

Payment Gateway Integration – BA Case Study

Background

Payment gateways act as intermediaries between customers, merchants, banks, and payment networks. A clear integration approach is critical to ensure secure, reliable transactions.

Problem Statement

Merchants face inconsistent payment success rates and unclear failure handling due to loosely defined gateway integrations.

Scope

- Payment initiation
- Authorization
- Capture
- Refunds
- Retries
- failure handling

Functional Requirements

- Define API request/response structures
- handle success and failure scenarios
- support retries
- refunds
- transaction status queries

Non-Functional Requirements

- Security
- performance
- idempotency
- audit logging

KPIs

- Payment success rate
- retry success rate
- refund turnaround time.