



## **SKP ENGINEERING COLLEGE**

Approved by AICTE New Delhi | Affiliated to Anna University - Chennai Tiruvannamalai, Tamil Nadu | Phone: +91-4175-252633 | +91-9443105139





#### **DEPARTMENT OF INFORMATION TECHNOLOGY**

IT3811 - Project work

Zeroth Review

**DATE:** 26-02-2025

# AUTOMATING INVENTORY MANAGEMENT

**NMNT ID:** NMNTSTD5122016

**Teams Member** 

Aruna A 512221205002

Dhanusha V 512221205004

Rahila S 512221205014

Team Name: SKP IT Riders

GUIDE MS. M.SAMHITHA, M.E.,

Department of Information Technology

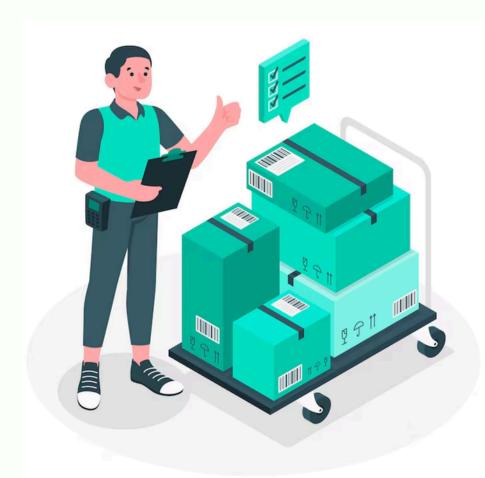
## Project Title & Relevance

- The title clearly reflects the core objective of the project.
- It highlights the focus on improving warehouse operations.
- Relevant for businesses that manage stock and fulfill orders manually.
- Directly connected to automation and real-time management.
- Short, clear, and easy to understand.



## Introduction

- In many small
   warehouses, inventory is
   still managed manually.
- This leads to errors,
   delays, and a lack of realtime data.
- Our project solves this by developing a web-based system.



- It automates tasks like stock tracking, order processing, and alert notifications.
- The website is built with
   Django and has an easyto-use dashboard for staff
  and admin.

#### Literature Review



Many research works discuss inventory automation, but mostly for large-scale industries.

#### **Cost Barriers**

Existing solutions are costly and complex for small businesses.

#### **Technology Insights**

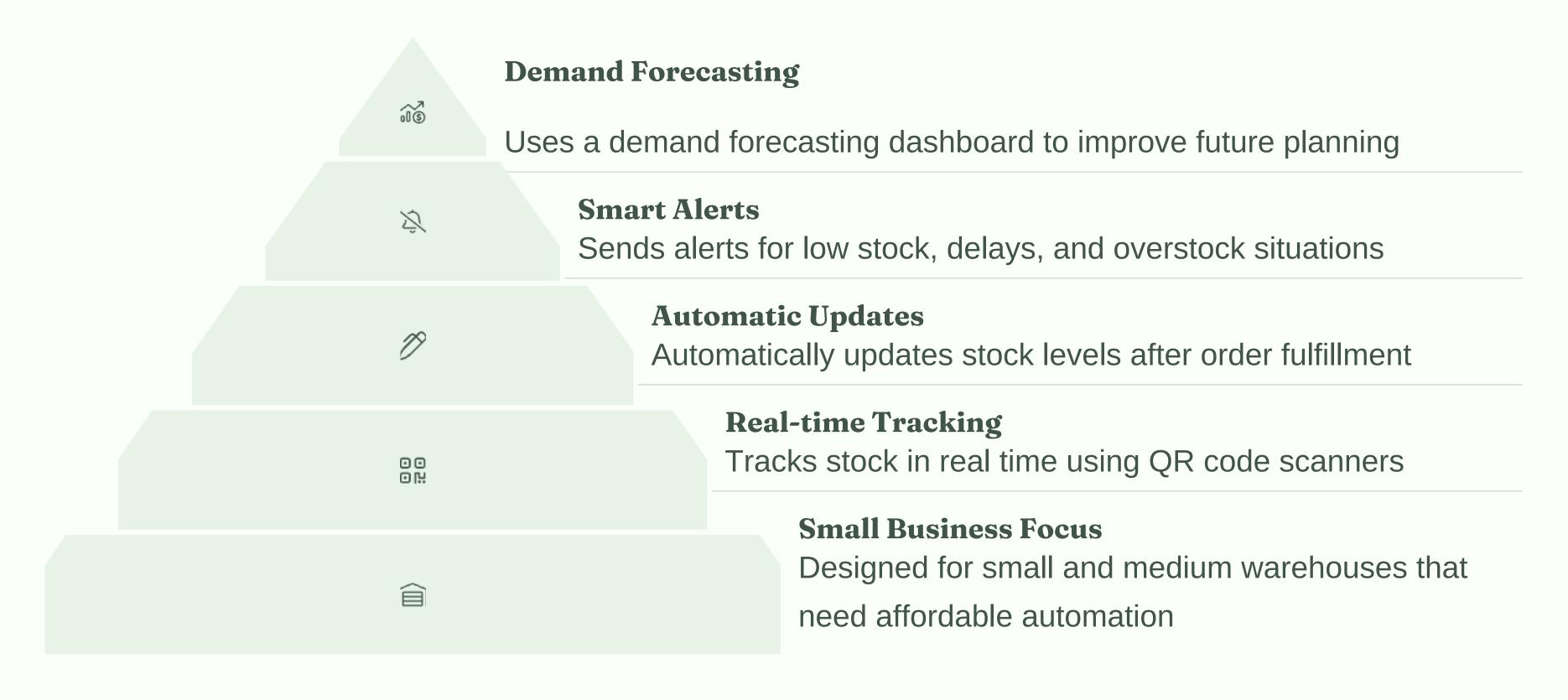
Studies show that real-time tracking and QR-based systems reduce human errors.

