur Village, Mojolaban Subdistrict, Sukoharjo Regency, holds significant potential for developing the village economy through the micro, small, and medium enterprise (MSME) sector. However, traditional grocery stores in this area face various challenges, including low operational efficiency due to manual record-keeping and minimal utilization of digital technology, which results in limited competitiveness amidst modern market competition (Pameling, et.al, 2024).

Based on an initial survey conducted in August 2024, approximately 90% of grocery stores in Palur Kulon still rely on manual recording methods, while only 10% of store owners understand the benefits of digital cashier applications. This situation not only hampers transparent and efficient financial management but also restricts the ability of grocery stores to compete with minimarkets that have adopted digital systems. The digitalization of grocery stores through the use of the Loyverse POS application serves as one solution to enhance operational efficiency and access to real-time financial data. Loyverse POS is designed to simplify inventory management, transaction recording, and sales analysis within a single Android and iOS-based platform, making it highly relevant for small MSMEs (Sitio, et.al., 2023).

The selection of Palur Kulon as the location for this service initiative is based on several strategic considerations. This area has substantial potential for economic development through MSMEs, but low digital literacy among grocery store owners poses a major obstacle. Furthermore, intensive assistance in implementing technology such as Loyverse POS is expected to bring about social changes, including increased digital literacy, business efficiency, and community income. This transformation can be conceptualized through the lens of technological determinism, which posits that technological advances are the primary drivers of societal and behavioral change. Moreover, the development of traditional grocery stores through digitalization can serve as a relevant economic empowerment model that can be replicated in other areas. This initiative aligns with the view that digital technology is a key catalyst for enhancing the sustainability and competitiveness of MSMEs in the modern era.

**RESEARCH METHODS**

This study uses a qualitative approach with descriptive techniques and participatory methods through community service activities. The qualitative descriptive approach aims to describe and explain phenomena in the Palur Kulon community, providing in-depth insights into residents' behaviors, motivations, and perceptions regarding the digitalization of marketing and financial management using the Loyverse POS application. This method enables comprehensive investigation into how technological advancements influence local life, particularly in terms of village development and economic growth. Additionally, this approach facilitates a detailed analysis of the organizational environment, including the assessment of small entrepreneurs' objectives, thereby providing a comprehensive understanding to effectively integrate sustainability principles into the company's strategic posture (Barbosa, et. al, 2020).

The research focuses on four minimarkets in Palur Kulon: Korean Store, Mrs. Pur's Store, Rochmad Store, and Ahsan Store. These store owners, directly involved in daily business operations impacted by digitalization, were chosen as research subjects. Actively engaging them allows the study to explore their experiences and perspectives on the benefits and challenges of using Loyverse POS. This focus provides unique insights into how digitalization affects small businesses, contributing to local economic development.

Data collection involved multiple methodologies, including interviews, observations, and surveys. In-depth interviews with store owners explored their perspectives on digital business operations and financial management. Observations assessed the baseline conditions of the stores prior to implementing digital tools such as transaction recording systems, inventory management, and financial reporting. Surveys with open and closed-ended questions provided insights into the owners' activities and attitudes toward digitalization. Additional documentation, including images, videos, and historical materials, supplemented the data and provided contextual analysis. Observations also examined consumer behaviors in grocery store transactions, such as preferences for cash or non-cash payments, helping identify store needs.

Data analysis used a thematic approach, beginning with data reduction to summarize and categorize raw data from interviews, observations, and surveys based on recurring themes and patterns. The summarized data was then organized visually in tables, graphs, and diagrams to simplify interpretation. Conclusions were drawn by identifying key themes on the impact of digitalization on store operations, financial management, and consumer behavior, with

findings cross-verified against documentation and FGD results to ensure reliability and validity.

Digital transformation—both internally through resource utilization and dynamic capabilities, and externally through structural changes and new forms of value creation—is critical for local economic development. As Kraus, et. al., (2020) highlight, adopting tools like Loyverse POS enhances operational efficiency and value creation for small businesses. For villages like Palur Kulon, embracing such technology not only improves business operations but also contributes to broader economic growth and development within the community.

