Amazon Sales Analysis

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DATA SOURCE – KAGGLE

- Amazon Sales DataSet

Data Sourcing

Import Amazon sales data (CSV) into Power BI by choosing "Get Data." Select "Text/CSV" to bring the file in. After loading, clean and model the data as needed using Power BI's data transformation tools. Finally, to properly analyze and visualize the data, create dashboards and reports in Power BI.

Objective

- To understand sales trends, identify strong and weak markets, and assess product performance on Amazon.

Goals

Increase sales in underperforming regions

Improve ROI

Reduce cancelled orders

Key Performance Indicators

•**Total Sales Revenue**: It gives a gross overview of how much income the business is generating from sales alone.

•**ROI (Return on Investment)**: ROI measures the profitability of an investment. It's calculated by dividing the net profit by the total cost of the investment.

•**Cancellation Rate**: This is the percentage of orders that are cancelled before they are fulfilled. A high cancellation rate might indicate issues with inventory management, pricing, or customer satisfaction.

•**Profit Margins**: This metric shows the percentage of revenue that has turned into profit, after all expenses have been subtracted from the total revenue.

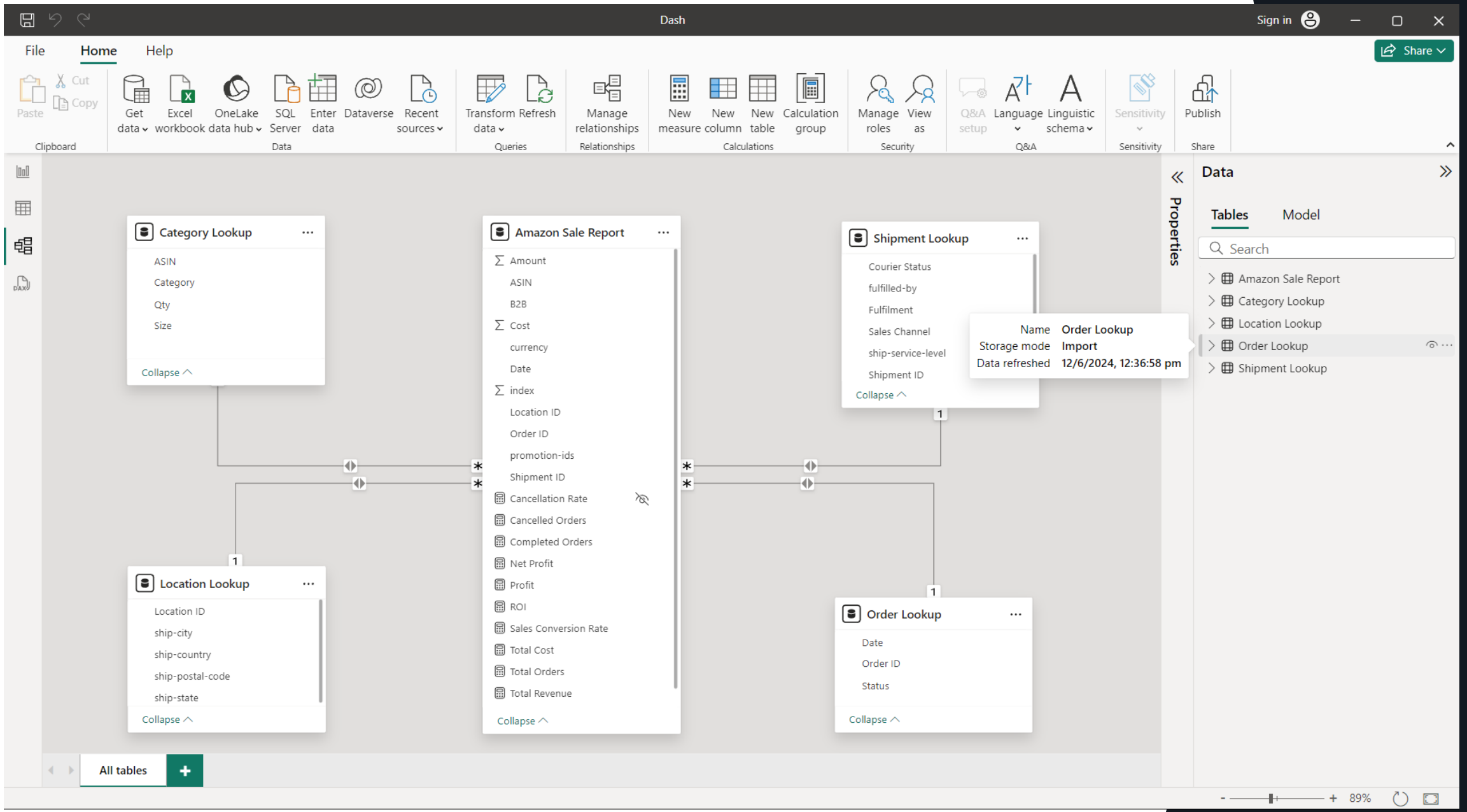
DAX Measures

- **Cancelled Orders =** Cancelled Orders = CALCULATE(COUNTROWS('TableName'), 'TableName'[Status] = "Cancelled")
- **Net Profit = Net Profit =** [Total Revenue] - [Total Cost]
- **ROI (Return on Investment)=** ROI = DIVIDE([Net Profit], [Total Cost], 0) * 100
- **Total Cost =** Total Cost = SUM('TableName'[Cost])
- **Total Orders =** Total Orders = COUNTROWS('TableName')
- **Total Revenue =** Total Revenue = SUM('TableName'[Amount])

Data Model

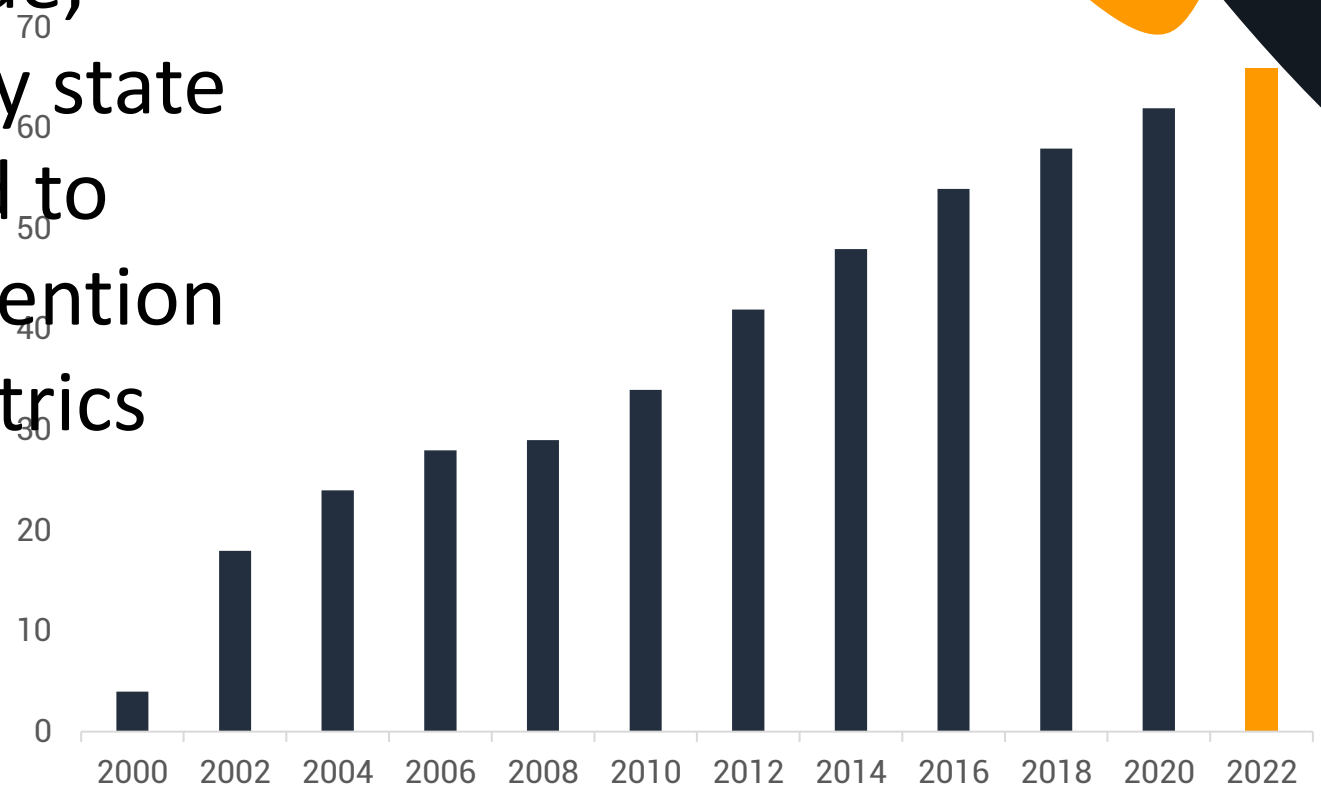
The data model consists of several tables such as 'Amazon Sale Report', 'Category Lookup', 'Shipment Lookup', 'Order Lookup', and 'Location Lookup'. These tables are interconnected to provide a comprehensive view of sales transactions, product categories, and geographical insights.