#### Our Approach

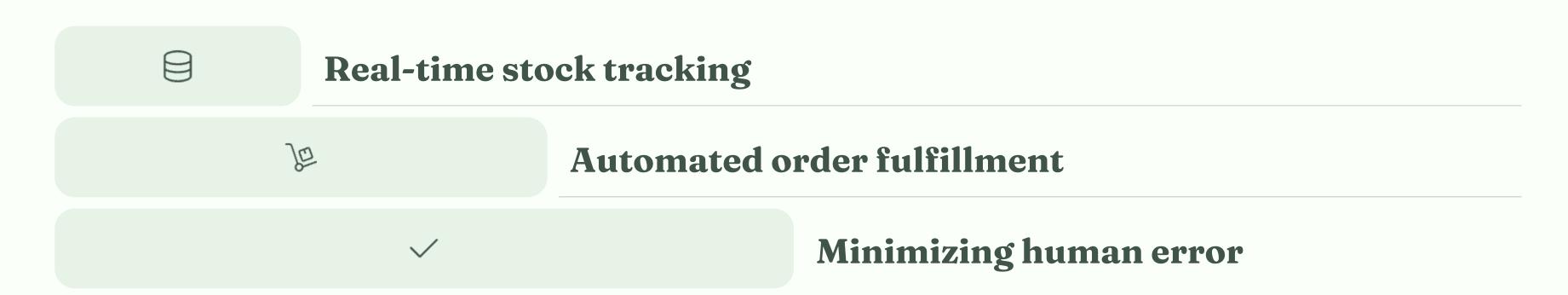
- Our project takes inspiration from existing works and customizes it for small warehouses.
- We focus on combining cost-effective tools (like QR codes and web dashboards) to simplify warehouse tasks.



#### Contribution to the Field



### **Problem Statement**



#### **Project Objectives:**

#### Website Development

Create a simple and responsive website for warehouse staff and admins.

#### **Real-time Notifications**

Provide real-time notifications and status tracking.

#### **QR** Integration

Automate stock updates using QR scanning.

#### **Data Analysis**

Forecast demand and generate data-based suggestions.

## Conclusion

#### **Problem Solution**

Our project provides a clear solution to a real-world problem faced by small warehouses.

#### Scalability

The system is built with opensource tools and is ready to scale.



#### **Task Automation**

It automates major tasks like tracking, fulfillment, and reporting.

#### **Error Reduction**

Reduces human errors and improves speed, accuracy, and productivity.

Overall, the project is practical, efficient, and solves the defined problem effectively.

