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**Gayados’ Rental Place’s Payment Management System**

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University of the Cordilleras

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of the Requirements for the Degree BS in Information Technology

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We also extend our appreciation to the authors and publishers of the references consulted, which have enriched our understanding of transactional processing systems and business management.

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**Chapter 1 INTRODUCTION**

**Background of the Study**

This project proposal outlines the development of a Payment Management System for Gayados' Rental Place. The goal is to automate and streamline rental payments, providing a more efficient way for customers to pay and for the business to manage payments and customer information.

The Transactional Process System chosen for this study is a Payment Management System specifically designed for rental businesses. This system will handle transactions related to rental payments, automate the payment process, and maintain accurate records.

A Computer Based Information System integrates hardware, software, and human resources to collect, process, store, and disseminate information. In the context of the Payment Management System, the CBIS will facilitate online payments, track rental statuses, manage customer data, and generate reports, enhancing operational efficiency and accuracy.

**Company Profile**

**Company Name**: Gayados' Rental Place **Location**: 16 Adarna Street, Dizon Subdivision, Baguio City, Philippines **Business Type**: Rental Property Management

**Services**: Provides rental accommodations and manages tenant transactions and records.

**Objectives**

The main objective of the study is to introduce CBIS in Gayados' Rental Place through the Payment Management System specifically achieving the following:

1. To determine the current state of the existing payment management system;
2. To identify problems and concerns encountered in the existing payment management system;
3. To propose features that will address the problems and concerns in the existing payment management system; and
4. To justify the economic feasibility of the proposed payment management system.



