**BINDURA UNIVERSITY OF SCIENCE EDUCATION**

**Faculty of Science Education**



**Designing a small scale business management system**

**For**

**Pamela**

**B1647001**

**Supervisor: Mr. Magomelo**

# Research Proposal

## **Introduction and Background**

In today’s market, small scale businessshould quickly adapt to the ever-changing technology to minimize overhead, lower cost of operation, and help to stay competitive. Everybody needs software, which can facilitate store operations and make their day-to-day lives much easier. Small scale businesssystem is an application software designed to take advantage of today’s technology and reduce or avoid the burden of storing data on paper and in files. This facilitates moving purchase, sales, and customer information, as well as supplier and company data, from paper to digital media on a secured server. Sales and purchase bills can be generated as needed. Each store has an option to store their data on one remote central database server. This will also allow stores to access information from other partner stores. This would in turn lead to information sharing, so that all the stores are aware of each other’s current inventory. It will be useful when ordering new purchases to avoid overstocking.

**Background**

The concept of the Small scale businessManagement system has been around for a long time, but it is still in the phase of discussion and design. Initially, all inventory and billing reports were managed manually by shop owners/employers using ledger- based systems. This requires a significant amount of time due to repeated access of the data. There is a high risk of lost or stolen data in that system. Storing old data is also one big factor. Store have to spare one separate room to store this information. Paper- based documents might lose their information with time, and after some years we can’t really read them at all. So the Small scale businessManagement System is designed to reduce paper- based data storage system and provide digital touch to billing and inventory system

## **Investigation and description of current system and Literature Review**

**Literature Review**

1. **Transformation from paper to computer based system**

A modern digital inventory management system must have the ability to keep track of sales and inventory. It should also provide communication means to contact suppliers as needed. It should also allow the incorporating shop owner’s ideas to be implemented into the system. Implementing the idea of the previous section is practical for an inventory system, and requires combining many technologies into one common approach. The time taken by a customer care representative of any mobile store to enter information in the computer represents a base of the modern Mobile Store Management System <http://money.howstuffworks.com>

Merchants used to write down inventory and sales details. They had to search their paper records to estimate future needs and retrieve old sales information. They had to spend significant amount of time every day for such work. After the Industrial Revolution, efficiency and accuracy became the major factors of business, along with significant change in positive customer care to increase sales. A team at Harvard University designed the first modern check-out system in the early 1930s <http://money.howstuffworks.com>. That system needed punch cards associated with items details. A system would gather information from the punch card and send it to stored data. As the system that was used by that time was too expensive for general merchants, this was the first time a store management system was transformed to a computerized system. Although it was very expensive, as computer systems during that time were relatively new and too expensive, this new innovation opened new dimensions to a store management system. Yet, the shop owners knew that they would need a better management system, and then different ideas for management systems were introduced, such as bar code scanner, RFID- based scanning systems. Merchants knew they needed a better system, and researchers created the forerunner of the modern bar-coding system in the late 1940s and early 1950s <http://money.howstuffworks.com>

1. **Point-of-Sale system: an innovative proposal**

During evolution from traditional management system, mechanical registers were also replaced by point-of-sale (POS) systems. POS systems helped to build capabilities and provide more important advantages. Historically, vendors of POS systems have focused their marketing efforts on large chain stores, but now they have turned their attention to small businesses because of their significant potential to grow and expand (Y. KIM AND J. LIM, 2011). Therefore, small organizations are also encouraged to use more powerful computer systems and software with a more attractive user interface that uses POS system instead of an old fashioned mechanical register system. For small organizations, such as mobile shops, product suppliers, and restaurant owners keeping transactions and inventory records is very hard and takes a lot of effort. POS system can be very beneficial for small organizations by providing smooth processes and functions This study proved that checkout processing time, which represents operational performance, was improved significantly both in the local and the remote server-client models, when an ADO data cache was embedded in the POS system. The more clients the proposed system served simultaneously, the greater savings it delivered, especially when large numbers of items were purchased in a sales transaction.

## **1.2.1. Description of the proposed system**

**Problems of the existing system**

The problems of the existing manual system of Small Scale Business System(SSBS) include among others the following:

* **Too much paper work:** The process involves too much paper work and paper storage which is difficult as papers become bulky with the population size.
* **Errors during data entry:** Errors are part of all human beings; it is very unlikely for humans to be 100 percent efficient in data entry.

## **Statement of the problem**

The complex nature of the existing small scale business system can be attributed to a number of factors:

* Most of the operations were done manually (a new product will have to manually entered on the paper) this results in a lot of mistakes being made for example he or she may miscalculate the total amounts of sales.
* Some management activities are not recorded or recorded in manually which are not efficient on running management task such as checking stock availability will have to search and find in store room by the staff themselves.

## **Objective of the study**

* To create a small scale business system for small scale business software.
* To centralize and combining all features to manage business activities in one complete and efficient application for management in the shop. Integrate cashier machine into the system for easier management.
* To calculate total numbers of sales in the stock.

## **Scope of the study**

The proposed system includes login for administrator, storekeeper and login for the owner. The Admin has the only rights to access the administration area. The Sales will login as Salesperson. The system is designed with a user security access level and it is responsible of determining the authenticity of the member by his/her given username and password. The system would be responsible for displaying latest products with their categories. The researchers will use a programming language called VB.NET and is more simple and user-friendly programming window application that can be easily understood by the beneficiary. The system will be designed solely for the Glendale Superstore

## **1.6 Feasibility study**

Feasibility is to carry out the detailed study of the existing system, find out the problem related to technical, operational staff, and economical field like cost by concerning the user of the study proposal of the proposed system is accepted by the management it will lead to the investigation of the existing system or problem area.

**Three phases of the feasibility study is used**

**Technical feasibility**

It is concerned with the available hardware and the software resources whether they meet the given requirement of the analyzed system or not which include latest machinery and the technique required handling the system. It may also invoke the study of the new alternative to solve the given problem.

**Behavioral Feasibility**

People are inherently resistant to change, and computers have known to facilitate change. An estimate should be made of how strong a reaction the user staff is likely to have toward the development of a computerized system. It is common knowledge that computer installations have something to do with turnover, transfers, restraining, and changes in employee job status. Therefore, it is understandable that the introduction of a candidate system requires special effort to educate, sell and train the staff on new ways of conducting business.

**Economic Feasibility**

It deals with the study of the cost benefit analysis. All the cost of the new system compared with the benefits, which can be obtained for management approval. The benefit may be quantities in nature Current System Summary. The genuine consideration of the system being developed is the approach follow to look the system in the way it is useful for them.

**Programming Languages**

* C# .NET
* MySQL