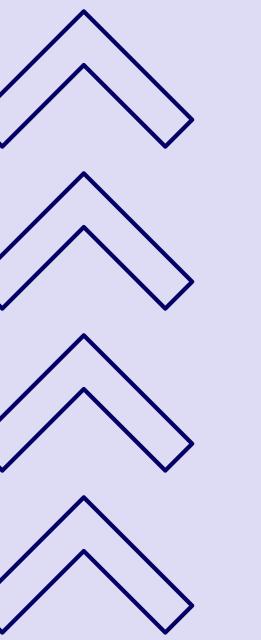


ADVENTURE WORKS ANALYSIS



TODAY'S AGENDA

1 Team Members

2 Summary of Project

3 KPI List

4 Excel Dashboard

5 Power BI Dashboard

6 Tableau Dashboard

7 MySQL Queries

8 Suggestions

9 Key Take Away



OUR TEAM



- Mohammed Jaffar Sadiq
- Meraj Ahmed
- Dhawan

SUMMARY

- This project analyzes the Adventure Works dataset using Excel, Power BI, Tableau, and MySQL for a comprehensive business performance review.
- Background data cleaning, appending, merge, data modelling
- Line Chart, Bar chart, column chart, pie chart and donut chart
- Added KPIs, Charts, Slicers/Filters, Filter reset etc

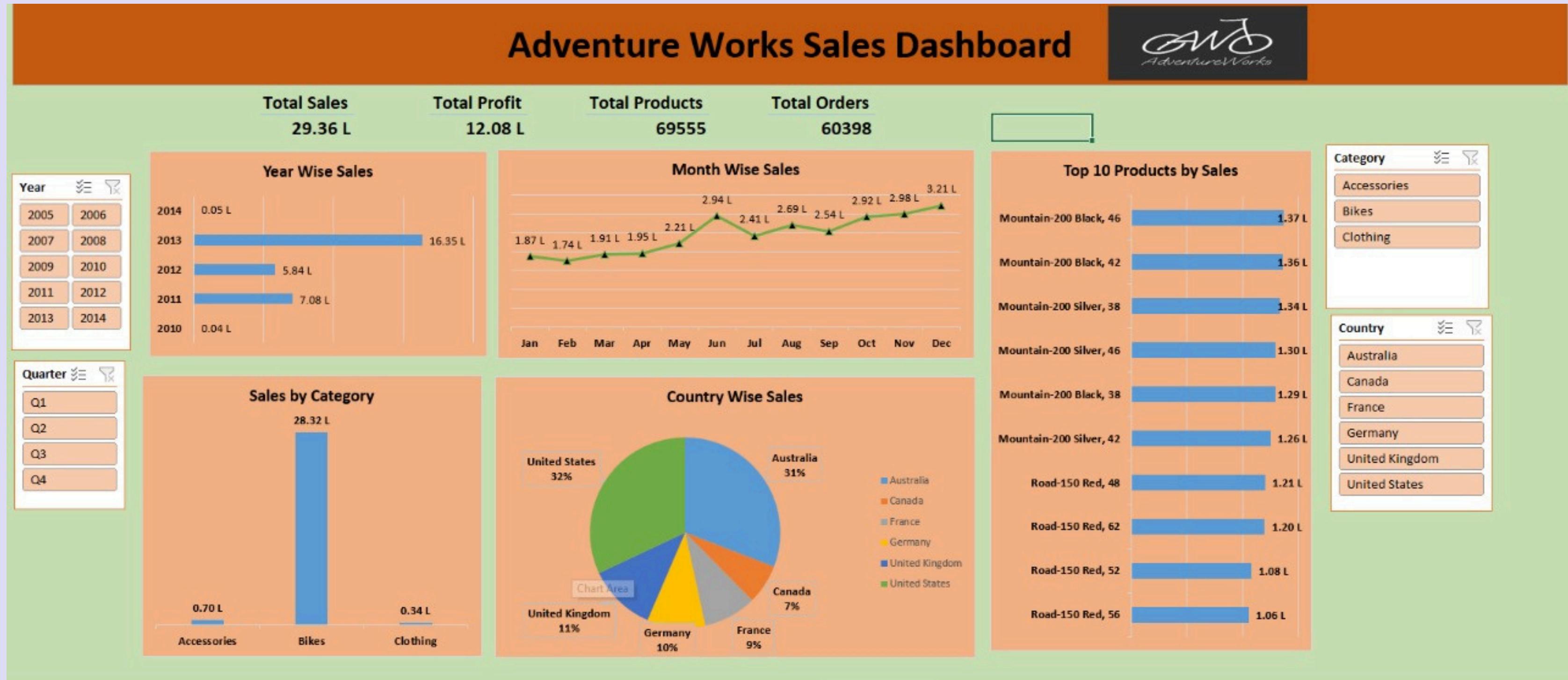


KPI LIST

- Total Sales
- Total Profit
- Profit Margin
- Total Production Cost
- Total Orders



