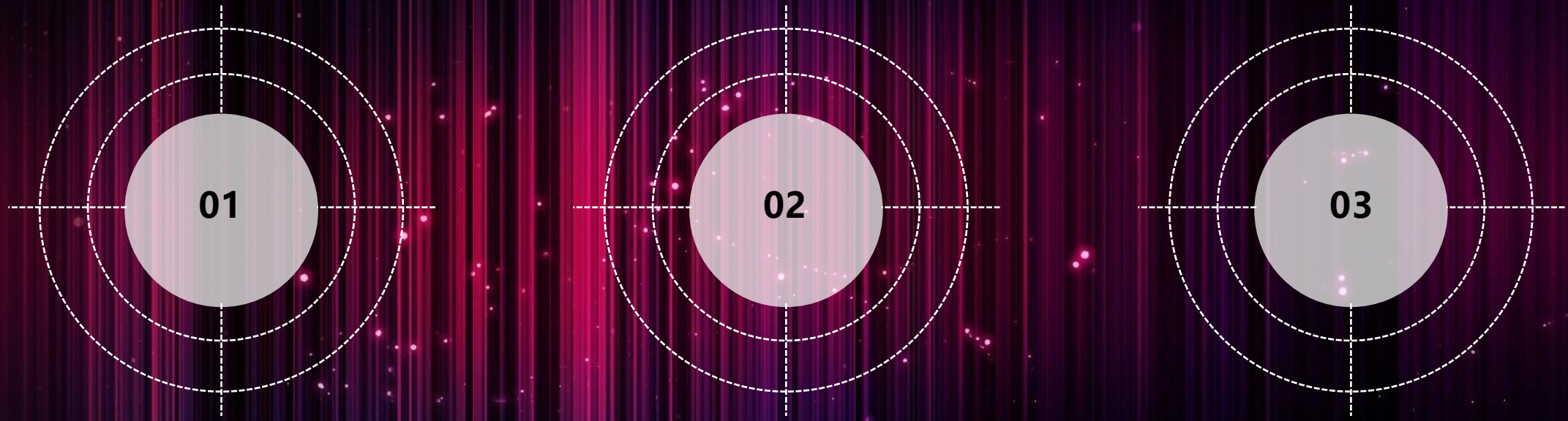
Retail Sales Dashboard Analysis

Project Objective



Analyze retail dataset to simulate a real business case

Solve decision-making problems through Excel dashboard

Deliver dynamic, slicer-controlled insights

Tools & Technologies Used

Microsoft Excel (Core Tool)

Dataset: 5000 Retail Sales Records

Power Query

Pivot Tables & Pivot Charts

Slicers & Map Chart

Skills Applied

Data Cleaning & Preparation

Data Transformation & Modeling

Dashboard Designing

Business Problem Solving

Business Challenges → Actionable Insights

- **Category Performance**
  Identify which categories drive the most sales and profit.
- **Profit Trends**
  Analyze how profit changes across years.
- **Sales Seasonality**
  Understand monthly and seasonal sales patterns.
- **Top Customers**
  Highlight the most profitable customers.

- **Geographical Insights**
  Discover which states contribute the most to sales.
- **Customer Growth**
  Track total customer count across years.
- **Dynamic Summary**
  Enable interactive filters (Category + Year) for deeper insights.

Problem Insights

Data Import & Cleaning

- Imported CSV in Power Query
- Removed duplicates, filled nulls
- Fixed data types & formatted columns

Data Transformation

01

Split Order Date → Year & Month

02

Created calculated fields

03

Structured dataset for Pivot Tables

Pivot Table Creation

One pivot per business question

Ensured consistency across measures

Grouped, filtered, sorted as required

Interactive Controls

- Made dashboard dynamic & user-driven
- Slicers for Year & Category
- Linked across multiple pivots

