

Flipkart Sales & Product Profitability Dashboard Project Report

Prepared by: Dinesh
MBA - Marketing & Business Analytics
SRM Institute of Science and Technology

Abstract

This project report presents the development of an interactive Power BI dashboard designed to analyze Flipkart's sales and product profitability performance. The dashboard provides insights into sales trends, profitability, customer behavior, and product-level performance. It demonstrates end-to-end data handling, from cleaning and modeling to visualization and insight generation, aimed at supporting data-driven decision-making in the e-commerce domain.

1. Introduction

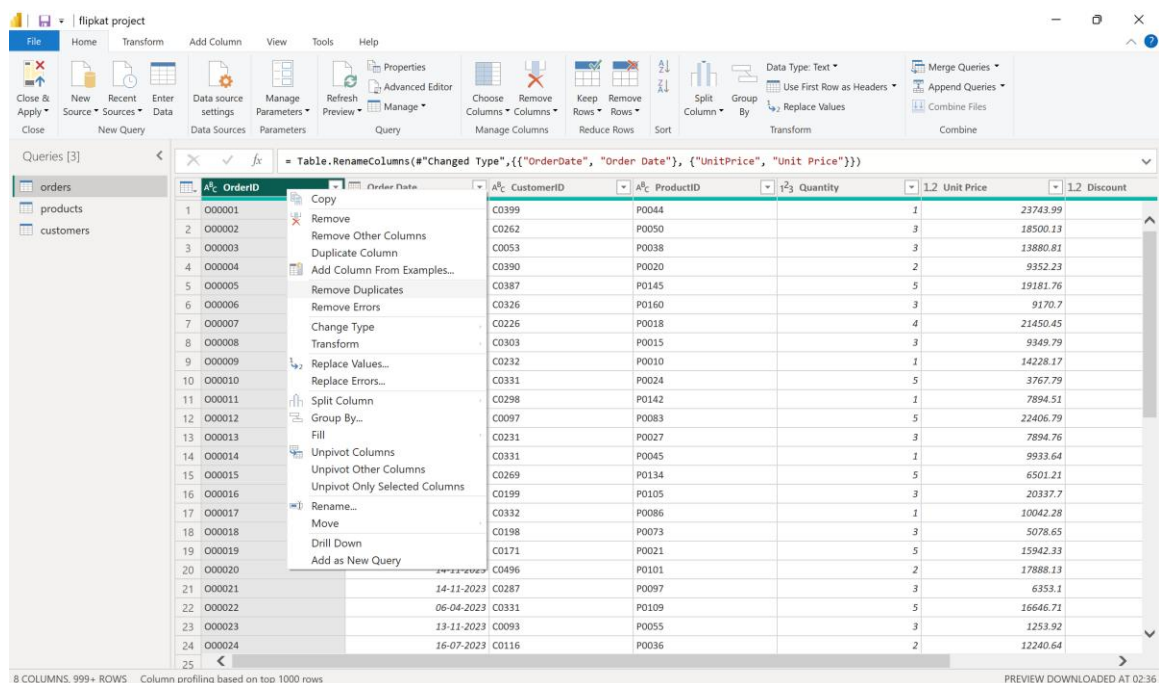
E-commerce platforms like Flipkart generate massive amounts of data daily. Analyzing this data provides valuable insights into sales trends, product performance, and customer behavior. The primary objective of this project is to design and build an interactive Power BI dashboard that enables stakeholders to evaluate profitability and optimize decision-making processes.

2. Objectives

- To analyze sales and profitability trends.
- To evaluate top-performing and low-performing products.
- To visualize sales distribution across categories and regions.
- To create interactive dashboards with slicers, filters, and navigation buttons.
- To develop a professional e-commerce analytics solution for portfolio demonstration.

3. Data Source & Preparation

The dataset used for this project simulates Flipkart's sales transactions. Data preparation was performed in Power Query, including handling null values, removing duplicates, correcting data types, and creating calculated columns.

