

## 1.1 Objectives of the Study

The main objective of this study is to develop a Multi-Tenant POS and Inventory Platform with Self-Checkout Support for MSMEs in Albay that is designed to address the inefficiencies in inventory operations, manual processes and transactions with web application that will allow customers to checkout items among Micro, Small and Medium Enterprises (MSMEs) in Albay with the aim of enhancing business efficiency through digitalization.

Specifically, this study aims to:

1. Develop a mobile-friendly web application with the following features:
  - a. A responsive web-based interface that allows customers to scan products barcode, manage shopping cart through the web app, and complete transactions;
  - b. Customers can choose to pay using either cash or online payment option;
  - c. To streamline the transaction by allowing customers to review purchases through a digital counter with minimal waiting time.
2. Develop a cashier and admin interface with the following features:
  - a. Allow cashiers to process transactions by scanning a QR code generated by the customer after checking out;
  - b. Integrate real-time inventory management that tracks stock levels, low inventory and facilitates easy product updates;
  - c. Provide detailed sales and inventory reports for better monitoring of business performance.
3. Evaluate the performance of the eKahera System by following the ISO /IEC 25010 Software Quality Standard.
  - a. Functional Suitability
  - b. Performance Efficiency
  - c. Compatibility
  - d. Interaction Capability
  - e. Reliability
  - f. Security
  - g. Maintainability
4. Deploy the system as an open-source platform with potential future monetization through premium services and subscriptions.