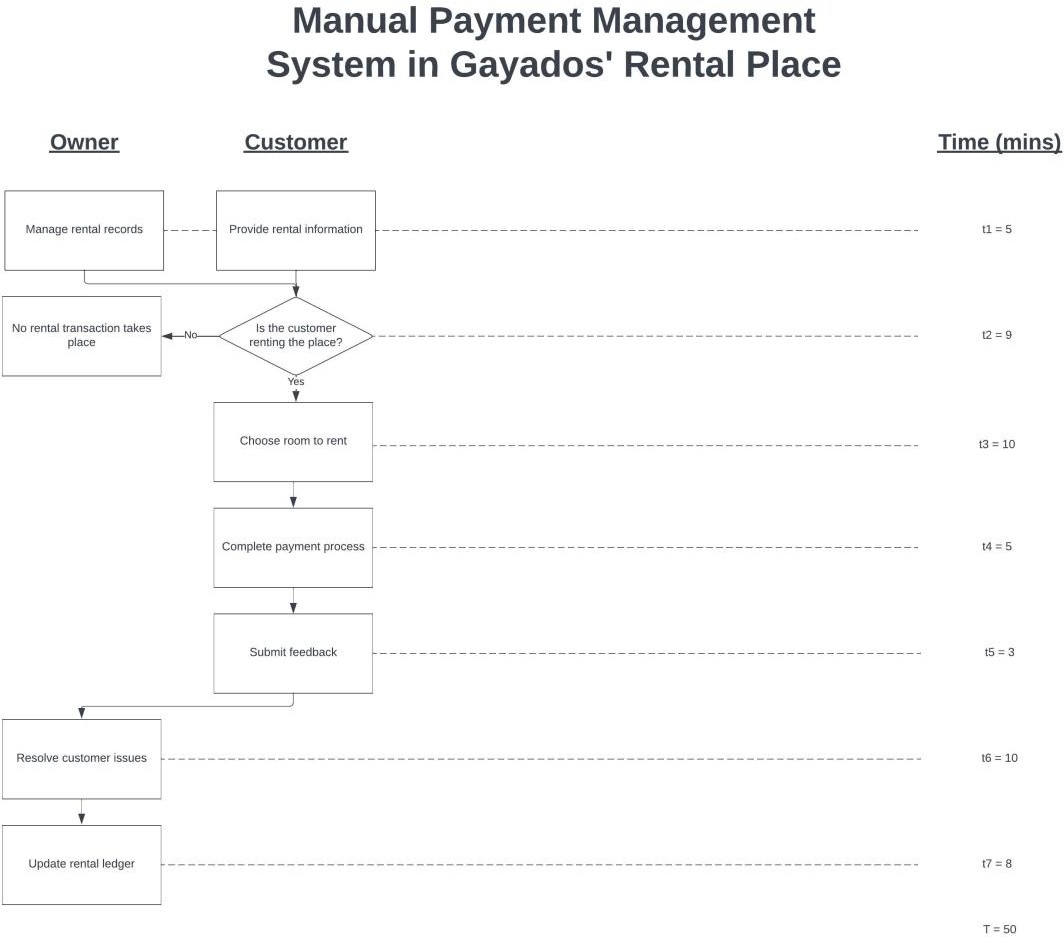
**Chapter 2**

References 181

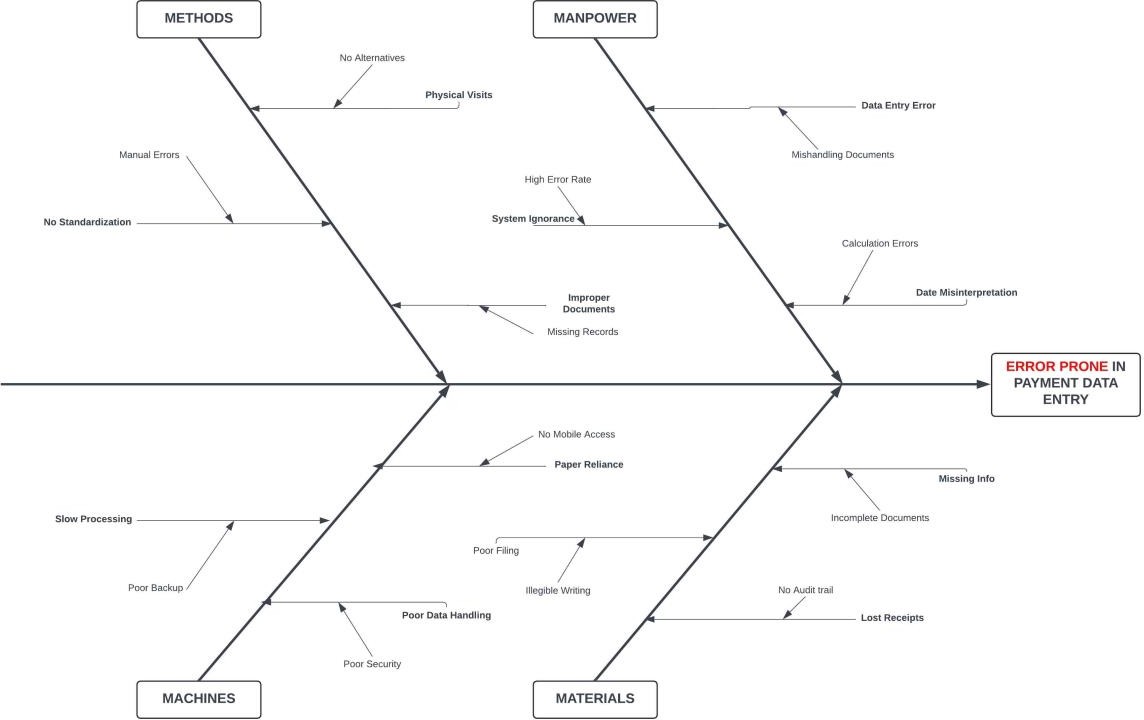
# THE EXISTING SYSTEM

Currently, Gayados' Rental Place relies on a manual payment process where customers pay in cash or via bank transfers, with records maintained in physical ledgers. This system is prone to errors and delays, as it lacks the capability for real-time updates, leading to inefficiencies and potential inaccuracies in record- keeping.

