**Chapter 1**

**INTRODUCTION**

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Today, technology is very essential and serve as an important necessity in our everyday lives. It is used by every people in any age to make their lives easier in every way. We are engaged in highly computerized technology generation that aims to enhance individual lifestyle and helpful most especially in the world of business. However, there are still some other advantages of technology; it is used personally and by the companies to make their job faster, efficient and undeniably achieve greater results.

Sales and inventory system is basically a process where a business keeps track of the sales activity and inventory as well. Manual sales and inventory systems might turned out to be slow and inaccurate that may result problems like running out of stocks and slow computations of product prices being bought by the customers. The success of a business greatly depends on controlling the merchandise inventory itself. As well as the continuously improving and upgrading of computer usage into more powerful and useful applications has made managing business transactions a lot more efficient and easier.

Transaction processing system or TPS is a computerized information system that was developed to process large amount of data for routine business transactions such as sales and inventory.

Computerized sales and inventory system allows much greater accuracy in stocking and product management. It saves time in computing the transaction from time to time by speeding up the process while raising accuracy. It collects all the details that the companies have the record of their stock and the quantity of each product. Can retrieve the data if lost by using the database of the system, which can facilitate all the records of the company.

**Statement of the Problem**

**General Problem**

* **RRGM looks for improvement of their manual sales and inventory processing and monitoring of delivery.**

The existing sales and inventory system of Rich R General Merchandise is still using manual inventory system where log books and excel workbook are used to list all the transactions they have. They are using calculator in computing their sales. In terms of storing their records, they are just using excel workbook and log book. All the official receipts are also hand written. Because of its manual procedure the company is having a hard time to keep track of their transactions and keeping it for storage. It is also time consuming because of the inevitable human error.

**Specific Problems**

* **Records are manually listed using logbooks and excel spreadsheet.**

Employees from different department uses either a logbook or excel worksheet from their own computers and there comes a time where conflicts and data mismatches were encountered.

* **The company is having difficulty in monitoring and updating its inventory.**

The current system is not efficient and reliable in terms of calculation of sales and producing systematic and timely report of inventory needed by the management for decision making.

* **The company still encounter problems due to miscalculations of sales transactions.**

The current system is labor-intensive. It require continuous monitoring to ensure that each transaction is accounted for and that products are maintained at the appropriate stocking levels

* **The company has difficulties in monitoring the status of its order and delivery.**

The monitoring for pending order from supplier whether it is received or pending and the delivery of products to clients whether it is delivered or pending is not properly notified. Because in most cases, they forget the scheduled delivery.

**Current State of the Technology**

RRGM is located at Antipolo, City. It started by the year 2006 and owned by Luciana Tamayo. The company caters a merchandise store that supplies products and sells it into retail stores. Their operating hours is from 9am to 6pm. They have 30 employees. The company has major suppliers such as ITREX trading, Super metro, Puregold, Super8, and the like.

Rich R General Merchandise are still using manual sales and inventory system. The company is using calculator in computing their sales and in terms of recording information the company is using excel workbook.

The company's payment to their supplier depends on what the supplier wants, it can be 30 days, 15 days or 7 days. In ordering of stocks to the supplier, the purchaser will call/fax the supplier and order a specific items with its quantity then arrange a date for its delivery. When the delivery comes the warehouse checker is responsible for the receiving of the actual stocks, and the sales invoice of the supplier. Then the checker will record the actual receiving in the logbook, then the sales invoice will give to the inventory clerk.

The process of their inventory is also manual. The warehouse checker will manually count the number of stocks of the product then report it to the inventory clerk and add the remaining balance from the previous invoice and record it to a excel workbook.

In receiving order from clients, the sales man will receive a call from the client and arrange a visit to their store. The order list will submit to the checker, then the checker will arrange the order and give the order list to the encoder for the invoicing, and the sales invoice will submit to the checker for delivery. When the date comes the sales agent will go to the store to get the order list of the client. When the order is ready it will be delivered to the client’s store and the delivery helper will also give the sales invoice of the order. If the customer is regular, the payment will receive by the company 7-15 days after the received date. If the customer is new, the payment will receive by the company right after the delivered date. The transaction made will be record to a logbook and excel workbook.