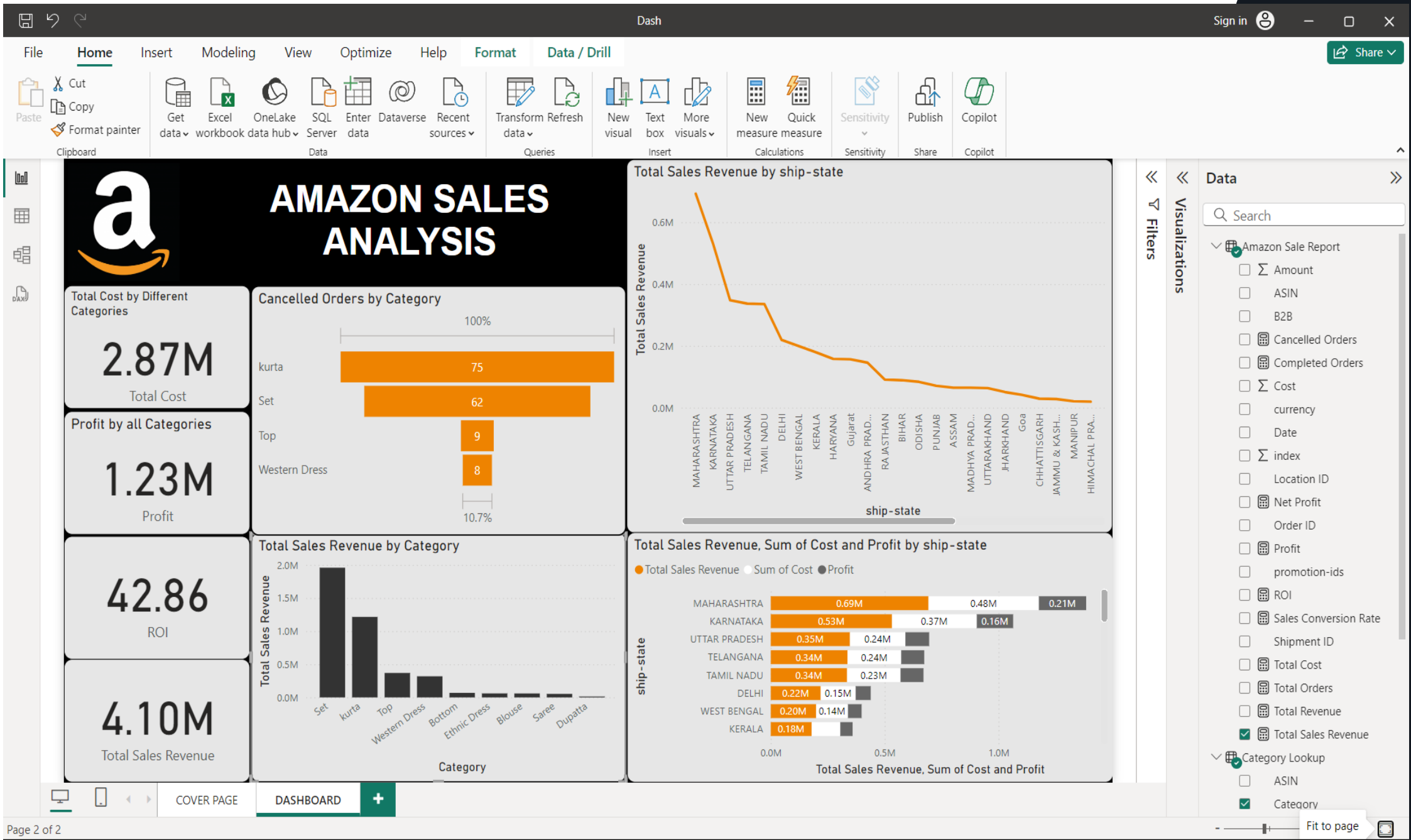
Data Model


Dash
Sign in
File
Home
Help
Share
Paste
Cut
Copy
Get data
Excel workbook
OneLake data hub
SQL Server
Enter data
Dataverse
Recent sources
Transform data
Refresh
Manage relationships
New measure
New column
New table
Calculation group
Manage roles
View as
Q&A setup
Language
Linguistic schema
Sensitivity
Publish
Clipboard
Data
Queries
Relationships
Calculations
Security
Q&A
Sensitivity
Share
Category Lookup
ASIN
Category
Qty
Size
Collapse
Amazon Sale Report
Amount
ASIN
B2B
Cost
currency
Date
index
Location ID
Order ID
promotion-ids
Shipment ID
Cancellation Rate
Cancelled Orders
Completed Orders
Net Profit
Profit
ROI
Sales Conversion Rate
Total Cost
Total Orders
Total Revenue
Collapse
Shipment Lookup
Courier Status
fulfilled-by
Fulfilment
Sales Channel
ship-service-level
Shipment ID
Collapse
Name Order Lookup
Storage mode Import
Data refreshed 12/6/2024, 12:36:58 pm
Location Lookup
Location ID
ship-city
ship-country
ship-postal-code
ship-state
Collapse
Order Lookup
Date
Order ID
Status
Collapse
1
*
Properties
Data
Tables
Model
Search
Amazon Sale Report
Category Lookup
Location Lookup
Order Lookup
Shipment Lookup
All tables
89%

Dashboard Overview

The dashboard provides a multi-dimensional view of sales data, including total sales revenue, costs, and profit margins by state and category. It is designed to highlight areas needing attention and track performance metrics over time.