Visualizations Used

Bar Chart → Category-level sales

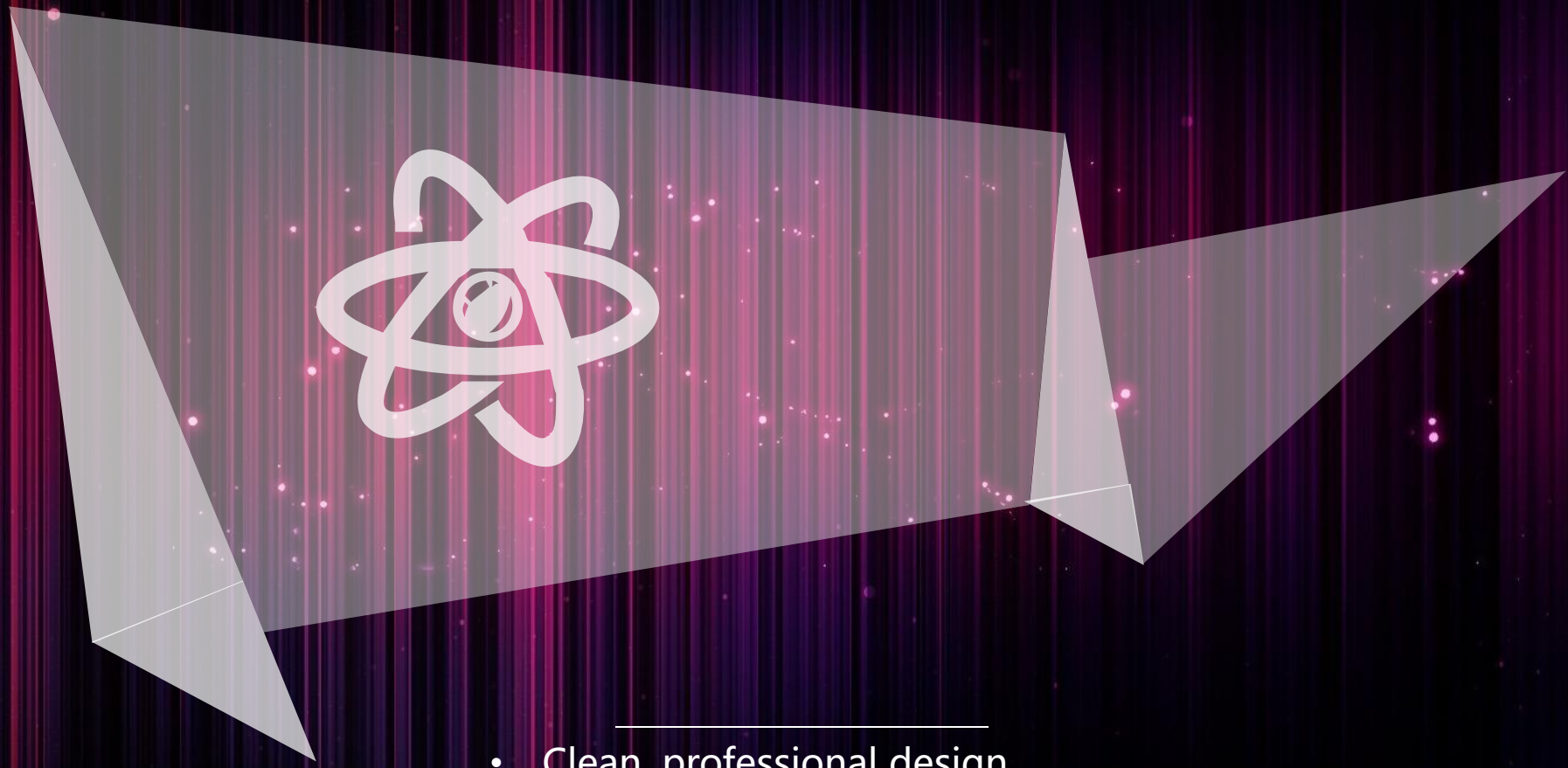
Line Chart → Profit over time

Area & Pie Chart → Monthly/Category mix

Map Chart → State-wise sales

Funnel Chart → Sales by Category

Dashboard Layout



- Clean, professional design
- Visuals grouped by business area
- Balanced colors for easy interpretation

