BUSINESS REQUIREMENTS DOCUMENT

E-Commerce Ordering & Tracking System

Executive Summary

This project aims to enhance the customer post-order experience by improving delivery visibility, real-time tracking, and automated notifications. The current system provides only limited delivery updates, leading to customer confusion and increased support inquiries. The proposed solution will integrate logistics APIs, improve order tracking detail, and automate status communication to reduce operational overhead and enhance customer satisfaction.

Business Problem

Customers currently have **limited visibility** into their order's delivery journey. The system only displays basic statuses such as "Shipped" or "Out for Delivery," without providing real-time updates from logistics partners.
As a result:

- Customers repeatedly contact support for status updates.

- Support ticket volume has increased by over 30%.

- Delivery partners spend additional time handling status-related queries.

- Customer satisfaction has decreased due to lack of transparency.

To address these issues, the business requires a modern, integrated tracking system that improves delivery transparency and reduces dependency on support teams.

Goals & Objectives

Business Goals

- Improve delivery transparency for customers

- Reduce the volume of repetitive support tickets

- Enhance communication between logistics partners and customers

- Increase customer trust and satisfaction

SMART Objectives

- Reduce support tickets related to order tracking by **40% within 3 months**

- Provide real-time tracking updates integrated from logistics partners

- Improve customer satisfaction score related to delivery experience by **25%**

- Deliver automated status notifications for at least **5 key delivery events**

Project Scope

In-Scope

- Real-time delivery tracking page

- Integration with logistics APIs

- Automated push/email/SMS notifications

- Order status standardization (e.g., Packed → Shipped → In Transit → Delivered)

- Display estimated delivery dates and delays

- User-accessible order history page

Out-of-Scope

- Seller portal enhancements

- Chatbot implementation

- Product recommendation engine

- Return/refund processing redesign

- Multi-device mobile app redesign

- Payment module enhancements (handled in a separate project)

High-Level Requirements

1. System shall display detailed order status across all stages of delivery.

2. System shall integrate with third-party logistics APIs for real-time updates.

3. System shall send automated notifications when order status changes.

4. System shall provide estimated delivery dates and update them if delays occur.

5. System shall allow customers to view complete order history.

6. System shall standardize delivery statuses across all courier partners.

7. System shall log all order updates in a centralized tracking database.

8. System shall provide a tracking link sharable with other users.

Business Rules

- Every order must have a unique tracking ID.

- Notifications must be sent for major status changes (Packed, Shipped, Out for Delivery, Delivered).

- If logistics API fails, system must retry every 10 minutes up to 5 times.

- Delays greater than 24 hours must trigger a customer update.

Assumptions

- Logistics partners will provide stable API access.

- Customers have valid phone numbers and email for notifications.

- Delivery statuses provided by vendors are accurate.

- SMS/Email provider will support high-volume alerts.

Constraints

Technical Constraints

- All tracking data must be integrated through existing middleware.

- System must load tracking page within **3 seconds**.

Regulatory Constraints

- Must comply with data privacy regulations for displaying customer address.

Timeline Constraints

- MVP must be delivered within **10 weeks**.

Risks

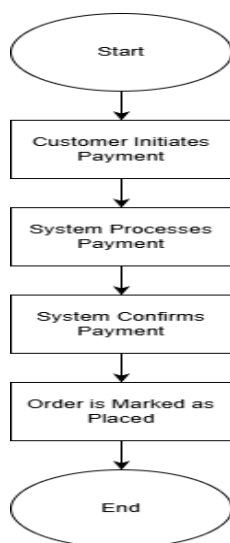| Risk	Impact	Mitigation
Logistics API downtime	No live updates	Implement fallback cached statuses
Incorrect delivery status from partner	Customer confusion	Automated reconciliation every 6 hours
High SMS/email volume during sales	Delayed notifications	Use scalable messaging gateway
Delivery delays during peak season	Support overload	Auto-notify customers of expected delays

Success Metrics

- Reduce delivery-related support tickets by **≥ 40%**

- Reduce customer follow-up calls regarding order status

- Improve delivery experience rating from 3.6 → 4.5+

- Increase repeat customer rate by 10%

- Improve tracking page engagement time

Stakeholder List

Stakeholder	Role
Product Owner	Approves requirements & priorities
Business Sponsor	Provides funding & strategic direction
BA (You)	Requirements gathering, validation, documentation
Logistics Team	Provides delivery status rules
Tech Lead	Design & development
QA Lead	Test case creation & testing
Customer Support	Provides insights on common complaints
UX Designer	Designs tracking page UI

High-Level Process Flow

```
        ┌─────────┐
        │  Start  │
        └─────────┘
             │
             ▼
   ┌───────────────────┐
   │ Customer Initiates │
   │     Payment        │
   └───────────────────┘
             │
             ▼
   ┌───────────────────┐
   │ System Processes   │
   │     Payment        │
   └───────────────────┘
             │
             ▼
   ┌───────────────────┐
   │ System Confirms    │
   │     Payment        │
   └───────────────────┘
             │
             ▼
   ┌───────────────────┐
   │ Order is Marked as │
   │     Placed         │
   └───────────────────┘
             │
             ▼
        ┌─────────┐
        │   End   │
        └─────────┘
```

Sign-Off

The above business requirements have been reviewed and approved to proceed with design and development.

- Product Owner: _____
- Sponsor: _____
- Date: _____