Task 4 – Dashboard Design (Full Submission PDF)

Objective:

Design an interactive dashboard using Power BI or Tableau based on a Sales/Financial dataset.

Tools:

Power BI / Tableau

Deliverables:

• Interactive Dashboard

• PPT Summary

• KPI Cards

• Trend Analysis

• Filters and Slicers

• Clean and consistent theme

Dashboard Design Steps:

1. Choose a Sales/Financial dataset from Kaggle.

2. Import into Power BI/Tableau.

3. Select KPIs:

- Total Sales

- Total Profit

- Profit Margin

- Total Orders

- Sales Growth %

4. Create visuals:

- Line chart (trend analysis)

- Bar chart (top products, categories)

- Map (sales by region)

- Donut chart (category breakdown)

- Cards for KPI totals

5. Add:

- Filters

- Slicers

- Navigation buttons

- Drill-down

6. Apply a consistent theme.

Interview Questions & Answers

1. What are the key elements of a dashboard?

- KPIs, charts, slicers, filters, drill-down options, clear layout, consistent theme, summary insights.

2. What is a KPI?

- KPI stands for Key Performance Indicator. It measures business performance. Examples: Sales, Profit, Growth, ROI.

3. What are slicers in Power BI?

- Slicers are interactive visual filters that allow users to filter data by category, date, region, etc.

4. Difference between Power BI and Tableau?

Power BI:

- Easy to use

- Low cost

- Best for Microsoft ecosystem

- Uses DAX language

Tableau:

- More powerful visualization engine

- Faster with large datasets

- Highly customizable

5. How do you make a dashboard interactive?

- Add slicers, filters, drill-downs, hover-tooltips, buttons, bookmarks, and cross-highlighting.

6. How do you deal with large datasets in dashboards?

- Use DirectQuery / Extracts

- Use aggregated tables

- Reduce columns

- Optimize data model

- Use star schema

- Apply incremental refresh

7. What chart types do you use for trend analysis?

- Line chart (primary choice)

- Area chart

- Bar chart (period comparison)

- Forecast line

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