In recording the sales transaction of the company, the owner will compile all the transaction and use calculator in computing all transaction made through years or month depending on the owner. It also recorded in the excel workbook.

**Objective of the Study**

**General Objective**

The objective of the proposed system is to make the existing system automated and help to achieve a less time consuming system. Because of the proposed automated system the user will now have an easy access to transactions that is saved to the database. The proposed system also offering security by using log-in information to accessed the system. Unauthorized personnel can’t access the files without registering on the system, registered accounts will filtered by the administrator by picking who’s account will be activated.

The proponents conducted the study to promote the advantage of using an automated system.

**Specific Objectives**

* **To create a module that will help ease in encoding data in the inventory list.**

The developers will develop a lan-based system since each department have their own computer. It is essential that all data corresponds to each other to keep track of precise information

* **To create a module that will help ease the company’s recording of information of items and monitoring of its inventory.**

A file maintenance module will be created to record the details of each product. This will aid the company in determining the status of the products by looking up in the number of the inventory. The time-spent and man-power in monitoring the inventory can be based on more productive activities for the business.

* **To create a module that will help in computation of sales transactions.**

Since the proposed system is automated, human errors and discrepancies will be presented. The calculations and of the transactions will be more accurate, the developers will create a sales module that will handle all sales transactions done by the user.

* **To create a module that will monitor the schedule of delivery.**

The developers will create a calendar that can notify the user to remind them the schedule of truck and its availability.

**Scope and Limitation**

**Scope**

* **Delivery Schedule**

In this module all of the list of delivery will be monitored. It contains modules such as:

* **Notifications**

Notifications for current and upcoming schedules.

* **Rescheduling**

Rescheduling of customers that are not accomplish on the given schedule.

* **Assigning of Deliveryman**

Automatic assigning of available deliveryman to new client.

* **Customer/Product Information**

Information about the customer and product that will be rendered (address, contact, product etc.).

* **Status**

In this module the customer can monitor the current status of their services acquired.

The following status are:

* + - * Pending – customers’ request for a specific date is upon approval, if the date is available it will be directed as scheduled.
      * Delivered – products are already delivered to the customer
      * Reschedule – customers’ delivery is for rescheduling
* **Inventory Module**

is where the administrator can create and modify item prices, make stock adjustments, inquire on stock items and view the value of stock-on-hand for accounting purposes.

* **POS (Point of Sale)**

This module will handle inquiries of items with its information that are saved in the database. This module will also handle the creation of the list of items that the customer wants to order, show the corresponding subtotal and accept the payment, save the details to the database and automatically update the inventory once the transaction is finished.

* **Purchase Order**

The Purchase Order is a document issued, indicating the type, number of orders for products the company will be requesting from the supplier. This module will handle the monitoring of the products that are purchased from the supplier.

* **Back Order**

This is a module that will monitor and handle all of the incomplete product that should be expected to deliver from the supplier. Stocks are automatically updated once the order is validated.

* **Return Order**

A module that will enlist the damaged product returned by the company to the supplier as well as the returned product by the customer to the company.

* **Utilities Settings**

This module will cover settings for Date and Time, Valued-Added Taxes (VAT) and Markup/Markdown prices.

* + Archiving and Restoration

The system will provide a temporary storage of records that were deleted by the users and the capability to restore it once needed.

* Backup and Recovery

This will give the system the ability to secure a backup and provide protection of data and restoration of it in case of data loss happened.

* **Reports**

This module is capable of generating report results requested by the user such as: weekly, monthly and annual reports.

Reports covers:

* Products Master List
* Purchase Order Report
* Stock Status
* Safe level
* Re-Order level
* Critical level
* Out of stock
* Sales Report
* Transactions Reports
* Cash

**Limitation**

Although the proposed system is automated it has certain limitations too that determined the coverage of the study.

* **Delivery Fee**

The proposed system will not cover the delivery of the units or products because delivery cost would depend on the owner and customer agreement.