

Mobile Sales Performance Analysis

Power BI Data Analytics – Detailed Business Case Study

Executive Summary

This case study provides a detailed analysis of mobile phone sales data using Power BI. The project focuses on identifying revenue drivers, seasonal demand patterns, customer behavior, and operational gaps. All data preparation, analysis, and visualization were performed inside Power BI, enabling a single-source analytical solution for decision-makers.

Business Context

The business operates in a competitive mobile retail market with multiple brands, price ranges, and city-level demand variations. Although large volumes of sales data were available, there was no consolidated view to understand which products, brands, and periods truly drove performance.

Business Problems Identified

Management lacked clarity on top revenue-generating brands and models, best and worst sales periods, regional demand concentration, and current month performance. Decisions related to inventory and promotions were often delayed due to the absence of real-time insights.

Data & Preparation

The dataset consists of over 3,800 transactions and more than 19,000 units sold across multiple years. Data cleaning was performed using Power Query to handle inconsistencies, standardize fields, and create a structured date hierarchy for time-based analysis.

KPIs Defined

Key performance indicators were defined to measure business health, including total sales, total units sold, total transactions, average selling price, and month-to-date (MTD) sales. These KPIs formed the foundation of all dashboard insights.

Overall Sales Performance

The analysis revealed total sales exceeding ⚡769 million, driven primarily by premium mobile models. Despite moderate unit volume, high average selling prices significantly boosted overall revenue.

Year-wise Performance Analysis

Sales performance varied across years. The most recent year showed the highest revenue contribution, supported by increased premium mobile adoption and stronger metro-city demand. Earlier years underperformed due to higher

reliance on mid-range models.

Month-wise & Seasonal Analysis

August emerged as the strongest month, driven by promotional activity and festive demand. In contrast, January and February recorded the lowest sales due to post-festive spending slowdown. Overall, Q3 consistently outperformed other quarters.

Month-to-Date (MTD) Analysis

MTD tracking enabled real-time monitoring of current month sales. Faster MTD accumulation was observed during strong months, while slower growth signaled underperformance, allowing timely corrective actions.

Brand-wise Performance

Apple, OnePlus, and Samsung were the top revenue-generating brands, driven by high-priced flagship models. Xiaomi and Vivo contributed higher sales volume but lower revenue, highlighting a revenue-driven business model.

Product-level Insights

Flagship models such as iPhone and Samsung Galaxy S series generated the majority of revenue. Mid-range models increased unit sales but had limited impact on revenue growth.

City-wise Performance

Metro cities including Delhi, Mumbai, Bangalore, and Hyderabad dominated total sales. Higher purchasing power and preference for premium devices drove this concentration. Tier-2 cities present growth opportunities for mid-range products.

Payment & Customer Behavior

UPI emerged as the most preferred payment method, followed by card payments. Cash usage was minimal, reflecting strong digital adoption. Customer ratings were predominantly positive, indicating high satisfaction levels.

Business Impact

The dashboard provided management with clear visibility into performance drivers, enabling smarter inventory planning, targeted marketing, and proactive sales monitoring through MTD insights.

Recommendations

Focus premium inventory in metro cities, promote mid-range models in Tier-2 regions, plan major campaigns around Q3, monitor MTD performance closely, and strengthen digital payment incentives.

Conclusion

This project demonstrates how Power BI transforms raw transactional data into actionable business intelligence. By integrating time-based, product-based, and customer behavior analysis, the solution supports a shift from reactive reporting to proactive, data-driven decision-making.