Dashboard Features

Slicers for real-time filtering

Segmented visuals for clarity

Minimalist design with professional palette

Built 100% in Excel – no macros/plugins

Dashboard Highlights

01 Fully dynamic and slicer-controlled dashboard

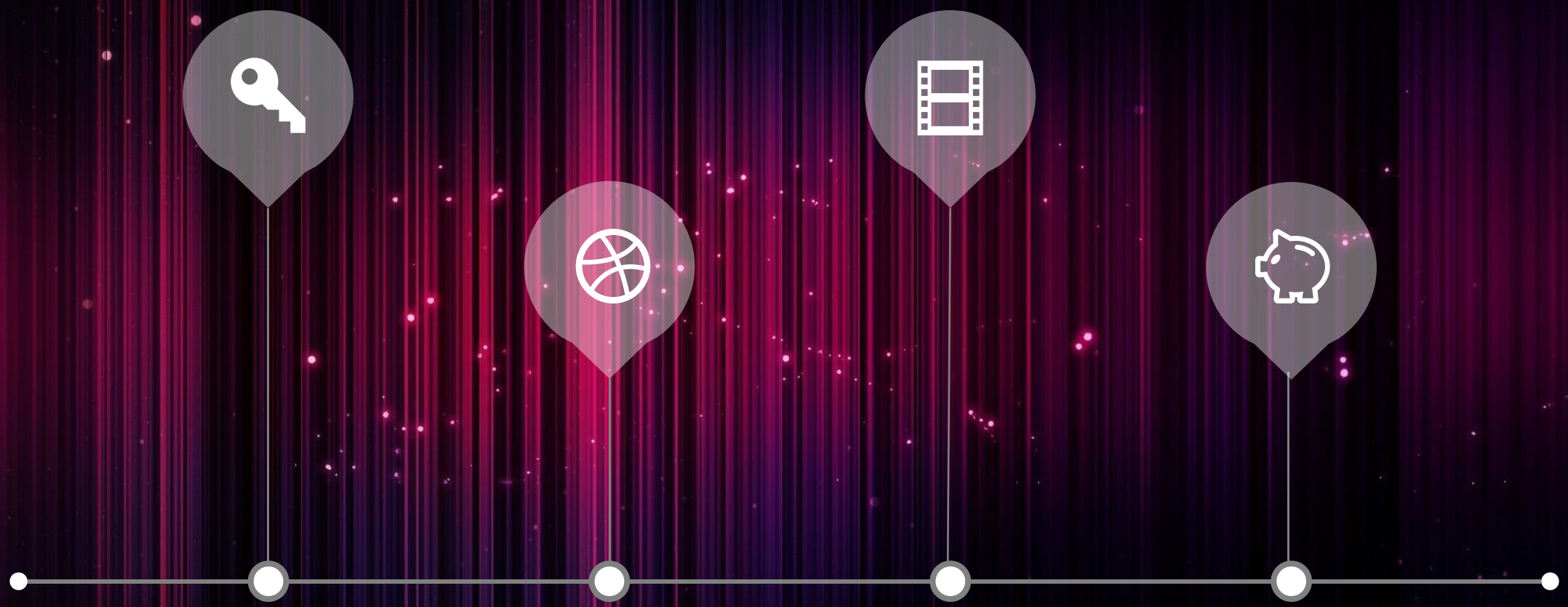
02 Designed for clarity, actionability, and user interaction