Dash
Sign in
File
Home
Insert
Modeling
View
Optimize
Help
Format
Data / Drill
Share
Cut
Copy
Format painter
Paste
Clipboard
Get data
Excel workbook
OneLake data hub
SQL Server
Enter data
Dataverse
Recent sources
Data
Transform data
Refresh
Queries
New visual
Text box
More visuals
Insert
New measure
Quick measure
Calculations
Sensitivity
Publish
Share
Copilot
AMAZON SALES ANALYSIS
Total Cost by Different Categories
2.87M
Total Cost
Profit by all Categories
1.23M
Profit
42.86
ROI
4.10M
Total Sales Revenue
Cancelled Orders by Category
100%
kurta
75
Set
62
Top
9
Western Dress
8
10.7%
Total Sales Revenue by ship-state
Total Sales Revenue
0.6M
0.4M
0.2M
0.0M
MAHARASHTRA
KARNATAKA
UTTAR PRADESH
TELANGANA
TAMIL NADU
DELHI
WEST BENGAL
KERALA
HARYANA
Gujarat
ANDHRA PRAD...
RAJASTHAN
BIHAR
ODISHA
PUNJAB
ASSAM
MADHYA PRAD...
UTTARAKHAND
JHARKHAND
Goa
CHHATTISGARH
JAMMU & KASH...
MANIPUR
HIMACHAL PRA...
ship-state
Total Sales Revenue by Category
Total Sales Revenue
2.0M
1.5M
1.0M
0.5M
0.0M
Set
kurta
Top
Western Dress
Bottom
Ethnic Dress
Blouse
Saree
Dupatta
Category
Total Sales Revenue, Sum of Cost and Profit by ship-state
Total Sales Revenue
Sum of Cost
Profit
ship-state
MAHARASHTRA 0.69M 0.48M 0.21M
KARNATAKA 0.53M 0.37M 0.16M
UTTAR PRADESH 0.35M 0.24M
TELANGANA 0.34M 0.24M
TAMIL NADU 0.34M 0.23M
DELHI 0.22M 0.15M
WEST BENGAL 0.20M 0.14M
KERALA 0.18M
0.0M
0.5M
1.0M
Total Sales Revenue, Sum of Cost and Profit
Filters
Visualizations
Data
Search
Amazon Sale Report
Amount
ASIN
B2B
Cancelled Orders
Completed Orders
Cost
currency
Date
index
Location ID
Net Profit
Order ID
Profit
promotion-ids
ROI
Sales Conversion Rate
Shipment ID
Total Cost
Total Orders
Total Revenue
Total Sales Revenue
Category Lookup
ASIN
Category
COVER PAGE
DASHBOARD
Page 2 of 2
Fit to page

