

Riyanthi
Angrainy Sianturi

Designing a Technology Model for Micro, Small and Medium Enterprises in the Lake Toba Region, Indonesia

Telephone
+6281375215693

Email
riyanthias@gmail.com

Website
<https://riyanthisianturi.com/>

Background

have an **educational background** and **having led various research** and community projects related to Micro, Small, and Medium Enterprises (MSMEs) around Lake Toba region allow me identified the gap between technology and MSMEs:

People understand technological advances but also have limitations in utilizing them for business development

through a study that identified the need for better "readiness of tourism actors in digitalization" in the Lake Toba area, showing a lack of readiness among MSMEs to adopt digital tools effectively.

Objective

To overcome the gaps mentioned previously and to optimize the effectiveness of the use of technology in developing MSMEs, a solution will be created that will use a two-way approach:

Application Model

Design a technology application that assists MSME owners throughout their entire business process, from production to reaching consumers.

Policy Recommendations

Develop policy suggestions for different stakeholders (village administration, government departments) to support the implementation and use of the application model within the MSME community.

Methodology

Problem identification

Define and understand the challenges faced by MSMEs in Lake Toba

Model Design

Design an application model that supports MSME business processes. Define features, prototype the application, and determine infrastructure and policy needs.

Research Design

Determine the research approach, data collection methods, data analysis techniques, and model design/evaluation methods.

Model Evaluation

Evaluate the application model with MSME representatives from the Lake Toba region. Conduct prototype evaluation and focus group discussions to gather feedback.

Data Collection

Collect data using surveys, interviews, and observations from MSMEs, government officials, and experts. Conduct fieldwork to gather data directly from stakeholders.

Model Improvemet and Coonclusion

Refine the application model based on evaluation results. Summarize research activities and present the final technology model.

Data Analysis

Analyze collected data to understand MSME needs regarding technology use. Identify patterns, trends, and key insights from the data.

Practical Implications

Target : The application model is **designed for Micro, Small and Medium Enterprises (MSMEs)** around Lake Toba region

Implementation Stages

- Pilot project in selected villages and districts.
- Partner with ITDEL (potentially an IT development agency) for app development.
- Implement government-approved policies to support the model's effectiveness.
- Evaluate and optimize the model within a set timeframe.

Success Measurement

- Increased development for MSMEs in the pilot areas.
- Model optimization based on evaluation results.
- Policy adjustments to ensure user adoption and model effectiveness.

Scaling Up

- Successful implementation in pilot areas paves the way for expanding the application model to all regions around Lake Toba.
- Government cooperation is crucial for equitable distribution and ongoing monitoring.

National Impact

- Wider adoption across Indonesia promotes sustainable growth for MSMEs in the tourism sector.
- Government support strengthens the model's sustainability, solidifying the role of MSMEs in Indonesia's economic landscape.