
Inventory and order management.

Introduction

Purpose

(Problem Description:)

- ❖ AKIL Investment Company encounters inefficiencies in its current management of corporate merchandise.
- ❖ The absence of a centralized database system leads to problems such as inaccurate inventory tracking, which can result in stockouts of popular items or overstocking of less popular ones.
- ❖ Manual order processing increases the likelihood of errors and delays in fulfilling customer orders, negatively affecting customer satisfaction.

- ❖ AKIL's ability to analyze sales data, identify profitable products, and optimize procurement from suppliers is hindered by the lack of a robust system.
- ❖ Ineffective communication and coordination among AKIL's departments (e.g., sales, logistics, procurement) create bottlenecks and increase operational costs.

Alignment with Sustainable Development Goal (SDG):

- ❖ This project aligns with **SDG Goal 12: Responsible Consumption and Production**.
- ❖ By optimizing inventory management, the system helps AKIL Investment Company minimize waste and improve resource utilization.
- ❖ Efficient order processing reduces unnecessary transportation, contributing to a lower carbon footprint for AKIL.
- ❖ Effective supplier management and lead time tracking enable AKIL to adopt more sustainable procurement practices.

Relevance in the Kenyan Context:

- ❖ AKIL Investment Company operates within the Kenyan corporate merchandise sector, which is essential for branding and marketing in Kenya.

- ❖ Efficient merchandise supply chains are crucial for Kenyan businesses like AKIL to maintain a competitive edge.
- ❖ Many Kenyan SMEs face challenges in adopting technology to improve their operations, making this project relevant by providing a tailored database solution for AKIL.
- ❖ This system will streamline AKIL's operations and contribute to the growth and efficiency of a Kenyan business.

Scope

- ❖ The database system will cover AKIL Investment Company's key business functions:
 - Managing product inventory with details like **ProductID**, **ProductName**, **Description**, **CategoryID**, **Quantity**, **SupplierID**, **ReorderLevel**, **UnitPrice**, **SellingPrice**, and **LastRestockDate**.
 - Processing customer orders from placement to delivery, including order details.
 - Managing customer information, including details and order history.
 - Managing supplier information, including contact details and lead times.
 - Recording sales and order-related transactions.

- Categorizing products for better organization.
- Managing employee/user information with roles and permissions

Importance

Describe the significance of this roadmap as it relates to the company's objectives.

Vision & objectives

Vision

To be the driving force behind AKIL Investment Company's evolution into Kenya's leading corporate merchandise provider, recognized for its seamless operations, exceptional customer experiences, and sustainable practices, all powered by a cutting-edge database system that delivers unparalleled efficiency and insight.

Key Elements of the Vision Statement:

- ❖ **Driving Force:** Emphasizes the database system's central role in enabling AKIL's success.
- ❖ **Leading Provider:** Sets a high aspiration for AKIL's position in the market.
- ❖ **Seamless Operations:** Highlights the goal of smooth and efficient processes across the entire supply chain.
- ❖ **Exceptional Customer Experiences:** Focuses on the importance of customer satisfaction and loyalty.

- ❖ **Sustainable Practices:** Reinforces the commitment to responsible resource management and ethical operations.
- ❖ **Cutting-Edge Database System:** Positions the technology as a key differentiator and enabler of the vision.
- ❖ **Unparalleled Efficiency and Insight:** Captures the core benefits of the system in terms of productivity and data-driven decision-making.

Objectives

Objectives:

- ❖ To design and implement a relational database for AKIL Investment Company to store and organize data across its operations.
- ❖ To create efficient data retrieval and update mechanisms to support AKIL's daily activities.
- ❖ To automate order processing, inventory control, and reporting for AKIL, reducing manual effort and errors.
- ❖ To provide AKIL with real-time insights into stock levels, order statuses, sales trends, and customer information.

- ❖ To improve communication and collaboration among AKIL's employees and departments.
- ❖ To enhance AKIL's customer service and satisfaction through accurate and timely order fulfillment

Key Functionalities and Features:

Product Catalog Management:

- ❖ Adding new products with specifications.
- ❖ Updating product details and pricing.
- ❖ Categorizing products (e.g., "T-Shirts," "Golf Shirts").

Inventory Management:

- ❖ Real-time stock level tracking.
- ❖ Automated reorder triggers.
- ❖ Inventory reporting and valuation.
- ❖ Supplier and lead time management.

Order Management:

- ❖ Customer order placement and tracking.
- ❖ Order status updates and notifications.

- ❖ Delivery scheduling.

- ❖ Invoice generation.

Customer Relationship Management (CRM):

- ❖ Customer data storage and retrieval.

- ❖ Order history tracking.

- ❖ Customer communication tools.

Supplier Management:

- ❖ Supplier contact and performance tracking.

- ❖ Purchase order management.

Transaction Processing:

- ❖ Payment recording and processing.

- ❖ Sales transaction tracking.

- ❖ Financial reporting.

User Management:

- ❖ User roles and permissions.

- ❖ Access control.

- ❖ Activity logging.

Reporting and Analytics:

- ❖ Sales reports (e.g., best-selling products).
- ❖ Inventory reports (e.g., stock turnover).
- ❖ Order fulfillment reports.
- ❖ Customer behavior analysis.

Stakeholders

Main Stakeholders:

- ❖ **AKIL Investment Company Management:** Needs the system for better control, efficiency, cost reduction, and informed decision-making.
- ❖ **AKIL Employees:**
 - **Sales Team:** Needs it for order management, sales tracking, and product information.
 -
 - **Logistics Team:** Needs it for delivery management and shipment tracking.
 -

- **Procurement Team:** Needs it for supplier management and lead time optimization.
-
- **Finance Team:** Needs it for transaction processing and financial reporting.
-
- ❖ **AKIL Customers:** Need easy ordering, order tracking, and timely deliveries.
- ❖ **AKIL Suppliers:** Need clear communication and efficient order processing.

How the Project Addresses Stakeholder Needs:

- ❖ **AKIL Management:** Provides data-driven insights and tools to optimize operations and achieve business objectives.
- ❖ **AKIL Employees:** Streamlines workflows, automates tasks, reduces errors, and improves collaboration.
- ❖ **AKIL Customers:** Ensures accurate and timely order fulfillment and enhances the overall customer experience.
- ❖ **AKIL Suppliers:** Facilitates clear communication, efficient order management, and timely payments.