03 Covers multi-angle insights: category, time, geography, customer

04 Built 100% in Excel – no add-ins, just skills!

Key Insights

Business Impact



Decision-makers can track category & regional sales drivers

Identify loyal, high-profit customers

Detect seasonality for planning inventory & promotions

Spot growth opportunities in emerging regions

What I Learned

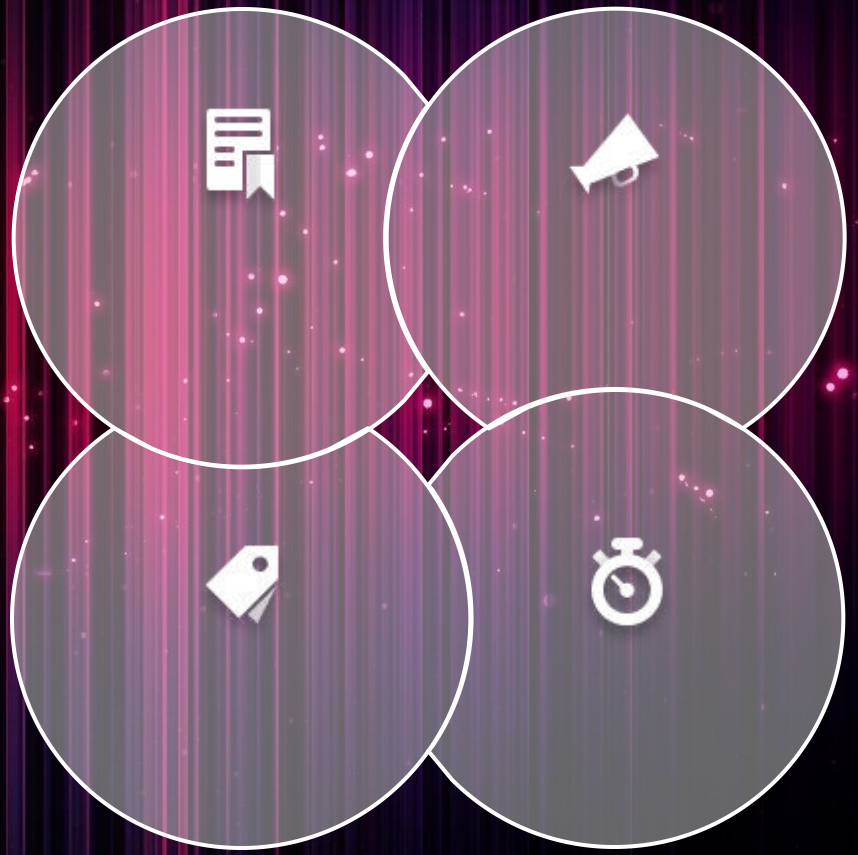
Challenges Faced

01

Handling inconsistent & missing data

02

Optimizing pivot performance on 5000+ rows



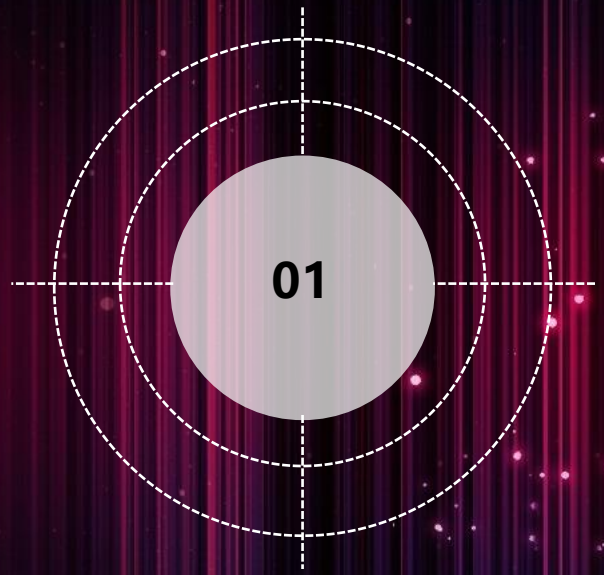
03

Designing for clarity instead of clutter

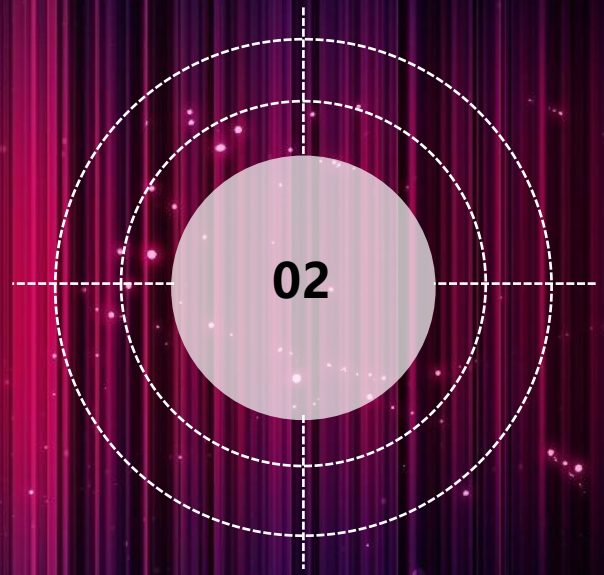
04

Choosing the right chart for the right story

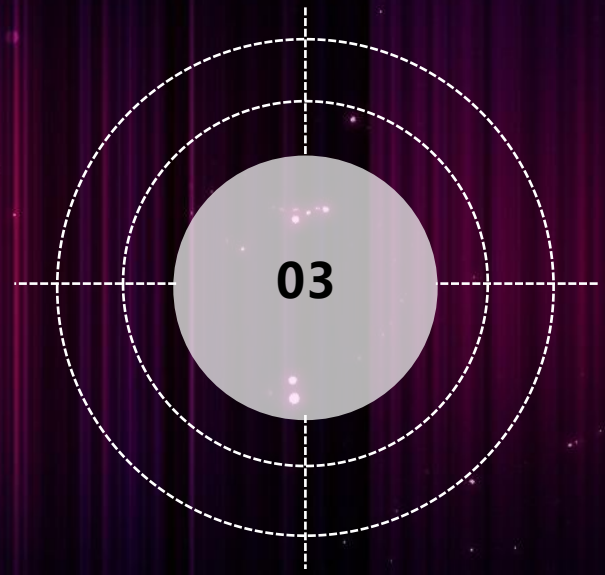
Stakeholder Value



Sales Teams → Target profitable categories/customers



Marketing → Run seasonal campaigns in October peaks



Management → Track customer growth & future expansion areas

Storytelling with Data

Structured dashboard to answer “business questions, not just show numbers”