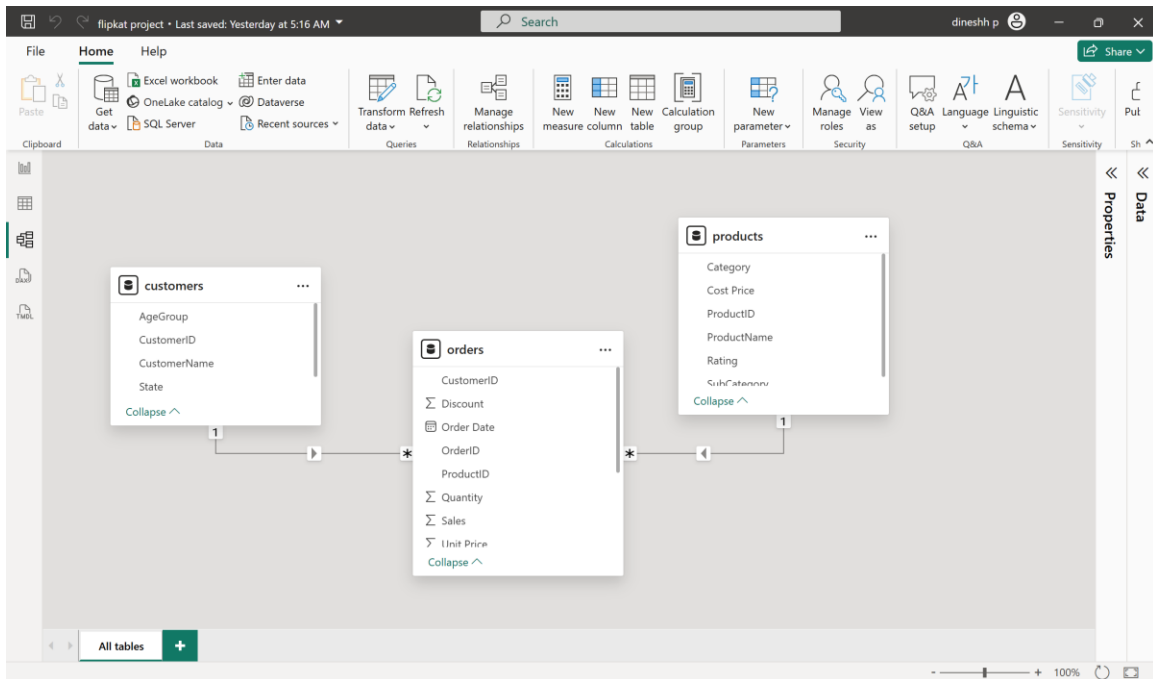


The screenshot displays the Microsoft Power Query Editor interface. The top ribbon includes tabs for File, Home, Transform, Add Column, View, Tools, and Help. The 'Transform' tab is active, showing various data manipulation options. The main area displays a table with the following columns: OrderID, OrderDate, CustomerID, ProductID, Quantity, Unit Price, and Discount. The table contains 25 rows of data. A context menu is open over the first row, showing options like Copy, Remove, and Rename. The status bar at the bottom indicates '8 COLUMNS, 999+ ROWS' and 'Column profiling based on top 1000 rows'.

OrderID	OrderDate	CustomerID	ProductID	Quantity	Unit Price	Discount
000001		C0399	P0044	1	23743.99	
000002		C0262	P0050	3	18500.13	
000003		C0053	P0038	3	13880.81	
000004		C0390	P0020	2	9352.23	
000005		C0387	P0145	5	19181.76	
000006		C0326	P0160	3	9170.7	
000007		C0226	P0018	4	21450.45	
000008		C0303	P0015	3	9349.79	
000009		C0232	P0010	1	14228.17	
000010		C0331	P0024	5	3767.79	
000011		C0298	P0142	1	7894.51	
000012		C0097	P0083	5	22406.79	
000013		C0231	P0027	3	7894.76	
000014		C0331	P0045	1	9933.64	
000015		C0269	P0134	5	6501.21	
000016		C0199	P0105	3	20337.7	
000017		C0332	P0086	1	10042.28	
000018		C0198	P0073	3	5078.65	
000019		C0171	P0021	5	15942.33	
000020		C0496	P0101	2	17888.13	
000021	14-11-2023	C0287	P0097	3	6353.1	
000022	06-04-2023	C0331	P0109	5	16646.71	
000023	13-11-2023	C0093	P0055	3	1253.92	
000024	16-07-2023	C0116	P0036	2	12240.64	

4. Data Modeling

A star schema was created with fact tables for sales and dimension tables for products, customers, and categories. Relationships were established to support cross-functional reporting.



