**PAN-Q C.PARK POINT OF SALE SYSTEM**



In Partial Fulfillment

Of the Requirement of the subjects

Object-Oriented Programming

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**December 2023**

**THE PROBLEM AND ITS SETTINGS**

**Introduction**

Pan-Q C. Park, located in San Miguel, Iligan City, is a popular mini food park primarily frequented by students. The park provides a range of food choices like Pinoy Barbecue Sandwiches, beef hotdogs, chicken hotdogs, squid rolls, and tempura. The main issue at Pan-Q C. Park revolves around their time-consuming and inefficient order-taking process. Additionally, the absence of receipts further adds inconvenience for customers who require them for reimbursement or record-keeping purposes.

Implementing a Point of Sale (POS) system is essential to enhance the efficiency of business operations, addressing current inefficiencies, saving time, and providing a more convenient experience for customers.

The point-of-sale (POS) system serves as the central hub, integrating sales, inventory management, payment processing, and customer management. This essential system ensures smooth cooperation among all business operations. It is imperative to set up the software and hardware in advance to ensure optimal functionality when required. (McDermott, 2023)

A POS or point of sale is a device that is used to process transactions by retail customers. A cash register is a type of POS. The cash register has largely been replaced by electronic POS terminals that can be used to process credit cards and debit cards as well as cash. A POS may be a physical device in a brick-and-mortar store, or a checkout point in a web-based store. (Hayes, 2023).

Due to the growing demand for POS systems in developing countries, there has been increased research focus on evaluating their usability. These systems, known for multifunctionality and complex interfaces, pose challenges not fully addressed by existing quality evaluation models. This study analyzed ten prominent quality models, extracted their usability factors, and proposed an enhanced model with twelve factors for comprehensive POS system usability evaluation. Our case study confirmed the effectiveness of the proposed model in providing a thorough assessment of POS system usability. (Md Alamgir Kabir, Bo Han, 2016)

This study aims to design and examine how Point of Sale (POS) systems enhance business efficiency by addressing inefficiencies, saving time, and providing a more convenient customer experience. Through analysis, the study seeks to offer insights into how POS systems optimize operational processes, streamline transactions, and improve overall customer satisfaction.

This study was conducted from December 2 to December 9 2023-2024 This research will take place at St. Michael’s College, Iligan City. The Pan Q store is in San Miguel, Iligan City, Region X, Northern Mindanao.

**Statement of the Problem**

The researchers have recognized three following problems:

* Time-consuming: A customer at Pan-Q C. Park spends a significant amount of time waiting in line to place an order, affecting their overall dining experience and the park's efficiency.
* Inefficient Order-taking Process: The manual and disorganized approach to taking orders at Pan-Q C. Park results in confusion among staff, leading to errors, longer wait times, and potential frustration for customers.
* Lack of Receipt: A customer purchases meals at Pan-Q C. Park but does not receive a receipt. This absence creates challenges when seeking reimbursement or accurately recording expenses for accounting purposes.

**Objective of the Study**

The objective of this study is to develop the PAN-Q C. PARK POINT OF SALE SYSTEM. Specifically, this study aims to:

* Design a Point-of-Sale System to reduce the time-consuming and inefficient order-taking process for the business, while also providing customers with a receipt.
* Develop a system that works well with the current business setup, providing better features to make tasks smoother and boost overall efficiency.
* Test and evaluate a system to ensure its functionality, performance, and effectiveness in meeting the desired objectives.

**Scope and Limitation of the Study**

The scope of this study is dedicated to the development and implementation of a Point of Sale (POS) system tailored specifically for Pan-Q C. Park in San Miguel, Iligan City. The primary focus lies in addressing the time-consuming and inefficient order-taking process at the food park, with the aim of enhancing business efficiency. The study aspires to design and evaluate how the POS system optimizes operational processes, streamlines transactions, and ultimately provides a more convenient customer experience for the predominantly student clientele frequenting the park.

Acknowledging limitations, the study's constrained timeframe, conducted from December 2 to December 9, 2023-2024, imposes restrictions. Surveying and a more extensive analysis beyond POS system development were unattainable due to this temporal constraint. As a result, the study focuses solely on creating and deploying the POS system for Pan-Q C. Park, without exploring broader implications or follow-up investigations. Despite these constraints, the study endeavors to provide valuable insights into the specific implementation of a POS system at Pan-Q C. Park.

**Significance of the Study**

The significance of this study lies in its potential to transform the operational landscape of Pan-Q C. Park, creating a more efficient, customer-friendly, and competitive food park environment. The proposed POS system aligns with the changing needs of both the business and its customers, aiming for a positive impact on various aspects of Pan-Q C. Park's operations and performance.

The following entities that will benefit from this study are the:

**Pan-Q C. Park Management,** this includes increased operational efficiency overall, greater customer service, and enhanced order processing. Automated receipt issuance is one of the aspects of the system that can help improve financial record-keeping and compliance.

**Staff and Employees,** this may result in a less stressful burden, higher job satisfaction, and a more effective workflow. In addition, staff workers can be empowered to acclimate to contemporary technology tools through appropriate training and integration with the POS system.

**Customers,** Students, Pan-Q C. Park's main clientele, and other patrons stand to gain a great deal. Their entire consuming experience is enhanced by the installation of a POS system that is quicker and more effective. Order processing quickly cuts down on wait times, which increases client happiness.

**Future Researchers,** Future studies interested in point-of-sale (POS) systems for food outlets might use this work as a standard and source of reference. When contemplating the implementation of effective order-taking systems, businesses in the food sector, particularly small food parks, can benefit from the insights provided by this study.

**Educational Institutions,** the study advances the field of academic by offering useful information about how POS systems are used in actual commercial settings. This study can be used as a case study for instruction in corporate management, hospitality, or information technology courses in educational institutions.

**Definition of Terms**

To ensure the study's clarity, the following terms are utilized, and their meanings are specified.

**Point of Sale (POS) -** of or relating to the place (such as a check-out counter) where an item is purchased.

**Order Taking -** the process of precisely recording orders, protecting the data, and delivering the orders.

**Receipt -** a writing acknowledging the receiving of goods or money**.**

**Inefficiency -**the quality or state of being [inefficient](https://www.merriam-webster.com/dictionary/inefficient)**.**

**Record-Keeping -** the act or practice of recording important information for future reference:the act of keeping records.