

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.

17 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

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.