MICROSOFT POWER-BI

SERIES 1

OVERVIEW

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INTRODUCTION

- Microsoft Power BI is a collection of apps, software services and connectors that come together to turn unrelated data into visually impressive and interactive insights.
- Power BI can work with simple data sources like Microsoft Excel and complicated ones like cloud-based or on-premises hybrid Data warehouses. Power BI has the capabilities to easily connect to your data sources, visualise and share and publish your findings with anyone and everyone.
- Power BI is simple and fast enough to connect to an Excel workbook or a local database.
- It can also be robust and enterprise-grade, ready for extensive modeling and real time analytics.
- This means it can be used in a variety of environments from a personal report and visualisation tool to the analytics and decision engine behind group projects, divisions, or entire corporations.

PARTS OF POWER-BI

- Power BI constitutes of a Microsoft Windows desktop application called Power BI Desktop, an online **SaaS** (Software as a Service) called Power BI Service and a mobile Power BI apps that can be accessed from Windows phones and tablets, and also available on Apple iOS and Google Android devices.
- These **three elements— Desktop, the Service, and Mobile apps** - are the backbone of the Power BI system and lets users create, share and consume the actionable insights in the most effective way.

PARTS OF POWER-BI

1. POWER-BI DESKTOP

It is a Windows application that provides a rich environment for data modeling, transformation, and visualization.

Key features of Power BI Desktop include the ability to import data from various sources, create data models, design visuals, write DAX calculations, and customize report layouts.

Power BI Desktop is primarily used by data analysts and report developers to build and design reports before publishing them to the Power BI Service.

PARTS OF POWER-BI

2. POWER-BI SERVICE

Power BI Service, also called as Power BI Cloud or Power BI Online.
It is a cloud-based platform where reports and dashboards created in Power BI Desktop can be published, shared, and accessed by others.
With Power BI Service, users can view and interact with reports and dashboards through a web browser or the Power BI mobile app.
It offers collaboration features, including the ability to share reports, create dashboards, set up data alerts, and collaborate with colleagues in real time.
Power BI Service also provides data refresh capabilities to ensure that reports stay up to date with the latest data.

PARTS OF POWER-BI

3. POWER-BI MOBILE

Power BI Mobile is a mobile application available for iOS and Android devices. It allows users to access and interact with Power BI reports and dashboard. Users can view, filter, and drill down into data, making it convenient for decision-makers who need access to business insights while away from their computers.

The app also supports offline access, so users can access reports even without an internet connection.

BUILDING BLOCKS OF POWER-BI

The basic building blocks in Power BI are:

- **Visualizations**

A visualization is a representation of data in a visual format. It could be a line chart, a bar graph, a color coded map or any visual way to present the data.

- **Datasets**

A dataset is a collection of data that Power BI uses to create its visualizations.

- **Reports**

A Report is a collection of visualizations that appear together on one or more pages.

- **Dashboards**

A Power BI dashboard is a collection of visuals from a single page that you can share with others.

BENEFITS OF POWER-BI

1. User-Friendly Interface

Power BI features a user-friendly, drag-and-drop interface, making it easy to both technical and non-technical users.
Users can create reports and dashboards without any extensive training.

2. Data Integration and Transformation

Power BI can connect to a wide range of data sources, including databases, cloud services, web sources, and more. It offers robust data transformation capabilities to clean, reshape, and model data for analysis.

3. Advanced Data Modeling

Users can create sophisticated data models using DAX, enabling complex calculations, aggregations, and relationships. The data model supports the creation of hierarchies, measures, and calculated columns.

BENEFITS OF POWER-BI

4. Interactive Visualizations

Power BI provides a huge library of customizable visualizations, including bar charts, line charts, maps, etc.

Visualizations can be filtered, cross-highlighted, and drilled down to explore data interactively.

5. Natural Language Queries

Users can ask questions using natural language queries, and Power BI's AI capabilities generate visualizations and insights based on the questions.

6. Real-Time Data

Power BI supports real-time data, allowing organizations to monitor and react to data changes in real-time.

BENEFITS OF POWER-BI

7. Data Sharing and Collaboration:
Reports and dashboards created in Power BI can be shared securely with others. Collaboration features include commenting, annotation, and the ability to create and share dashboards with stakeholders.

8. Security and Compliance:
Power BI offers robust security and access control features, including integration with Azure Active Directory for identity management.
It complies with various industry standards and regulations, making it suitable for organizations with strict data governance requirements.

9. Scalability:
Power BI is highly scalable, capable of handling large datasets and serving the needs of small to large organizations.

