

# **MILESTONE 1**

**PRG 181** 



FREERK VAN DEN BOS(602074)

KUDZAI DUTUMA(602991)

DONYA PRETORIUS(602952)

CHRISTOFFEL LOMBAARD(602390)

### **Table of Contents**

Purpose of the report	2
Background of the report	2
Scope of report	2
Manual Data Entry	3
Rental Management	3
Poor Reporting	
Growth and Scalability	4
Customer interaction	
The users of the system	6
System	6
Additional features	7
References	8

# Introduction

#### Purpose of the report

This report analyses the possible outcomes of automating the administration of the David's Retro Room store by integrating technology into the business's daily operations to improve productivity, efficiency and time consumption in the recording and management of data, stock control and calculations. Additionally, addressing opportunities for improvement that include inclusivity with the registered members while attacking areas of concern in the finance and marketing department.

#### Background of the report

Created in 2020, the David's Retro Room store creates a platform for like-minded individuals who have an interest in collectables such as gaming, fictional characters, cards, etc. His business opens doors for collectors to sell their collectables for 6 months. This is managed by the owner receiving the details of the interested seller along with a daily rental fee which are dependent on several different factors. This is all recorded manually by the owner who receives a 25% commission on the selling price. The catalogue of products ranges in 4 sub-categories within 3 different collectible categories.

## Scope of report

This report highlights the efficiency in transitioning from a manual to automated administration in the David's Retro Room store by analysing the complications of how the daily operations are being run and suggestable alternatives to cover the majority areas of concern for better capacity and overall positive business performance with departments of discussion being administration, finance, and public relations.

#### Manual Data Entry

A manual system processes data and task completion through individual manual labour or without the assistance of automated tools and software. The current method of entering information by hand on the seller details, collectables and their categories and prices faces a risk of human error and time consumption while affecting performance in concentration and fatigue. Clients who want to buy might leave his store because the process takes too long and leave unaided. Additionally, security risk increases as anyone within a hand's reach can view and steal the business records. Although the owner can lock his files in a secure location, does it still open the possibility of losing the files.

Creating a system that records, captures, and stores the item's information in a database ensures that there will be no lost records because of the protection measures in the database, eliminating the possibility of misplacing or damaging his general ledger. David's work becomes manageable as he can search for an item by entering a keyword like an item's name, and the system will search for the item and display the details. Sorting categories and subcategories are simple to arrange to his preferred liking.

#### Rental Management

Rental agreements done by hand are slow and prone to mistakes more often. The calculation of rent is dependent on the collectable. Questions on accuracy and consistency arise since the calculation is written and becomes problematic because of the risk of miscalculating and inaccurate data. Tracking leases, writing invoices, and payments by hand add an overload of work for one person.

A system such as Microsoft Excel will assist David in recording rentals, payments, and leases of collectables. Areas of concern in sold and added items are tracked and managed. Comfort is reassured when creating clear statements and invoices on rent and items in the store that will help David sort his data based on unpaid rent, his clients or item leases.

#### **Poor Reporting**

The manual system has some setbacks when making detailed reports or analysing data. The probability of potentially creating an unnecessary obstacle is high as reports about sales, growth and customer demand become challenging to determine and harder to make future positive business choices because of misinformation from current reports, causing him not to learn from past mistakes. Reports set an overview of the progression of the business. The present method of reporting could hinder the store's overview, creating uncertainty on the next step of expanding.

In the database, David is accessible to stock, where he can type or arrange items in a specific category that shows proof of purchase history. The owner or any employee can see the ratio of items sold to stock available over a period. The information projects processed data are transformed into graphs and tables, increasing confidence from interested investors towards his business and success. The system program could send emails to the original owners with a receipt. David will find it easier to calculate his commission from the sales made and the history of financials. Projections on potential growth by earnings and sales made are estimated.

#### **Growth and Scalability**

The manual accounting system is reasonable for a small business as there are minimal transactions, and as the potential for growth increases, are financial operation affected. Higher volume transactions and higher customer demand require additional resources. The David's Retro Room store must be scalable to leave room for growth and evolvement so the predictions for longevity and expected income can be estimated and calculated. Limitations are created because of the manual system and therefore need an individual of high expertise to determine those predictions with the risk of miscalculating.

Implementing an automated system allows the business to make accurate calculations for future predictions of income and losses. Acquiring a system that progressively adapts to the business's growth allows David's Retro Room to expand into a national, international, and digital business catering to any individual interested in collectables. The possibilities for branching into different sectors of collectables become limited to availability and finances, an automated system that will assist David in depicting the future of the business through reports and statistics, investors and sponsors invest in the store with limited risks and a positive return on investment. David will effectively measure the gap between where he is and where he wants to be using a GANT chart, Porter's analysis, and a balanced scorecard.

#### **Customer interaction**

<u>Customer buying</u>: When confronted with a situation where a customer needs a specific collectable and is unavailable, the need still exists.