**Process-Entity-Time Diagram**



**Ishikawa Diagram**



**Chapter 3**

# THE PROPOSED SYSTEM

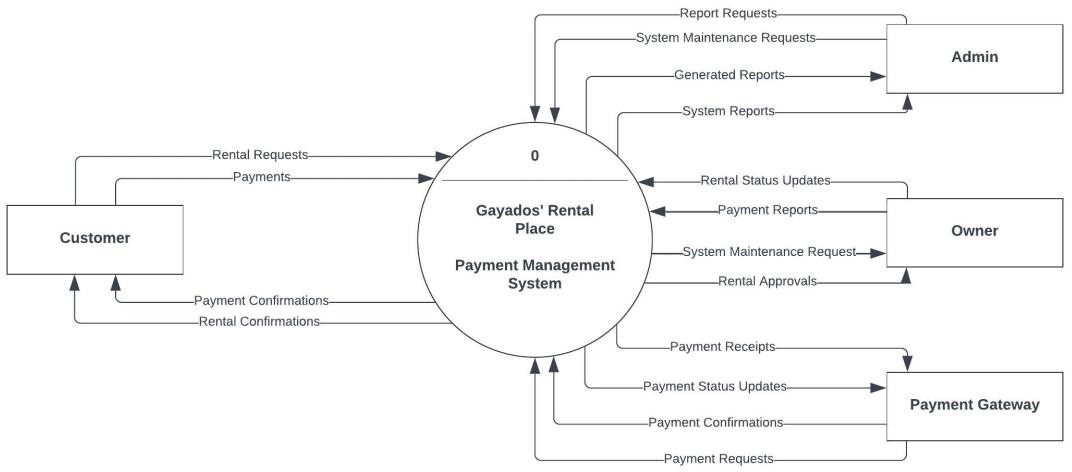
The proposed Computer-Based Information System (CBIS), a Payment Management System, aims to automate the rental payment process, enhancing efficiency and customer satisfaction. This system will enable customers to make online payments using various methods, including GCash, banks, and PayMaya, ensuring convenience and flexibility. By updating payment records in real-time, the system will reduce errors and provide instant transaction confirmations, maintaining accurate financial records.

Additionally, it will manage comprehensive customer information, allowing for better service and quick resolution of queries.

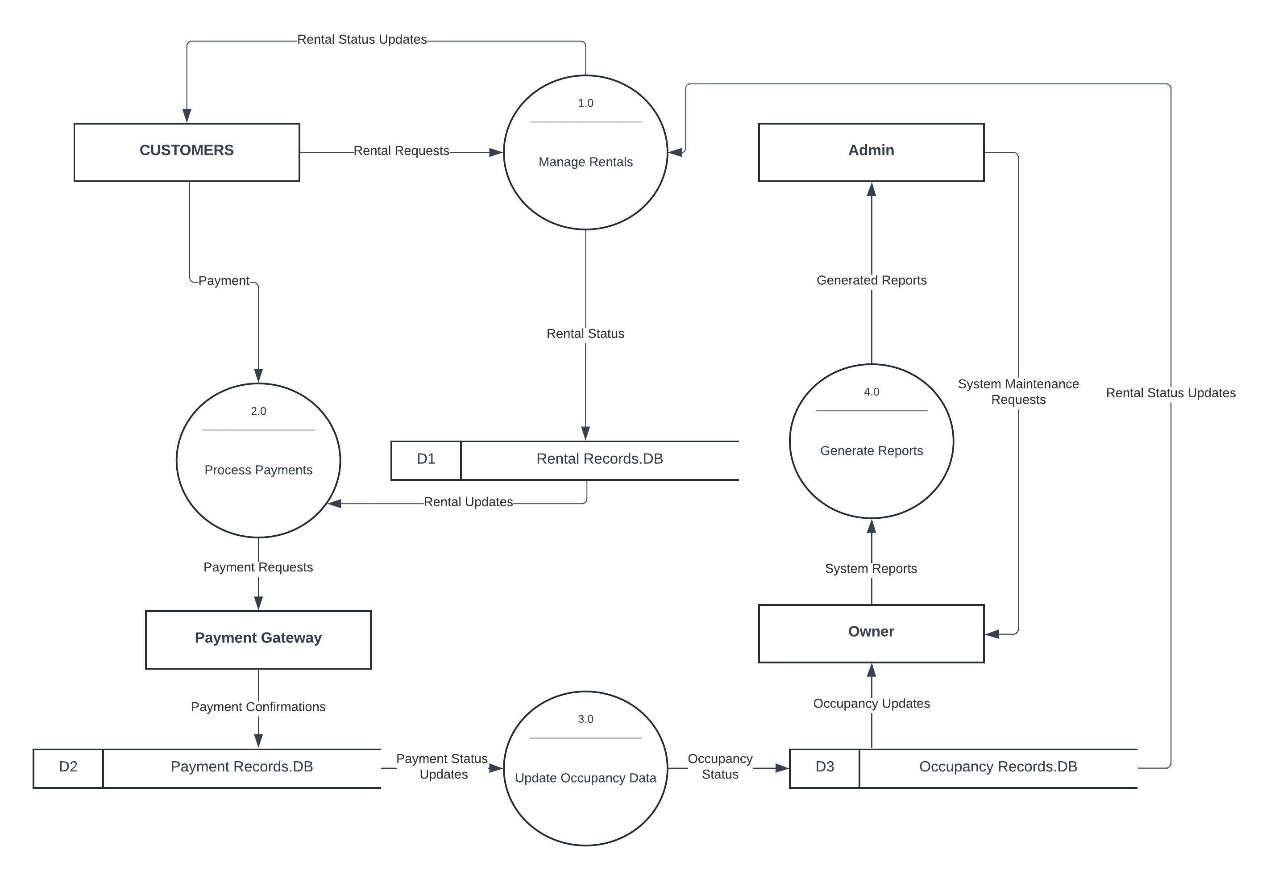
The system’s capability to generate detailed financial reports is another significant advantage, aiding the management team in making informed decisions. These reports will include summaries of total payments, overdue accounts, and financial projections, facilitating effective financial planning. The automated process will free up staff time, allowing them to focus on other critical tasks, while robust security measures will protect sensitive data. Overall, the Payment Management

