

Functional Requirements Document (FRD)

Project: Payment Transactions RCA Dashboard

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1. Data Requirements

1.1 Transaction Table Structure

Column Name	Description
transaction_id	Unique transaction identifier
user_id	Links to user table
created_at	Timestamp of transaction
amount	Transaction amount
status	SUCCESS or FAILED
failure_reason	Reason of failure

1.2 User Table Structure

User Column	Description
user_id	Unique user identifier
age	User age
city	User location
device	User device type
type	User category (new/returning/premium)

2. KPI Requirements

KPI	Formula	Description
Total Transactions	COUNT(transaction_id)	Total number of payment attempts
Success Count	COUNT(status=SUCCESS)	Total successful payments
Failure Count	COUNT(status=FAILED)	Total failed payments

Success Rate %	Success Count / Total Tx	Percentage of successful transactions
Failure Rate %	Failure Count / Total Tx	Percentage of failed transactions
Avg Amount	SUM(amount) / Total Tx	Average transaction value

3. Visual Requirements

Visual	Description
KPI Cards	Show success %, failure %, totals
Daily Trend Chart	Daily success vs failure
Failure Reason Bar Chart	Top failure reasons
Device Segmentation	Failures by device
City Segmentation	Failures by city
Hourly Heatmap	Failures by hour vs failure reason

4. Filters / Slicers

Filter	Field
Date Range	created_at
City	city
Device	device
User Type	type
Failure Reason	failure_reason