Project Report – Power BI Project

Mobile Sales Dashboard

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1. Introduction

The **Mobile Sales Dashboard** project is designed to analyze **mobile phone sales data** and create an **interactive Power BI dashboard** to visualize sales performance, identify top-selling brands, and understand customer preferences.
This project aims to provide business stakeholders with **data-driven insights** for **strategic decision-making**.

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2. Objectives

The main objectives of the project are:

- To design an **interactive dashboard** using Power BI.
- To track **total revenue, total units sold, and average selling price**.
- To identify **top-performing mobile brands and models**.
- To analyze **regional performance and customer demand trends**.
- To enable **dynamic filtering** for in-depth business insights.

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3. Dataset Details

- **Dataset Name**: Mobile Sales Data
- **Source**: Sample dataset

- **Size**: ~10,000+ records
- **File Format**: `.xlsx` / `.csv`
- **Key Fields**:
    - **Order ID** – Unique transaction identifier
    - **Date** – Order date
    - **Region** – Geographic location
    - **Brand** – Mobile phone brand
    - **Model** – Mobile phone model
    - **Units Sold** – Number of units sold
    - **Unit Price** – Price per unit
    - **Total Sales** – Total revenue from sales

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4. Tools & Technologies Used

Tool / Technology	Purpose
Power BI	Dashboard creation & visualization
Power Query	Data cleaning & transformation
DAX (Data Analysis Expressions)	KPI calculations
Excel	Initial data cleaning & exploration

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5. Methodology / Project Workflow

Step 1: Data Collection

- Collected raw **mobile sales dataset** for analysis.

Step 2: Data Cleaning & Transformation

- Handled **missing values** and removed duplicates.
- Converted data types for numerical and date fields.
- Created calculated columns for **Total Sales** and **Profit Margin** (if applicable).

Step 3: Data Modeling

- Defined relationships between data tables (if multiple).
- Used **DAX measures** to calculate KPIs:
    - **Total Revenue** = SUM(`Total Sales`)
    - **Total Units Sold** = SUM(`Units Sold`)
    - **Average Selling Price** = AVERAGE(`Unit Price`)

Step 4: Dashboard Development

- Designed a **user-friendly dashboard** with:
    - KPI Cards → Total Revenue, Units Sold, Avg. Price
    - Bar Chart → Top 5 Mobile Brands
    - Line Chart → Monthly & Yearly Sales Trends
    - Map Visual → Regional Sales Distribution
    - Slicers → Filters by Brand, Model, Region, and Date

Step 5: Insights & Recommendations

- Identified **top-selling brands** contributing maximum revenue.

- Determined **peak sales months** to improve inventory management.
- Analyzed **regional performance** to optimize marketing strategies.

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6. Dashboard Features

Feature	Description
KPI Cards	Displays Total Revenue, Units Sold & Average Price
Brand Analysis	Highlights top-performing mobile brands
Regional Insights	Shows sales performance across regions
Trend Analysis	Visualizes monthly & yearly sales patterns
Interactive Slicers	Enables filtering by brand, model, region, and date

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7. Key Insights

- **Brand A** contributed the highest sales revenue.
- **Region X** had the maximum sales compared to other locations.
- **December & January** recorded the highest number of mobile sales.
- **Average selling price** showed a rising trend in the last two quarters.

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8. Future Scope

- Integrate **real-time data sources** for live reporting.
- Add **predictive analytics** for future sales forecasting.
- Implement **automated data refresh pipelines**.

- Include **customer sentiment analysis** for better product insights.

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9. Conclusion

The **Mobile Sales Dashboard** successfully provides **clear, actionable insights** into mobile phone sales trends, top-performing brands, and regional performance.
This interactive Power BI dashboard empowers businesses to **make data-driven decisions** and optimize their sales strategies.