# **KWA MKAMBA BAKERY**

**SYSTEM DESIGN DOCUMENT**

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**BY**

**MWENDWA EMMANUEL**

[**mwendwae054@gmail.com**](mailto:mwendwae054@gmail.com)

**+254742586034**

## DECLARATION

I, Mwendwa Emmanuel hereby declare that this is my original work and has never been done by anyone else to the best of my knowledge.

## DEDICATION

This dissertation is dedicated to my mother Mrs. Esther Musyoki and my father Mr. Cosmus Musyoki. Thank you for the effort you make to educate me, clothe me, and ensure a brighter future for me.

## ACKNOWLEDGEMENTS

I extend my appreciation to everyone who in one way or the other gae me moral and financial support.

My friends Gibson and Simon whose company I enjoyed during the development of this project, and whose encouragement and courage challenged me to achieve the best I could.

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# Chapter 1: Introduction

## 1.1: Introduction

Kwa Mkamba Bakery is a registered bakery located in Huruma, Eldoret near Huruma Primary School. It was started in 2015 by Mr. Musyoki where its head office is located. It consists of three main departments which involve productions, store keeping and sales. It is a family in business and caters to hundreds of customers/people daily.

Kwa Mkamba Bakery is a bakery engaging in business that’s in producing, selling and marketing of half-cakes in two different price ranges (Ksh. 5/- and Ksh. 10/-). A packet of the Ksh. 5/- consists of two dozen pieces while the Ksh. 10/- consists of a dozen pieces and each packet goes for Ksh. 100/-.

The trend followed in this bakery is quite simple. From production they are handed over to store keeping department where they are recorded in a book. Then it moves over to the sales where the sales and purchases are recorded in sales book with their corresponding prices. The amount of bakery products that are sold on a particular day are entered in the record books and files.

At the end of the day, daily reports are made on sales, production and expenses. Stock monitoring is done which checks the products that are on high demand and products/ingredients/raw materials that are missing in the production sector.

## 1.2: Background

This bakery has been expanding in terms of production and market since its start. The aim of this bakery is to improve its products as well as improving customer satisfaction. A dedicated sales agent is required for each of the three areas they distribute their products i.e., Eldoret Town, Kahoya/Maili Nne and Huruma. These agents load products in crates onto their delivery vehicle and ride/drive to their designated routes/areas and sale to their customers.

Records are taken of the number of products leaving the warehouse and the products returning to the warehouse(returns, spoilt, damaged). These processes are currently being done manually. Payments are done either through cash or mobile transactions. A sales agent will bring the amount of cash on hand and add up the total with all mobile transactions before closing the sales of the day(Cash brought, Mobile Transactions, Balance/Debt).

## 1.3: Problem Statement

Records are kept in paper files, store record books where every one can access them therefore liable to:

* Data is easily lost, misplaced, changed and manipulated.
* Lack of data security.
* There is poor data search and look up methods.

## 1.4: Objective of the study

### 1.4.1 General Objectives

The main objective of this project was to develop an automated system that will enable recording and calculations of the bakery.

### 1.4.2 Specific Objective

1. To provide a management information system for the bakery to record number of products produced daily.
2. The owner to be able to view daily records in one place and have protection over the data.
3. To create a system to help see daily sales and trends in an easy format for informed business decisions.
4. To develop a prototype that will enhance work done during recording to make work precise, accurate to reduce loss of information.

## 1.5: Product Scope

The system being introduced will have two major functions: the production and the sales subsystems. The production subsystem is to keep track of raw materials purchased, expenses incurred during production and number of products produced. The sales subsystem is to keep track of products sold, damaged, returned, expired and the dates.

The system will center on data entry, date search, data retrieval, validation and data verification. It will also deal with a daily supply of goods, customer’s information depending on their terms of purchase, product rates, available raw materials in the production sectors (stock taking) and Sales accounting in terms returns, delivery, registered customers (agents) that needs to be supplied on a daily basis.

## 1.6: Significance of the System

The system helps one to appreciate the need of a computerized Bakery Management Information System. The system has a customer’s database, daily finished products, stock takings and sales. Once a customer is registered, he/she is given a unique code that will be used every time the purchase is made.

With the daily data entry, the BMIS can determine and predict the forces of demand and supply by following the trend of reports, this can be done in terms of stock taking, products sold, costs, profits, hence improving the business decisions.

Data security is ensured by securing passwords and gives different users different levels of authorization. This reduces and stops the risks of information being accessed, changed, disrupted and modified by every unauthorized person.

# Chapter 2: Literature Review