

PROJECT REPORT: MOBILE SALES ANALYSIS

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Objective: Sales Trend Identification & Customer Behavior Analysis

1. EXECUTIVE SUMMARY

This project involves a comprehensive analysis of over **40,000 mobile sales transactions** to uncover critical revenue trends, payment preferences, and product performance. By leveraging **Power BI**, the raw data was transformed into an interactive dashboard that provides stakeholders with the intelligence needed to optimize inventory, marketing, and payment processing strategies.

Key Performance Indicators (KPIs)

- **Total Sales:** ₹769M
- **Total Quantity Sold:** 19K units
- **Total Transactions:** 4K+
- **Primary Revenue Drivers:** Apple & Samsung

Objective: *To leverage high-volume transaction data to identify sales peaks, optimize the brand mix, and understand payment ecosystems for retail growth.*

2. BUSINESS PROBLEM STATEMENT

The retail mobile market is highly competitive with rapidly changing consumer preferences. This analysis seeks to:

- Identify which **brands and models** contribute most to the bottom line.
- Understand **payment method trends** (Digital vs. Cash) to optimize transaction fees and speed.
- Analyze **time-based demand** (Monthly and Day-wise) to better manage staffing and stock levels.
- Correlate **customer ratings** with sales volume to assess product satisfaction.

3. TECHNICAL METHODOLOGY

3.1 Data Preparation & Modeling

To ensure accuracy and performance, the following steps were taken:

- **ETL Process:** Data was cleaned and transformed using Power Query, ensuring consistent formatting for brand names and transaction dates.
- **Calculated Measures (DAX):** Developed custom DAX measures for Total Sales, Quantity, and Transaction counts to enable dynamic aggregation.

- **Data Structuring:** Established relationships within the data model to allow for seamless filtering across Brand, Payment Method, and Date hierarchies.

3.2 Dashboard Features & Visualizations

The dashboard was built for high interactivity, allowing users to drill down into specific data points:

- **Sales Trend Analysis:** Line charts displaying monthly fluctuations from January to December.
- **Payment Ecosystem:** A pie chart showcasing the distribution of UPI, Debit Card, Credit Card, and Cash.
- **Brand Comparison:** A detailed table and bar charts comparing leaders like Apple and Samsung against competitors (OnePlus, Vivo, Xiaomi).
- **Customer Sentiment:** Distribution charts analyzing customer rating patterns across different price segments.
- **Dynamic Slicers:** Interactive filters for Brand, Payment Method, Mobile Model, and Day Name.

4. KEY INSIGHTS



Brand & Product Performance

- **Market Leaders:** Apple and Samsung lead the revenue contribution, indicating a consumer preference for premium segments.
- **Model Velocity:** Specific high-demand models were identified as "Fast-Moving Goods," requiring prioritized inventory.



Transactional Behavior

- **Digital Dominance:** UPI and Card payments significantly outperform cash transactions, suggesting a tech-savvy customer base.
- **Rating Correlation:** Higher-rated models consistently show higher transaction volumes, proving that social proof drives sales.



Temporal Trends

- **Monthly Peaks:** Identified specific months with significant sales surges, likely tied to festive seasons or new product launches.
- **Weekend Surge:** Sales distribution analysis shows that weekends significantly outperform weekdays in both quantity and transaction value.

5. STRATEGIC RECOMMENDATIONS

1 Marketing & Promotions

- **Weekend Specials:** Launch targeted "Weekend Flash Sales" to capitalize on the identified high-traffic periods.
- **Payment Incentives:** Partner with banks or UPI providers for cashback offers on Apple and Samsung models to further drive premium sales.

2 Inventory Management

- **Stock Optimization:** Increase stock levels for top-selling models during identified peak months to prevent stock-outs.
- **Brand Focus:** Allocate more shelf space and marketing budget to high-revenue brands (Apple/Samsung) while using mid-range brands (Vivo/Xiaomi) for volume.

3 Customer Experience

- **Review Integration:** Leverage high customer ratings in marketing materials to build trust for mid-tier models.

6. CONCLUSION

The **Mobile Sales Analysis Dashboard** successfully transforms 40K+ rows of data into a strategic asset. By identifying that digital payments and premium brands drive the majority of the ₹769M revenue, the business can now make data-backed decisions regarding inventory, marketing spend, and operational hours.

This project showcases expertise in:

✓ Power BI & DAX ✓ Data Cleaning & ETL ✓ Trend & Pattern Recognition ✓ Retail Business Intelligence

Deliverables

- **Power BI File (.pbix):** Interactive dashboard with full data model.
- **Data Summary:** KPI report and brand performance tables.
- **Insights Report:** Detailed breakdown of customer behavior and trends.