System will streamline operations, ensure data accuracy, and enhance decision-making processes, contributing to the overall efficiency and success of the rental business.

**Data Flow Diagram Context Diagram**



**Top Level Diagram**



**Explosion of Process 1.0 (Manage Rentals)**

A close-up of a diagram

Description automatically generated

**Explosion of Process 2.0 (Process Payments)**

A diagram of a diagram

Description automatically generated

**Explosion of Process 3.0 (Update Occupancy Data)**

A close-up of a diagram

Description automatically generated

**Explosion of Process 4.0 (Generate Reports)**

A diagram of a diagram

Description automatically generated

**Cost Benefit Analysis**

1. **Development Cost (DC)**

|  |  |  |
| --- | --- | --- |
| New Computer | 1 lot | ₱30,000 |
| Professional Fees | 1 lot | ₱25,000 |
| Training Fees | 1 lot | ₱2,000 |
| **Total** |  | **₱57,000** |

1. **Operating Costs**
   1. **Existing Operating Costs (EOC)**

|  |  |
| --- | --- |
| Inventory Supplies | ₱22,000 |
| Maintenance | ₱22,000 |
| Salaries  Utilities | ₱240,000  ₱37,000 |
| **Total** | **₱321,000** |

* 1. **Proposed Operating Costs (POC)**

|  |  |
| --- | --- |
| Inventory Supplies | ₱15,000 |
| Maintenance | ₱15,000 |
| Salaries  Utilities | ₱240,000  ₱30,000 |
| **Total** | **₱300,000** |

* 1. **Saving (SN)**

SN = ₱EOC – POC

SN = ₱321,000 – 300,000

# SN = ₱21,000



* 1. **Comparative Table**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Year (n)** | **Savings (SN)** | **Interest (1+i)^n** | **Present Value**  **(PV)** | **Cumulative PV (CPV)** | **MARK** |
| 1 | ₱21,000 | 1.20 | ₱17,500 | ₱17,500 | X |
| 2 | ₱21,000 | 1.44 | ₱14,583.33 | ₱32,083.33 | X |
| 3 | ₱21,000 | 1.73 | ₱12,138.73 | ₱44,222.06 | X |
| 4 | ₱21,000 | 2.07 | ₱10,144.93 | ₱54,366.99 | X |
| 5 | ₱21,000 | 2.49 | ₱8,433.73 | ₱62,800.72 | ✓ |

* 1. **Pay Back Period (PBP)**

PBP = ((DC - CPV of the last x mark) / PV of the check mark) + number of x marks

PBP = ((₱57,000 - ₱54,366.99) / ₱8,433.73) + 4 years

PBP = 0.31 + 4 years

**PBP = 4.44 years**

* 1. **Net Present (NPV)**

NPV = CPV of the 5th year – DC NPV = ₱62,800.72 - ₱57,000 **NPV = ₱5,800.72**

* 1. **Return on Investment (ROI)**

ROI = (NPV / DC) x 100%

ROI = (₱5,800.72 / ₱57,000) x 100% ROI = 0.10176 x 100%

# ROI = 10.18%

**CONCLUSIONS AND RECOMMENDATIONS**

**Conclusions**

The current manual payment system at Gayados' Rental Place is inefficient and error-prone, causing delays and inaccuracies. The proposed Payment Management System (PMS) will address these issues by enabling online payments, real-time data updates, and automated reporting. This will enhance efficiency and accuracy for both owners and customers. With a 10.11% ROI over five years, the system is economically viable and beneficial for the business.

**Recommendations**

A graph with multiple colored squares

Description automatically generated with medium confidence

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