Insights flow from Category → Time → Customer → Region → Growth

Built narrative helps decision-makers act quickly

Future Improvements

Automate refresh with Power Query

Add KPIs like Customer Retention & Avg. Order Value

Expand dataset with external sources (e.g., demographics)

Build comparison view: Planned vs. Actual sales

Conclusion

01 Transform & Model Data using Power Query

02 Extract Business Insights with Pivot Analysis

03 Design Dashboards that tell stories, not just numbers

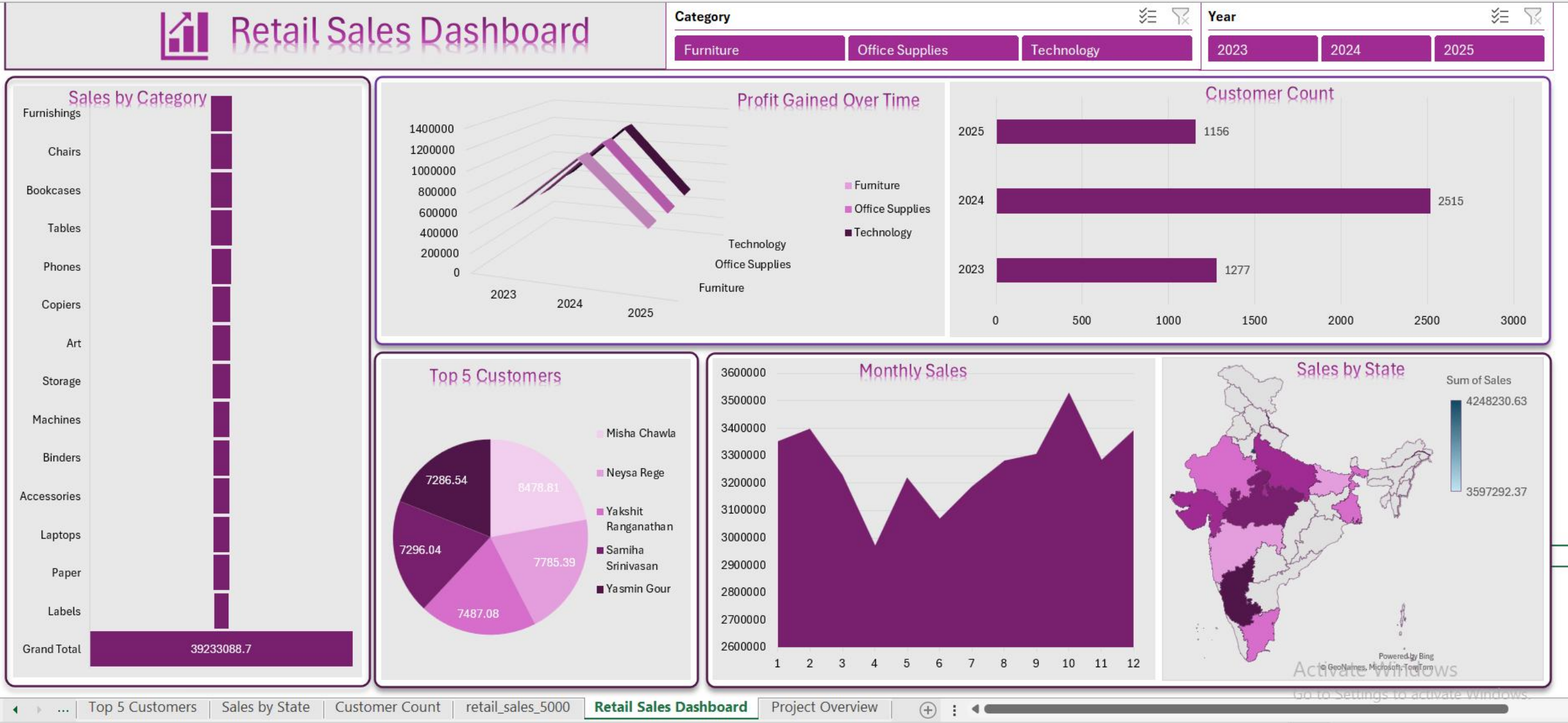
04 Think Critically from a decision-maker’ s perspective

05 Connect Data with Decisions for practical impact

06 Use Excel as a Strategic Tool rather than just a calculator

07 Work with Clarity, Intent & Creativity in every analysis

Final Dashboard



Project Overview