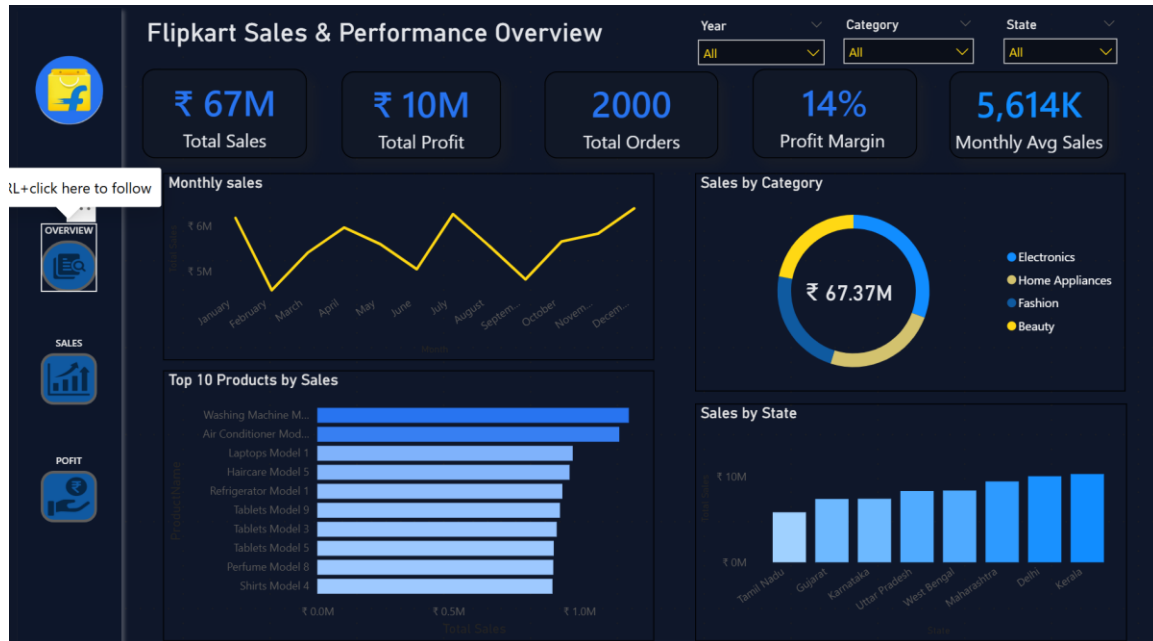
5. DAX Measures

Several DAX measures were created to enhance analysis. Examples include:

- Total Sales = SUM(Sales[Sales Amount])
- Total Profit = SUM(Sales[Profit])
- Profit Margin = DIVIDE([Total Profit],[Total Sales],0)
- Average Order Value = DIVIDE([Total Sales], DISTINCTCOUNT(Sales[Order ID]),0)

