# Design and Implementation of a Product Expiry Alert Management System

**David Kamau**
**Department of Computer Science and Information Sciences, Maasai Mara University**
**P.O Box 861-20500, Narok, Kenya**
**Tel:**
**Email: mutie10277@student.mmarau.ac.ke**

## Abstract

The Design and Implementation of a Product Expiry Alert Management System project aims to develop a robust software solution that effectively manages product expiry alerts in various industries. With the increasing demand for efficiency and quality in product management, it is crucial to address the challenges associated with tracking and managing product expiry dates. This project focuses on designing and implementing a system that provides timely notifications and alerts to businesses and consumers regarding the expiry dates of their products. By leveraging modern technologies and data management techniques, the proposed system ensures that expired products are detected and dealt with promptly, reducing the risks of health hazards and financial losses. The system employs a user-friendly interface that allows businesses to input relevant product information, including batch numbers, manufacturing dates, and expiry dates. The information is stored in a secure database, ensuring data integrity and confidentiality. Through automated processes, the system constantly monitors the stored data and generates alerts when a product's expiry date is approaching or has passed. To enhance the functionality and versatility of the system, additional features such as barcode scanning and integration with existing inventory management systems are incorporated. This integration enables seamless synchronization of product expiry data across different platforms, facilitating real-time updates and accurate reporting. The Design and Implementation of a Product Expiry Alert Management System project not only benefits businesses by preventing the sale and consumption of expired products but also enhances consumer safety and confidence. By minimizing the chances of consuming expired goods, the system helps protect consumers from potential health risks. Overall, this project aims to develop an efficient and reliable product expiry alert management system that can be widely implemented across industries. The successful implementation of this system will contribute to streamlining product management processes, reducing waste, and ensuring the safety and satisfaction of both businesses and consumers.
**Key words:** product expiry alert system, businesses, expired products