**CHAPTER I**

**INTRODUCTION**

**Rationale of the Study**

The Friendly Mart Ordering and Delivery Navigation with SMS Notification and Chatting System is a digital platform designed to make grocery shopping easier. It allows customers to order products online, navigate deliveries, receive SMS updates, and chat directly with store staff. It also helps management by providing tools for order tracking, and business reports.

Friendly Mart Polomolok, established in 2010, has become one of the main grocery stores in the town. It has served residents for years by offering food and household items. As Polomolok continues to grow, the store needs to keep up with modern ways of serving customers.

At present, Friendly Mart faces several problems. Inventory is still managed manually, customers do not always get order updates, and there is no real-time communication channel for questions. These issues cause confusion, order delays, and lower customer satisfaction. The store also lacks business analytics to understand sales and customer behavior.

The proposed system solves these problems by sending SMS updates, providing real-time chat support, and offering order tracking and reports. With this, Friendly Mart can improve service, reduce errors, and build stronger trust with customers while preparing for future growth.

**Objectives of the Study**

**General Objectives**

The researchers aim to study and develop a Friendly Mart Ordering and Delivery Navigation with SMS Notification and Chatting System, Polomolok, South Cotabato.

**Specific Objectives**

* To create an **online grocery catalog** for easy product browsing and ordering.
* To build an **order tracking system** that shows delivery progress.
* To add a **chatting system** for real-time communication between customers and staff.
* To send **SMS notifications** for order updates and delivery status.
* To provide a **delivery navigation** for the directions of the rider.

**Scope and Limitations of the Study**

**Scope of the study**

The Friendly Mart Ordering and Delivery Navigation with SMS Notification is capable of the following:

*Develop a system module that provides an intuitive and easy-to-navigate online catalog for customers.* This module displays products with accurate details, pricing, and availability, ensuring customers can browse and select items effortlessly. By automating product management and categorization, the system improves shopping experience and reduces errors in product selection. *Develop a system module that automates real-time tracking of customer orders, providing comprehensive monitoring of order status from placement to delivery.* The system captures and logs all order activities securely, ensuring transparency and accountability. Customers and administrators can quickly identify order progress, improving efficiency and customer satisfaction.

*Develop a system module that enables seamless communication between customer and delivery personnel.* The system logs chat activities, ensuring secure and traceable communication. This module improves customer support, resolves order-related issues promptly, and enhances overall interaction within the platform.

*Develop a system module that automatically sends SMS notifications to customers regarding order confirmations, updates, and delivery status.* This ensures customers are informed in real-time, improving communication, reducing missed updates, and enhancing trust and convenience.

*Develop a system module that provides real-time delivery navigation for riders, ensuring accurate and efficient routes.* The system tracks delivery progress and integrates with mapping services, reducing delays and optimizing delivery efficiency. This module ensures timely delivery, improves resource management, and enhances customer satisfaction.

**Limitation of the Study**

The system will only support cash-on-delivery and in-store payments, with delivery limited to Friendly Mart’s designated areas. SMS notifications may experience delays due to network providers. The system is exclusively for Friendly Mart and relies on staff-provided inventory data rather than full automation.

**Significance of the Study**

This proposed system will benefit the following:

**Store**

This system will ensure the timely and accurate processing of orders, notifications, and deliveries, improving the reliability of service and reducing delays. Automated tracking and reporting features will enhance operational efficiency and decision-making.

**Customers**

This system will provide a user-friendly online catalog, real-time order tracking, and SMS notifications, simplifying the shopping process. Automated updates and clear communication will make customer interactions smoother, faster, and less prone to errors.

**Riders**

This system will provide an automated delivery navigation system and real-time updates, making route management and order deliveries more efficient and accurate. The integration of order tracking and communication tools will streamline monitoring and ensure timely deliveries, improving overall service quality.

**Researchers**

Researchers can user their skills and knowledge in research. This study can help them in their studies and an additional individual learning as an Information Technology student.

**Future Researchers**

This system would be a great help for the future researches. The documentation and system will serve as their foundation so that it can be more advanced and useful.

**Flow of the Study**

**Input Process Output**

Browse product catalog

Add order product

Send messages orders

Order event occur

Rider location and delivery address

Search product result

Logs order product data

Transmit messages and log

Sends SMS logs

Calculate optimal route

Display product catalog

Display and Track order product data

Display messages

Display SMS notification

Display delivery navigation

*Figure 1.1. Senior Citizen Management Support System Flow of the study*

**Definition of Terms**

The following definitions provide clarity on key terms related to the Friendly Mart Ordering and Delivery Navigation with SMS Notification and Chatting System.

**Ordering System** – Online product selection and purchase.

**Delivery Booking** – Scheduling customer deliveries.

**SMS Notification** – Text updates about order status.

**Chat Support** – Real-time messaging with staff.

**Order Tracking** – Monitoring order progress until delivery.

**Analytics Dashboard** – Visual reports of sales and customer activity.

**System** – A combination of hardware, software, and peripherals that work together to manage and process information.