EXCEL DASHBOARD



POWER BI DASHBOARD

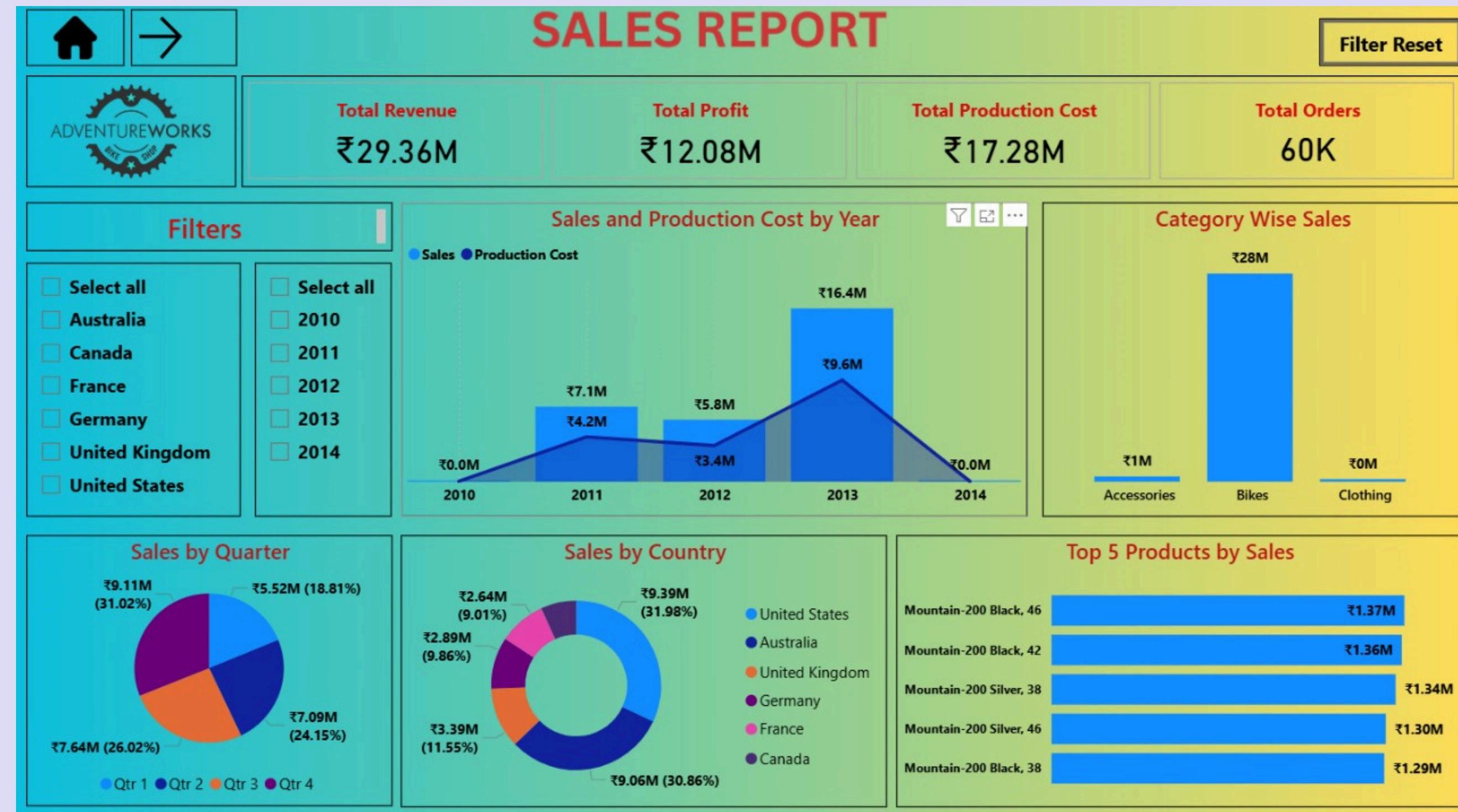
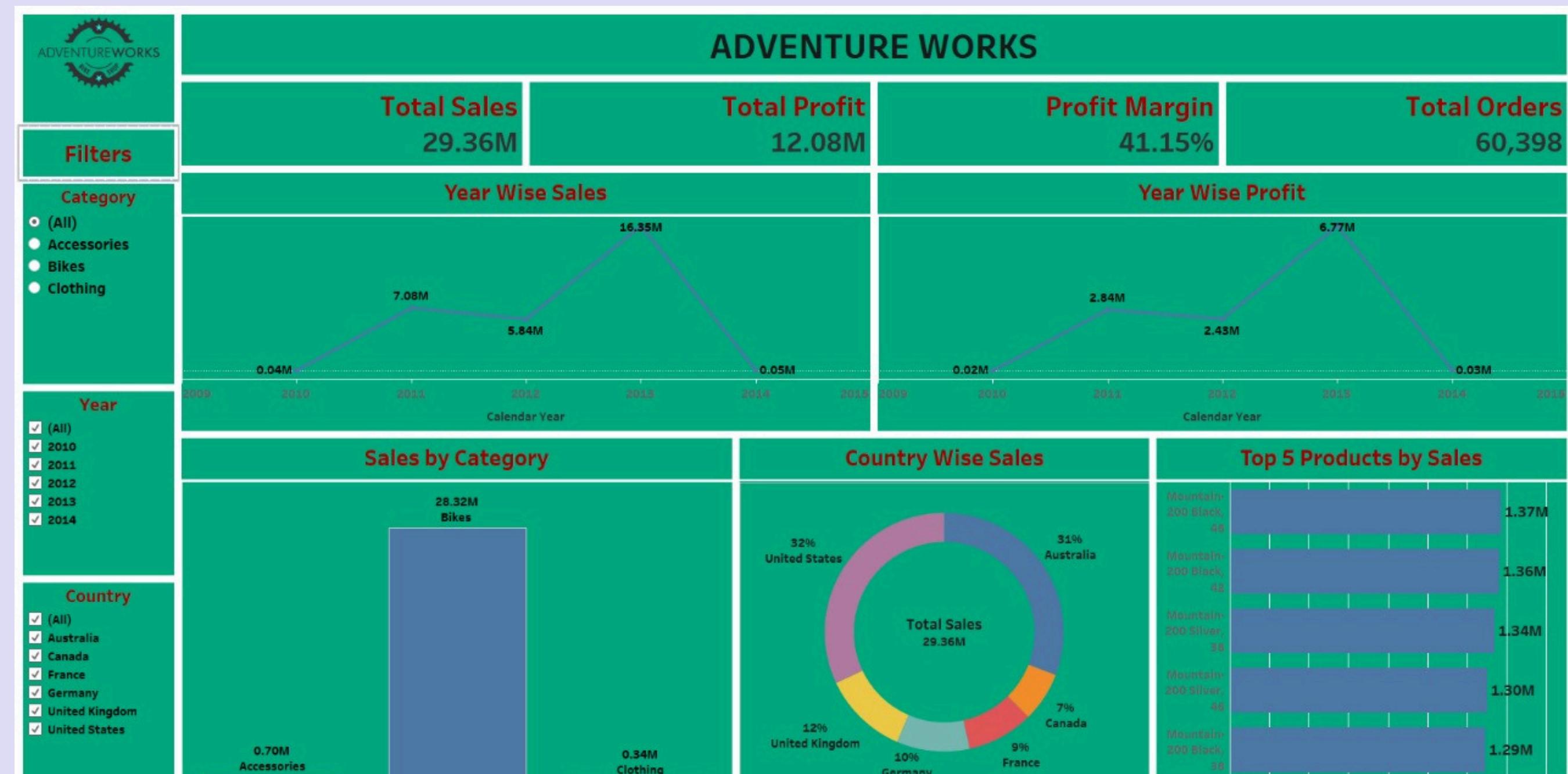


TABLEAU DASHBOARD



MYSQL

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

adventureworks

- Tables
- Views
- Stored Procedures
- Functions

classicmodels

customers_orders

excelr_afternoon

joins

sakila

sample2

schooldb1

Adventureworks

1 #Create Database Adventureworks

2 • create database adventureworks;

3 • use adventureworks;

4

Action Output

#	Time	Action
1	14:20:01	use adventureworks

Output

16

17 • select * from master_sales;

