**Vosotros Water Delivery System**



A Project Presented to the

Faculty of the College of Computer Studies

St. Michael’s College

Iligan City

In Partial Fulfillment of the Requirements

In Systems Integration and Architecture 1 and Web System and Technologies

by

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**CHAPTER 1**

**THE PROBLEM AND ITS SETTINGS**

**Introduction**

In the rapidly evolving landscape of service management, technology integration is essential for optimizing operations and enhancing customer satisfaction. Among the innovations reshaping the industry, water delivery systems stand out as pivotal advancements. These systems serve as digital platforms, enabling companies like Vosotros Water Shop to efficiently manage orders, deliveries, and customer interactions while providing clients with a seamless ordering experience. This thesis explores the significance and impact of the Vosotros Water Delivery System, examining how its implementation transforms customer experience and improves operational efficiency.

Vosotros Water Shop, located in Fuentes Purok 16, Zone 6, offers purified drinking water in various formats. However, the shop currently relies on manual order processing and delivery management, leading to inefficiencies. The Vosotros Water Delivery System addresses these challenges by automating water ordering, delivery scheduling, inventory management, and payment processing. Customers can place orders online, select delivery times, track their orders, and pay cash on delivery. Additionally, the system assists administrative staff in managing customer information and monitoring inventory levels. By leveraging technology, the Vosotros Water Delivery System enhances overall service efficiency, ultimately improving customer satisfaction and fostering growth for Vosotros Water Shop.

**Statement of the Problem:**

Through the interview with the owner of the company the researchers found out that the problems the Vosotros Water Selling shop currently have are the following:

* \*\*Manual Order Processing\*\*: Current water delivery systems often rely on manual methods to record and manage customer orders, leading to errors and delays.
* \*\*Inefficient Scheduling\*\*: Lack of an optimized delivery scheduling system results in uncoordinated deliveries, causing delays and customer dissatisfaction.
* \*\*Limited Inventory Management\*\*: Inadequate tracking of stock levels results in situations where orders cannot be fulfilled due to a lack of available water products.

**Objectives of the Study:**

The objective of this study is to design and develop a Water Delivery System.

These are the following objectives:

* “Automate Order Management” To create a system where customers can place orders through an online platform, view available waters, and track their order history.
* “Optimize Delivery Scheduling” To design a scheduling system that allows customers to choose their preferred delivery dates and times, with real-time updates on delivery status.
* “Enhance Inventory Management” To implement a system that tracks stock levels, alerts staff when inventory is low, and facilitates automatic restocking.

**Scope and Limitations**

The *Vosotros Water Delivery System* aims to enhance the efficiency of ordering, delivery, and inventory management for water delivery services through a web-based platform. This project encompasses the design, development, and implementation of an accessible system for customers to place orders and track deliveries. Additionally, it will provide features for administrative staff to manage inventory, schedule deliveries, and process payments, ensuring a streamlined operation for all users.

The scope of this system includes the utilization of modern web technologies to create a user-friendly interface that is mobile-responsive, allowing customers easy access from various devices. By focusing on enhancing the customer experience and operational efficiency, the system intends to reduce order processing times and improve delivery tracking capabilities, ultimately benefiting both customers and service providers.

However, the study faces several limitations. Challenges may arise in integrating the system with existing infrastructure, which could impact implementation timelines. Furthermore, the reliance on internet access for users may limit accessibility for certain customer segments. Lastly, the project will focus exclusively on water delivery services, without extending to related product offerings, which could restrict potential market growth.

**Significance of the Study**

This study will be beneficial to the following entities:

**Customers** -The system offers a convenient, user-friendly platform for placing orders and tracking deliveries in real time. It enhances the customer experience by providing flexible delivery scheduling and multiple payment options.

**Business Owners/Management** - The system will streamline business operations, reduce the time spent on manual order processing, and improve overall efficiency. By optimizing inventory management and delivery schedules, it minimizes delays and ensures better customer satisfaction.

**Delivery Staff -** The system provides clear schedules and real-time updates on deliveries, improving the coordination and timeliness of water delivery services.

**Industry** - The success of this system can serve as a model for other water delivery services or similar logistics companies, driving technological innovation in the service industry.

**Documentation**

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