6. Dashboard Design

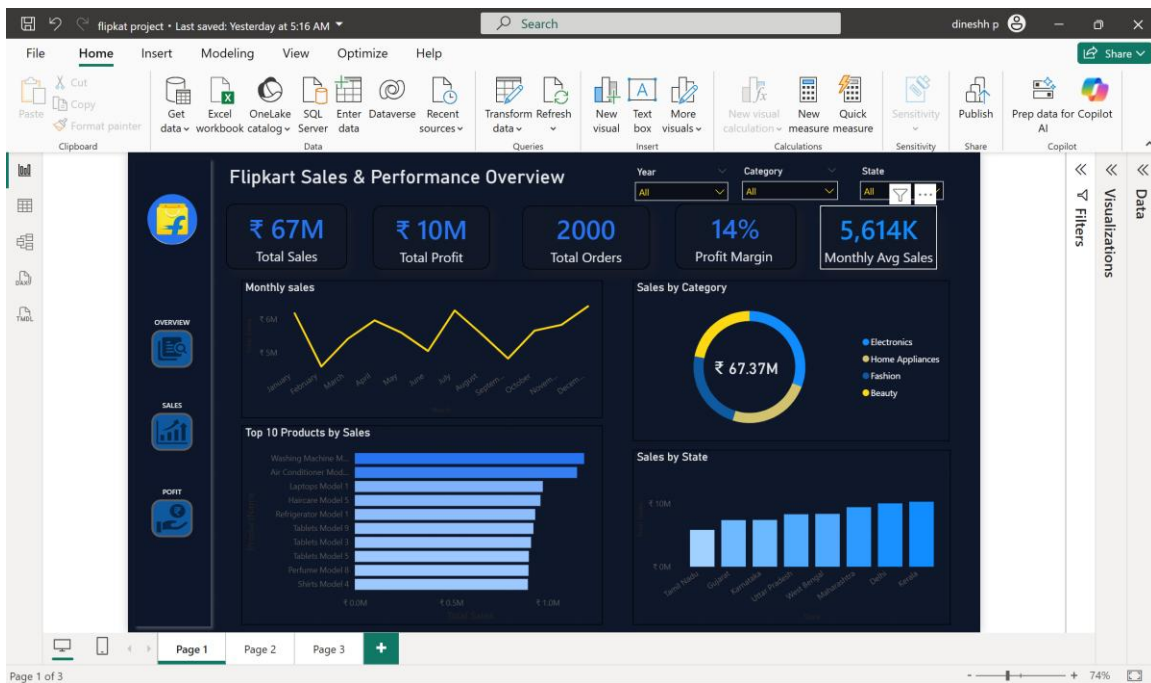
The dashboard was designed using Flipkart's branding theme, with a dark background, blue (#2874F0) highlights, and yellow (#FFD814) accents. A vertical sidebar was added for navigation across pages, ensuring a professional and consistent layout.



7. Dashboard Pages

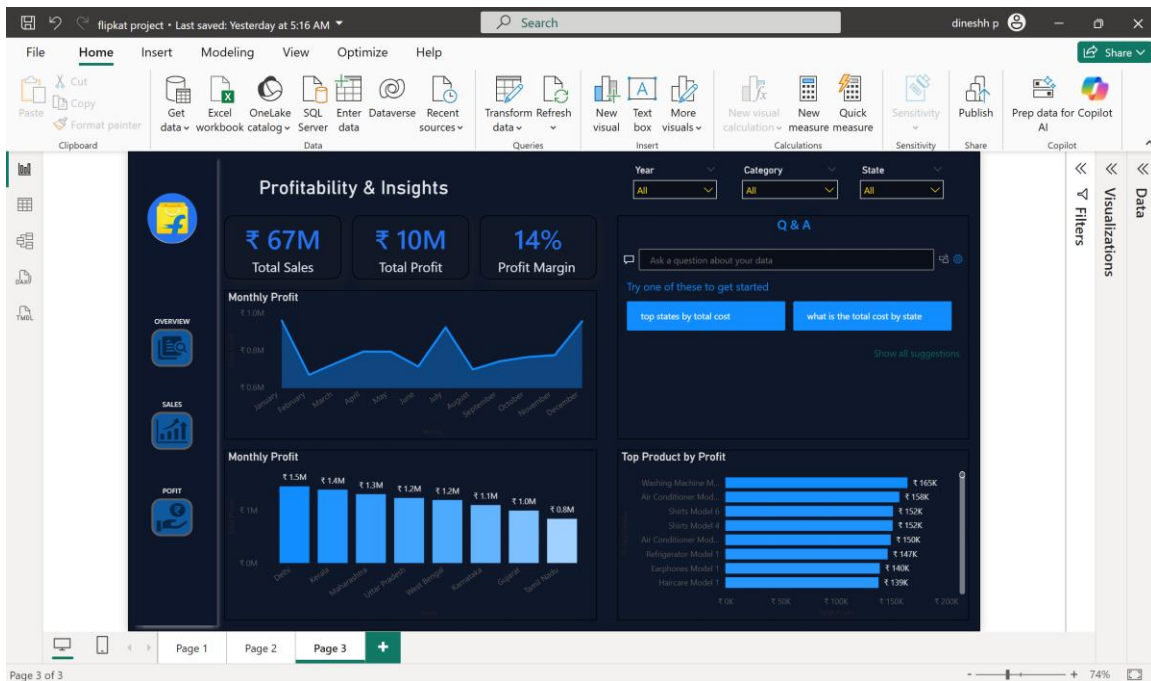
7.1 Sales Overview

This page provides an overview of total sales, orders, and customers using KPI cards. It includes charts for monthly sales trend, sales by category, and top 10 products by sales.



