



# Product Requirements & Specification Document

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## Project Name

PulseKPI - Sales Region Performance Dashboard

## Description

Develop a Power BI dashboard to visualize sales KPIs by region, leveraging SQL-extracted data. The dashboard will display bar, line, and KPI visuals to highlight top-performing regions and sales trends over time.

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## 1. Objectives

Objective	Description
Regional Sales Insights	Visualize sales performance by region
Trend Analysis	Show sales trends over time
KPI Monitoring	Display key sales metrics (e.g., total sales, growth rate)
Actionable Intelligence	Enable identification of top/bottom-performing regions

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## 2. Stakeholders

Role	Responsibility
Product Owner	Requirements, acceptance, prioritization
BI Developer	Dashboard development, data modeling
Data Engineer	SQL data extraction, ETL
Sales Manager	End-user, feedback provider

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## 3. Functional Requirements

ID	Requirement
FR1	Connect Power BI to SQL data source
FR2	Extract and transform sales data by region and time period
FR3	Display bar chart of sales by region
FR4	Display line chart of sales trends over time (monthly/quarterly)
FR5	Show KPI cards for total sales, YoY growth, and top region
FR6	Enable filtering by date range and region



FR7	Refresh data automatically (daily)
FR8	Ensure responsive layout for desktop and tablet

## 4. Non-Functional Requirements

ID	Requirement
NFR1	Dashboard loads within 5 seconds
NFR2	Data refresh completes within 15 minutes
NFR3	Adheres to company branding guidelines
NFR4	Access restricted to authorized users

## 5. Data Requirements

Data Element	Source Table	Description
Region	sales_regions	Sales region name/ID
Sales Amount	sales	Total sales value
Date	sales	Transaction date
Product (optional)	sales	Product sold

### Sample SQL Extraction:

```
SELECT
  r.region_name,
  s.sale_date,
  SUM(s.amount) AS total_sales
FROM
  sales s
JOIN
  sales_regions r ON s.region_id = r.id
GROUP BY
  r.region_name, s.sale_date
```

## 6. Visual Specifications

Visual Type	Purpose	Data Elements	Interactivity
Bar Chart	Sales by region	Region, Sales Amount	Drill-down, filter
Line Chart	Sales trend over time	Date, Sales Amount	Date/region filter
KPI Cards	Key metrics (total, growth, top region)	Aggregated sales	N/A



## 7. User Stories

ID	As a...	I want to...	So that...
US1	Sales Manager	View top-performing regions	Focus efforts on high performers
US2	Sales Manager	Analyze sales trends over time	Identify growth/decline periods
US3	Sales Manager	Filter data by region and date	Get targeted insights

## 8. Acceptance Criteria

- Dashboard connects to live SQL data and refreshes daily
- Bar, line, and KPI visuals are present and accurate
- Filters for region and date function correctly
- Dashboard loads within 5 seconds
- Only authorized users can access the dashboard

## 9. Constraints & Assumptions

- Data is available and accessible in SQL database
- Power BI Pro licenses are available for users
- No advanced custom visuals required

## 10. Timeline & Milestones

Milestone	Target Date
Data Model Finalized	Week 1
Initial Dashboard Draft	Week 2
Stakeholder Review	Week 3
Final Delivery	Week 4

## 11. Out of Scope

- Mobile-specific optimization
- Predictive analytics or forecasting
- Integration with non-SQL data sources

## 12. Appendix

### Technologies:

- Power BI (dashboard/reporting)
- SQL (data extraction)

**Themes:**

- Business, Education
  - Data Analytics
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