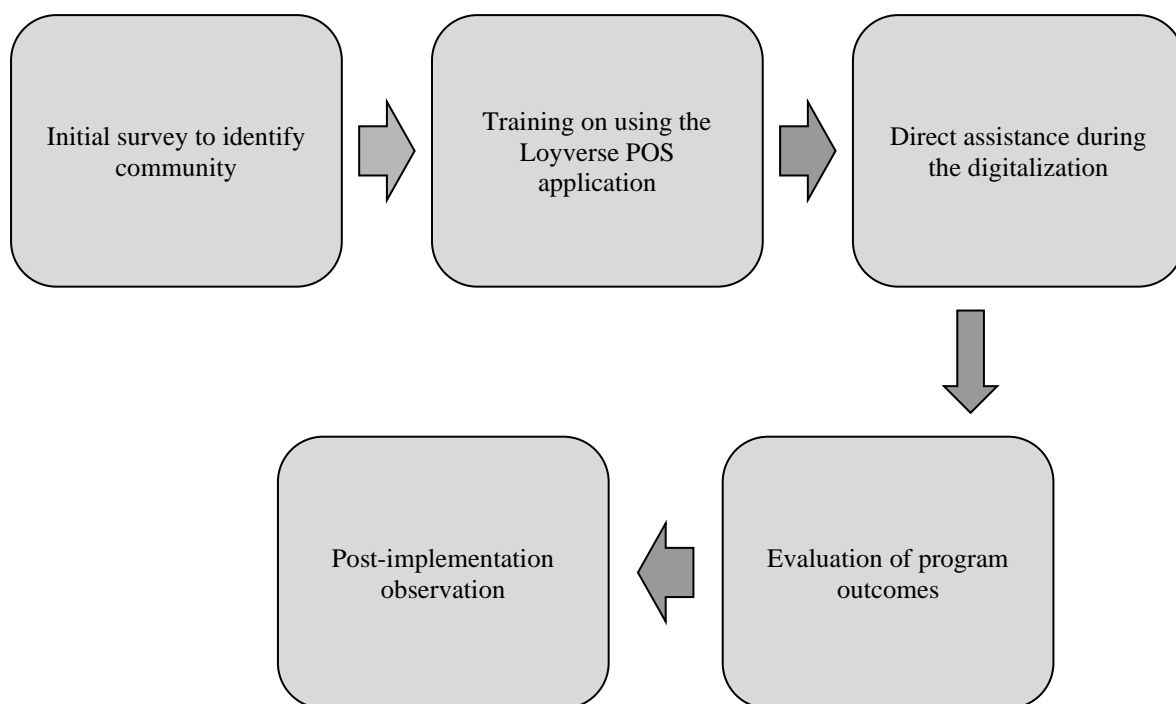


Figure 1. Program Implementation Flowchart

## RESULTS AND DISCUSSION

A community service activity with the theme of local economic development through the digitalization of small grocery stores was carried out in several stages. The first stage involved conducting an initial survey to identify the needs of grocery store owners and the challenges in their business operations. The findings revealed that the stores lacked proper financial records, making it difficult for owners to track profits, losses, and daily income. Additionally, they were unaware of out-of-stock items and the list of sold products. This situation hindered the stores from monitoring the progress of their businesses effectively.



Figure 2. Initial Survey

To address the problems faced by small grocery stores, we carried out several activities aimed at resolving these issues. In the second stage, we conducted a workshop with the theme of enhancing the understanding of traditional grocery stores about digitalization using the Loyverse POS application. During the workshop, we explained the benefits and functions of the features available in the application. Additionally, several theoretical aspects of digitalization were also presented. This activity focused primarily on building conceptual and theoretical understanding before moving on to practical implementation.



Figure 3. Digitalization Workshop

In the third stage, we conducted regular mentoring sessions twice a week at each grocery store. These sessions focused on implementing digitalization through the use of the Loyverse POS application. Traditional grocery store owners were guided in entering stock and product prices into the application, using digital cash registers, creating store logos and identities,

issuing receipts for transactions, and analyzing financial records that are automatically logged in the application.



Figure 4. Implementation Mentoring

At this stage, store owners were able to track out-of-stock items in real time without the need for manual counting. Daily transactions were recorded, enabling the stores to monitor daily income and determine profit or loss. Financial records also became more organized and structured. As a result of this mentoring, the management and operations of traditional grocery stores became more systematic and transparent, particularly in tracking daily income and understanding the store's profit or loss. Finally, in the last stage, we conducted an evaluation to identify the challenges and benefits experienced by each grocery store. The results from the various stages were collected through questionnaires distributed to each store.

Table 1. Final Survey Results

No	Uraian	Nilai	Capaian (%)
1	The use of the Loyverse POS digital application facilitates transactions	5	90
2	Financial records are more structured with the use of the Loyverse POS application	5	90

3	Digitalization using the Loyverse POS application is suitable and beneficial for traditional grocery stores	5	90
4	Assistance provided makes it easier to reorganize the operations of traditional grocery stores	5	90
5	The use of the Loyverse POS application facilitates the development of strategies to increase income for traditional grocery stores	4	80

The results of this activity demonstrated several significant improvements for grocery stores. The digitalization process carried out through the Loyverse POS application provided ease in conducting transactions and ensured more accurate inventory management. Financial records also became more organized and structured, enabling store owners to better manage their business operations. This digital transformation proved to be highly beneficial, offering numerous advantages to grocery stores in streamlining their work processes. Consequently, store operations became more effective and efficient, allowing owners to focus more on overall business development.

## **KESIMPULAN**

The community service through mentoring digitalization in traditional grocery stores demonstrates the importance of applying information technology in managing small businesses. The Loyverse POS application enhances operational efficiency by facilitating real-time management of stock and transactions, supporting management information systems theory and innovation theory. The grocery store, previously relying on manual methods, is now more transparent, structured, and able to increase customer trust and growth opportunities. Digitalization also improves operational management, which is crucial for effective decision-making. Overall, digital transformation is a critical step for grocery stores to adapt to the modern market and achieve business sustainability. It is recommended that other grocery stores adopt similar technology to improve operational efficiency, with further training to optimize its implementation in small business management and local economic development

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