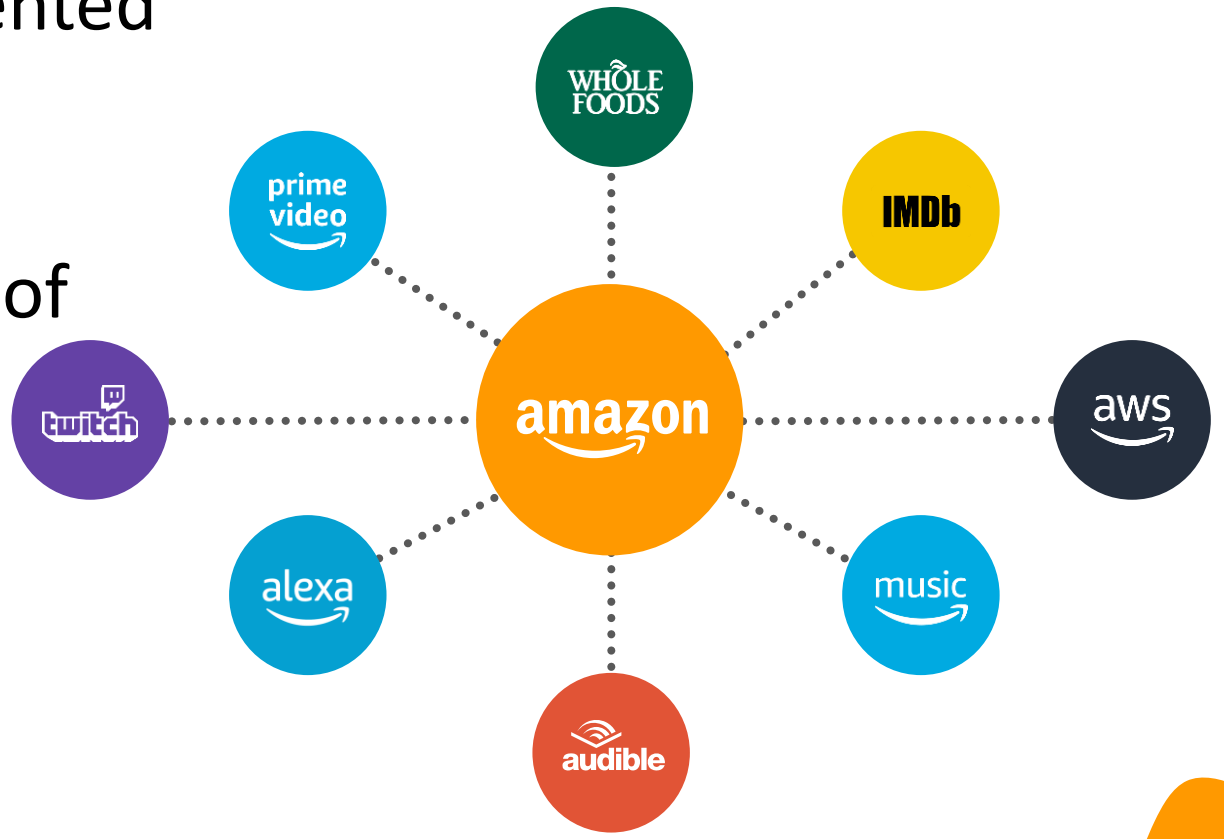
Analysis Summary

Key findings include:

- Total sales revenue and profit segmented by categories and states.

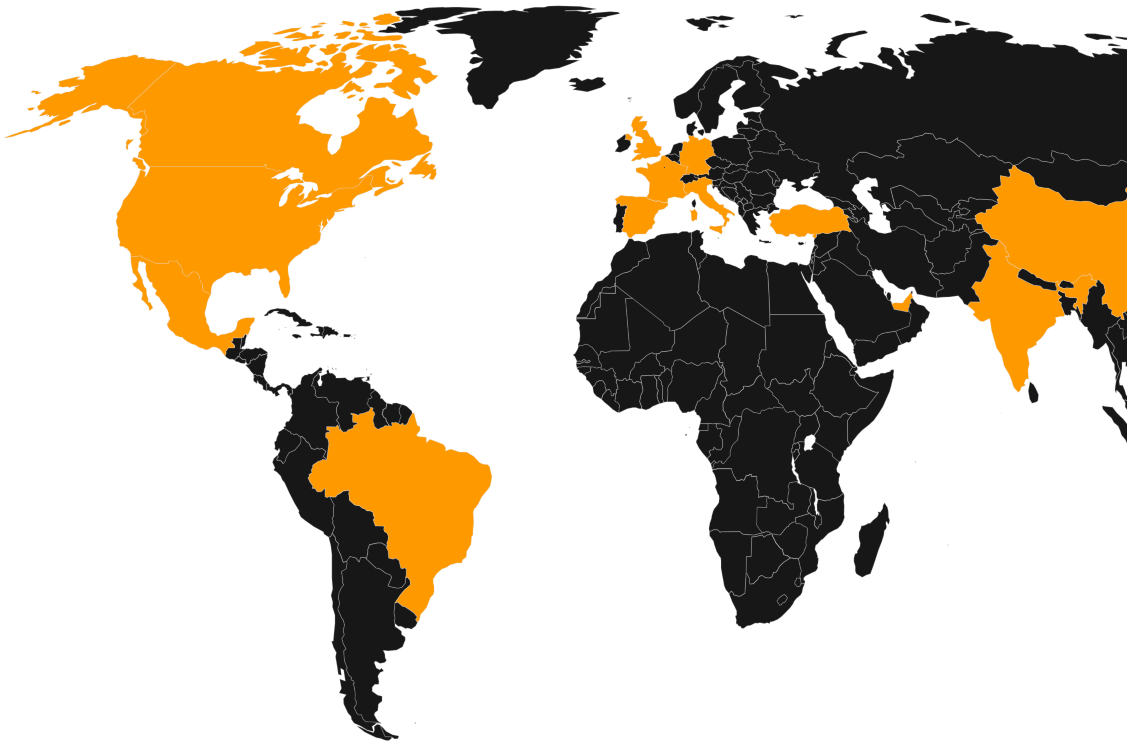
- Categories with the highest number of cancellations.

- The overall ROI achieved through the current sales strategies.



Conclusion

The insights derived from the analysis suggest targeted strategies for improving category-specific sales and addressing high cancellation rates. Recommendations will be made to optimize marketing and operational tactics.



Reference

- Kaggle For Dataset
- Git Hub for further references

thanks!