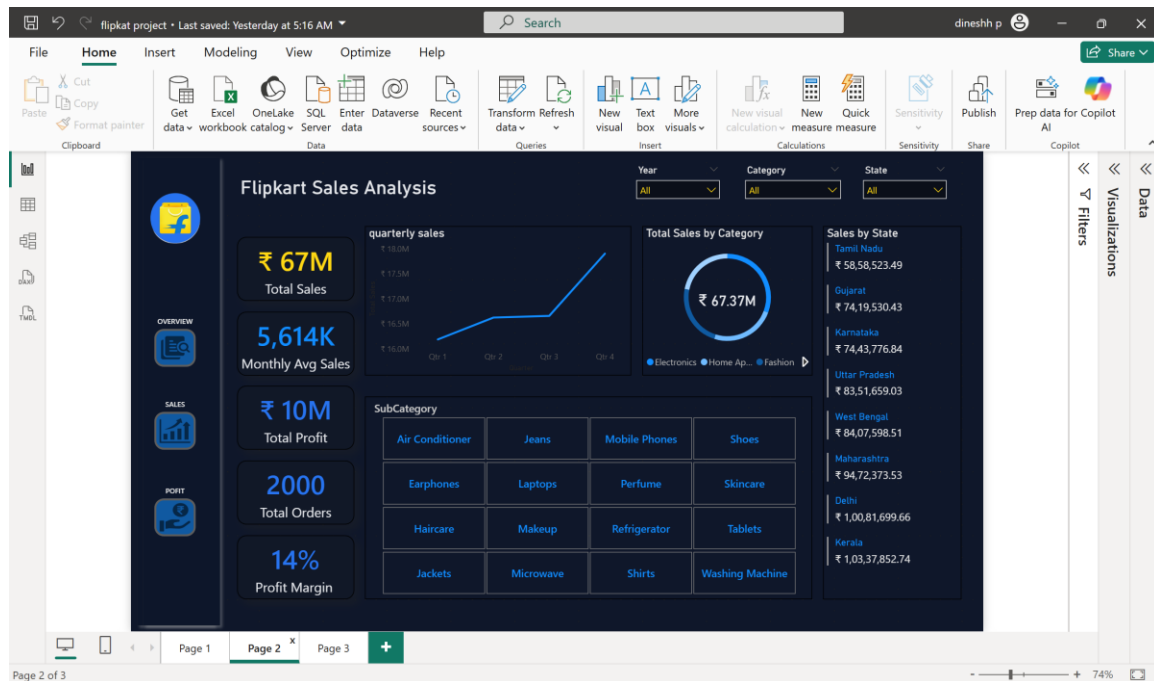
7.2 Profitability Analysis

This page focuses on profitability KPIs and visualizations. It includes profit margin by category, profit trends, and a bar chart of top 10 products by profit.



7.3 Customer Insights

This page provides insights into customer distribution, repeat purchases, and regional sales performance. Interactive slicers allow filtering by time, region, and category.



8. Interactivity Features

- Slicers for category, region, and time period.
- Cross-filtering and highlighting across charts.
- Navigation buttons for moving between pages.
- Q&A visual for natural language query exploration.

9. Key Insights & Conclusion

The Flipkart dashboard provided valuable insights into sales and profitability performance. Key findings include:

- Top categories contributing the highest revenue.
- Seasonal spikes in monthly sales trends.
- Most profitable products and underperforming items.
- Regional variations in sales distribution.

The project demonstrates practical Power BI skills, from data preparation to visualization, making it suitable for portfolio presentation in data analyst roles.

10. References

- Power BI Documentation: <https://learn.microsoft.com/power-bi/>
- E-commerce Analytics Case Studies
- Flipkart Public Data Reports (simulated dataset used here)