<u>Customer selling</u>: Communication is vital to growing a business, as David needs continuous communication with his clients and customers using feedback and surveys on their suggestions to improve daily operations. Areas of discussion are in-stock availability, sales, collectable leases and rent due. Human interaction can cause a delay in communication, resulting in a bad client experience, loss of loyal customers and financial loss. An automated system can improve this problem by being the platform between the parties.

2 types of customers require communication regularly.

- 1. Registered Seller
- 2. Registered Buyers

To be able to build a successful business, customer interaction is required. Open communication with registered sellers and buyers is vital, enabling a good working relationship. The application will have a messaging platform that works hand-in-hand with email, to increase customer service and interaction. It is built in a way that buyers can view collectables on the app when the items leave the store, send a WhatsApp or email to enquire about a collectable, put a hold on it (to book it out) or for customer support. A capability must be available to opt-in for specials or promos.

Registered sellers are suggested to sending a direct message on the app to request a quote for their collectables sold at the shop. Quotes will then be prepared and returned on the messaging platform with the following information: daily rate, commission cut and the terms and conditions. If the sellers wish to continue with the sale, they'll need to fill in their personal information on a form on the app. By way of using WhatsApp, email, and fillable forms anyone who wishes to make contact is encouraged to do so.

The advantage of using WhatsApp or email is immediate connection and a better customer experience. The seller or buyer will be able to chat with an employee and sellers will be able to share images of their collectables.

Information can be shared in seconds and customers will remain satisfied as long as the expectation of communication is met. This means of interaction will enable the store to provide service to buying customers globally, this will have an immense effect on the growth of the business. WhatsApp and email allow for automated replies. If employees are too busy to immediately attend to questions an automated reply will ease the turnaround times of the customers by communicating the store's business hours and alternative contact numbers.

A built-in calendar on the app ensures collectables are not held in the store for more than 6 months. If the customer wants his collectable returned before the due date, the

calendar will also delete his due date to not incorrectly bill the customer. The functional areas under customer interaction include buying, selling and general customer service.

#### The users of the system

David will have full access to the application where he will have a full overview of the functionality to track and trace progress. He should be able to edit or update any item or price. His business is new, and it will be some time until he expands or builds a franchise. David's employees need access to capture sales and finalize the sales with clients. Their part of the application will be Stock control, intake, and sales. They will use the application to book the collectables, handle enquiries and deal with walk-in clients.

Clients selling items. His clients selling their collectables can also download the application to make the intake process quicker. If they decide to use David's services, they can complete the information on the application form example, personal information, category, and photos of collectables.

Clients buying items. They can easily go on the app to check what David's store has in stock and order. They input their personal details, address and banking details to finalize the order.

#### System

The system allows David to control and manage his data for efficient filling, reports and documents. Improvements in data control become fluid because clear information develops clarity and visibility in the final product. David can employ workers for the till, financial management and assistance in administration.

He can note details such as the name, category, condition, and owner when a collector wants to showcase the item on his shelves. The system will save the details in the database so David can use it for further use in terms of rent and grouping similar items for easier viewing. The system then creates a unique code and barcode for that item. The collectable owner will receive an email and notification on the system of the progress, so they are regularly updated. An item whose lease has expired will have the opportunity to be displayed online for any period that David decides so both parties will benefit from an expired item that might still be of interest. David still manages that item similarly as he would indoors and will continuously receive rent.

The customer experience improves by scanning collectables, which speeds up the payment process. Items sold are updated on the system using an algorithm and automatically creates receipts for proof of payment for David, the owner and the customer. When an item is marked as sold, the system will calculate the rent due based on the number of days the item was on display and will calculate the 25% commission David gets for the selling price. An email is sent to the original owner about his sold item with an invoice of the rent due, which he can then pay into the business bank account.

Later, data in applications like Microsoft Word, Excel, and Access for calculating and determining expenses, income, popular items, and top-selling categories are stored. David's app, similar to platforms like eBay, Grailed, or Takealot, allows sellers to list their products even if they are not near David's store.

#### Additional features

**Image Recognition:** Getting image recognition technology for the products to facilitate easier item scanning and stock counting by automatically getting details from uploaded images of all the products.

**Online payment methods and options to pay:** Enabling online payment options for rental fees of the products and purchases to improve convenience for collectors and make payments easy.

**Mobile Application:** Developing a mobile application for on-the-go access to the database or system, allowing to manage products and collectibles from anywhere.

# References

Nextiva, 27 July 2022, what is business communication and why do we need it? Accessed 23 March 2024, https://www.nextiva.com/blog/what-is-business-communication.html/

James Wilson, 9 August 2022, *Data science central*, TechTarget, accessed 22 March 2024, <a href="https://www.datasciencecentral.com/9-features-that-make-a-mobile-app-user-friendly/">https://www.datasciencecentral.com/9-features-that-make-a-mobile-app-user-friendly/</a>

Richard Breitmeyer, 21 July 2015, What are the 7 disadvantages of a manual system? Accessed 22 March 2024, < <a href="https://www.linkedin.com/pulse/what-7-disadvantages-manual-system-richard-breitmeyer/">https://www.linkedin.com/pulse/what-7-disadvantages-manual-system-richard-breitmeyer/</a>