

SwiftCart – Business Analysis Document

1. Project Overview

Project Title: SwiftCart – Smart E-Commerce Platform

Objective: The goal of this project is to design and analyze a smart e-commerce platform that enhances the user shopping experience through personalized recommendations, simplified checkout, and fast delivery. The analysis will identify business requirements, system interactions, and potential process improvements.

2. Stakeholders

- Customer – primary users who shop through the app.
- Admin – manages inventory, users, and orders.
- Delivery Partner – responsible for logistics and shipment tracking.
- Marketing Team – handles promotions, campaigns, and customer engagement.
- Technical Team – developers, testers, and support engineers.

3. Business Requirements

BR1: The system shall allow users to register and log in securely.

BR2: The platform shall support product browsing by category, search, and filters.

BR3: The platform shall provide personalized product recommendations.

BR4: The checkout process shall support multiple payment methods (card, wallet, cash on delivery).

BR5: The admin panel shall allow product management and inventory tracking.

4. Functional Requirements

FR1: The user can view product details, ratings, and reviews.

FR2: The system shall allow adding/removing products to/from cart.

FR3: The admin can add, update, or remove a product with all related details.

FR4: The system shall track orders and display real-time status to users.

5. Use Case Descriptions

Use Case: Place Order

Actors: Customer, System

Description: A user selects products, adds them to cart, confirms order details and completes checkout.

Use Case: Manage Product Catalog

Actors: Admin, System

Description: Admin adds/edits/deletes products in the system catalog.

6. Activity Flow

Activity: Order Process Flow

1. User browses products.
2. User adds items to cart.
3. User proceeds to checkout.
4. System confirms availability and calculates total.
5. User selects payment method and places the order.
6. System generates order and notifies user and delivery partner.

7. User Acceptance Criteria

- User should be able to register and receive confirmation email.
- Users can complete checkout with multiple payment options.
- Admin can successfully add/edit/remove products from dashboard.
- System shows real-time order status for customers.
- Orders are logged in the database with accurate timestamp.

8. Project Scope Statement

In Scope:

- User registration and login functionality.
- Product browsing, search, and filter features.
- Shopping cart and checkout process.
- Order management for both customers and admin.
- Payment gateway integration.
- Admin control panel for managing products and users.
- Delivery tracking interface for customers.

Out of Scope:

- Supplier and vendor management.
- In-app chat or customer support systems.
- International tax and compliance features.
- Warehouse management automation.

9. User Personas

1. Mariam – The New Shopper

- Age: 24 | Occupation: University Student
- Goals: Looking for affordable fashion and beauty products.
- Pain Points: Doesn't trust online reviews; gets overwhelmed with choices.

2. Ahmed – The Busy Professional

- Age: 32 | Occupation: Software Engineer
- Goals: Wants fast delivery and easy reordering of tech gadgets.
- Pain Points: Hates long checkouts, values speed and reliability.

3. Salma – The Admin Manager

- Age: 29 | Role: E-commerce Operations Admin
- Goals: Manage inventory efficiently and monitor user complaints.
- Pain Points: Needs an intuitive dashboard with real-time updates.

10. User Stories and Acceptance Criteria

Story 1:

As a customer, I want to search for items by category and filter results, so I can find what I need faster.

- AC1: Results should update in real-time as filters are applied.
- AC2: Search results should match keywords in product title or tags.

Story 2:

As a customer, I want to track my order status, so I can know when it will arrive.

- AC1: The order must show statuses like "Processing", "Shipped", or "Delivered".