18

19 #Merge Products Tables

20

21 • CREATE TABLE master_products AS

Result Grid | Filter Rows: Export: Wrap Cell Content:

ProductKey	OrderDateKey	DueDateKey	ShipDateKey	CustomerKey	Promotion
353	20121231	20130112	20130107	11345	1
537	20121231	20130112	20130107	11345	1
581	20121231	20130112	20130107	20982	1
490	20121231	20130112	20130107	20982	1
225	20121231	20130112	20130107	20982	1
380	20121231	20130112	20130107	22822	1
540	20121231	20130112	20130107	22822	1
378	20121231	20130112	20130107	25793	1
529	20121231	20130112	20130107	25793	1
540	20121231	20130112	20130107	25793	1
355	20121231	20130112	20130107	11407	1

master_sales 8

Action Output

#	Time	Action
1	14:20:01	use adventureworks
2	14:20:55	select * from master_sales LIMIT 0, 1000

GPL

MYSQL

```
175  
176      #Year wise Total Sales, Total Production Cost and Total Profit  
177  
178 • SELECT  
179      YEAR(STR_TO_DATE(OrderDateKey, '%Y%m%d')) AS SalesYear,  
180  
181      ROUND(SUM(UnitPrice * OrderQuantity * (1 - UnitPriceDiscountPct)), 2) AS  
182      ROUND(SUM(ProductStandardCost * OrderQuantity), 2) AS TotalProductionCost
```

<

Result Grid | Filter Rows: Export: Wrap Cell Content:

	SalesYear	TotalSalesAmount	TotalProductionCost	TotalProfit
▶	2010	43421.04	25572.06	17848.97
	2011	7075525.93	4231462.19	2844063.74
	2012	5842485.2	3414478.17	2428007.03

```
100  
167      #Total Sales, Production Cost and Profit  
168  
169 • SELECT  
170      ROUND(SUM(UnitPrice * OrderQuantity * (1 - UnitPriceDiscountPct)), 2) AS TotalSalesAmount,  
171      ROUND(SUM(ProductStandardCost * OrderQuantity), 2) AS TotalProductionCost,  
172      ROUND((SUM(UnitPrice * OrderQuantity * (1 - UnitPriceDiscountPct)) - (ProductStandardCost * OrderQuant  
173      FROM 
```

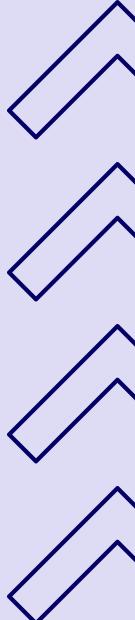
<

Result Grid | Filter Rows: Export: Wrap Cell Content:

	TotalSalesAmount	TotalProductionCost	TotalProfit
▶	12961432.16	7671512.42	5289919.74

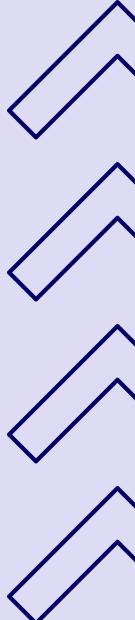
SUGGESTIONS

- Automate data refresh processes to keep dashboards and reports always up-to-date.
- Integrate predictive analytics to forecast future sales and profit trends for better strategic planning.
- Enhance interactivity by adding drill-down capabilities in Power BI and Tableau for category-to-product level analysis.
- Standardize data formatting and naming conventions across all tools to ensure consistency.



KEY TAKE AWAYS

- KPIs like Total Revenue, Total Profit, and Profit Margin give a clear view of financial health.
- Visualizations revealed year-wise trends, top-performing products, and strong regional markets.
- Multi-tool analysis across Excel, Power BI, Tableau, and MySQL provides a well-rounded business intelligence approach.
- The project demonstrates the value of combining data modeling, visualization, and storytelling for better decision-making.



CONCLUSION

The Adventure Works project successfully transformed raw sales and production data into meaningful business insights using Excel, Power BI, Tableau, and MySQL. By tracking KPIs such as Total Revenue, Profit, Production Cost, and Profit Margin, the analysis provided a comprehensive view of company performance. Visualizations highlighted sales trends, profitable categories, top products, and high-performing regions, enabling data-driven decision-making. Interactive slicers and filters empowered users to explore data from multiple perspectives with ease. Overall, this project demonstrates how integrating multiple BI tools with clear storytelling can drive strategic and operational improvements.



THANK YOU