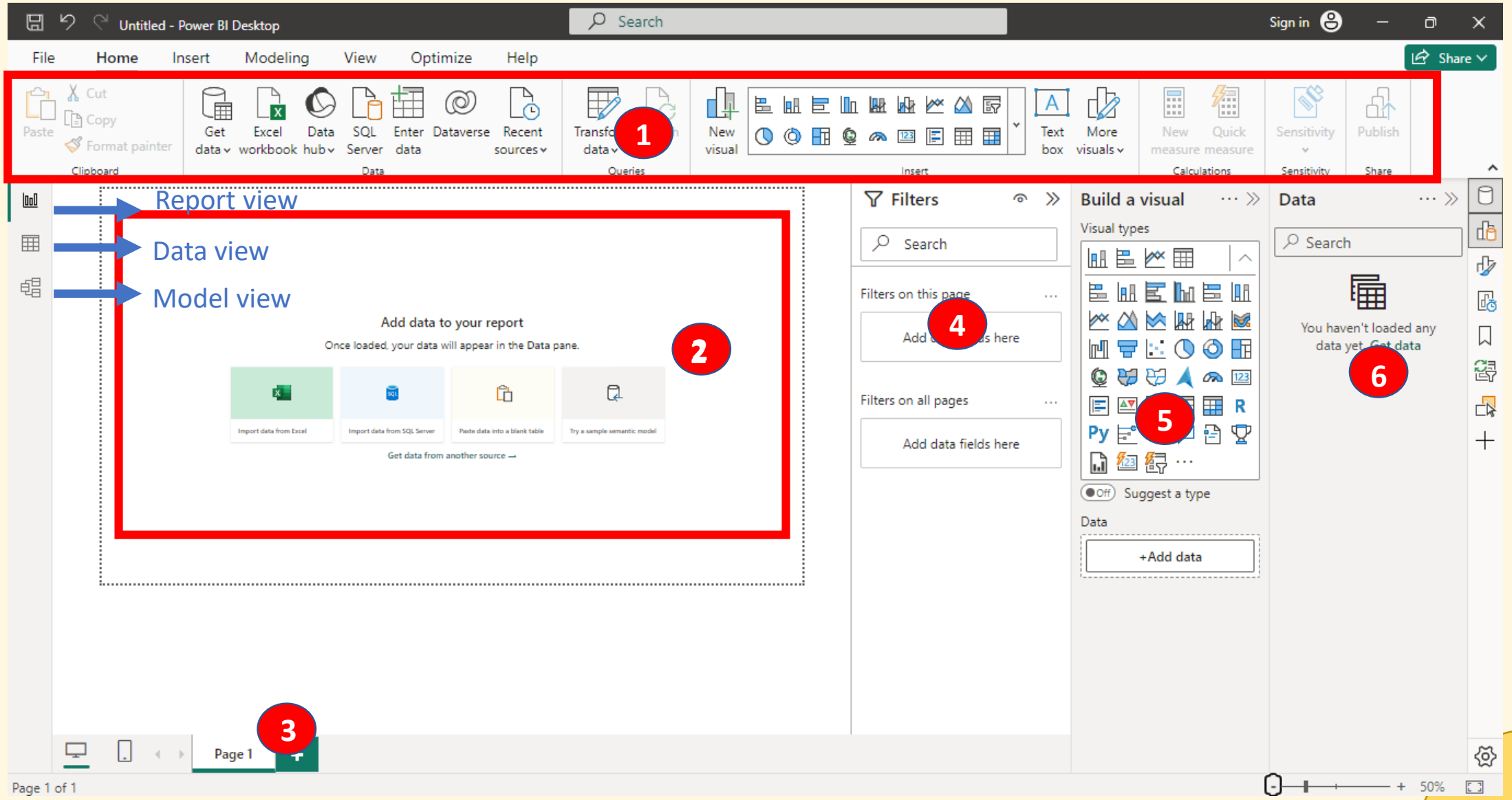
BENEFITS OF POWER-BI

10. Cost-Efficiency

Power BI offers both free and paid licensing options, making it accessible to organizations of all sizes.

Power BI Pro and Premium licenses provide additional features for advanced use cases.

POWER-BI DESKTOP VIEW



POWER-BI DESKTOP VIEW

1. **Ribbon** - Displays common tasks that are associated with reports and visualizations.
2. **Report view, or canvas** - Where visualizations are created and arranged. You can switch between Report, Data, and Model views by selecting the icons in the left column.
3. **Pages tab** - Located along the bottom of the page, this area is where you would select or add a report page.
4. **Filters Pane –** Where you drag fields in filters as per requirement
5. **Visualizations pane** - Where you can change visualizations, customize colors or axes, apply filters, drag fields, and more.
6. **Data pane** - Where dataset tables with respected columns, measures and calculated columns are displayed.

THANK YOU

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