Creating Interactive Dashboards

Section 1: Learn

What is an Interactive Dashboard?

An **interactive dashboard** in Power BI is a collection of visual elements that allow users to **filter, drill-down, and explore data dynamically**. Unlike static reports, interactive dashboards enable **real-time decision-making** and **better data analysis**.

Why Create Interactive Dashboards?

- **Enhances User Experience**: Allows users to explore data with filters and slicers.

- **Provides Deeper Insights**: Enables drill-through and cross-filtering for detailed analysis.

- **Improves Decision-Making**: Presents key performance indicators (KPIs) in a clear, interactive format.

- **Saves Time**: Automates repetitive reporting tasks and provides real-time updates.

Key Features of Interactive Dashboards

Feature	Description

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Slicers	Filters data based on user selection.
Drill-throughs	Allows users to click on visuals to see detailed reports.
Cross-Filtering	Automatically updates all visuals when selecting a value.
Bookmarks	Saves different views for easy navigation.
Custom Tooltips	Shows extra details when hovering over visuals.
KPI Indicators	Displays progress toward goals using dynamic visuals.

How to Create an Interactive Dashboard in Power BI?

1. **Import Data** → Load a dataset into Power BI.

2. **Design Visuals** → Add charts, tables, and KPIs.

3. **Enable Interactivity** → Use slicers, filters, and drill-throughs.

4. **Customize Layout** → Arrange visuals for clarity and easy navigation.

5. **Publish & Share** → Share the dashboard via Power BI Service.

A Brief History

Dashboards have been used in business intelligence for decades. With the rise of tools like Power BI, **interactive dashboards have replaced static reports**, making data-driven decisions easier and more efficient.

Section 2: Practice

Step-by-Step Guide to Creating an Interactive Dashboard

Step 1: Importing Data

1. Open **Power BI Desktop**.

2. Click **Get Data** and import an **Excel or SQL dataset**.

3. Click **Load** to add the data to the Power BI model.

Step 2: Adding Visuals

1. Drag and drop a **Bar Chart** to the canvas.

2. Assign **Sales Amount** to the **Y-Axis** and **Region** to the **X-Axis**.

3. Add a **Card Visual** to display **Total Sales**.

Step 3: Making the Dashboard Interactive

1. **Adding a Slicer**:

   o Click on **Slicer** from the Visualizations pane.

o   Drag **Year** to the slicer field to enable filtering by year.

2. **Enabling Drill-through**:

   o   Create a **new page** for detailed reports.

   o   Drag a category field to the **Drill-through well**.

   o   Users can now right-click on a category to see **detailed data**.

3. **Applying Cross-Filtering**:

   o   Click on a visual and go to **Format Pane > Edit Interactions**.

   o   Adjust filters so that selecting a category updates other visuals.

Example: Building a Sales Dashboard

1. Import sales data with region, product, and total sales.

2. Create a bar chart showing total sales by product category.

3. Add a slicer to filter by year.

4. Enable drill-through to view detailed reports on sales trends.

5. Customize layout and colors for readability.

Section 3: Know More

Frequently Asked Questions

1. What is the difference between a report and a dashboard in Power BI?

- **Report**: A collection of **multiple pages** with detailed visuals.

- **Dashboard**: A **single-page view** that provides **key insights using interactive elements**.

2. How do slicers improve dashboards?

Slicers allow users to **filter visuals** dynamically, making the dashboard more **interactive and user-friendly**.

3. What is the purpose of drill-through?

Drill-through enables users to **click on a data point** and view **detailed insights**, improving analysis.

4. How can I share my dashboard with others?

You can **publish the dashboard to Power BI Service** and share it with colleagues via a **secure link or workspace access**.

5. Can I use custom visuals in my dashboard?

Yes! Power BI supports **third-party visuals** from **Microsoft AppSource**, allowing more customization.

6. What is a KPI visual, and why is it useful?

A KPI visual **tracks progress toward a goal**, helping businesses **monitor performance at a glance**.

These notes will help you **design and build interactive dashboards in Power BI**, making your reports **more engaging, insightful, and easy to use!**