



POWER BI

Visualizing Data



Introduction to Power BI

- Competitive Landscape
- Terminology & Navigation
- Power Query Editor
- Loading the Data Model
- Filters & Formatting
- Practice: Interpret an Interactive Dashboard



Microsoft
Power BI

Power BI Intro

Competitive Landscape

Gartner's 2021 Magic Quadrant

- What does this mean?
- Functionality?
- Market Share?
- Free Software? 😊

**“LOW-COST, LOW-FRICTION,
COMMUNITY-POSITIVE”**

Figure 1: Magic Quadrant for Analytics and Business Intelligence Platforms



Competitive Landscape



★ Industry leader for data visualization software, with VizQL IP for Interactive Data Inquiry.

Logical & Physical Data Model with Hyper Database Engine for in memory columnar preparation. Extensive 80+ native data connectors.

Robust user-friendly interface designed to democratize access to visual data analysis.

Extensive specialization options: PyTab, Extension libraries, 3rd party add-on integration, etc.

Integrated with Microsoft tool suite, including MS database offerings.

User navigation uses familiar selection interface for Data Model and Chart Navigation.

★ Consistent user experience reduces learning curve for those with Excel experience and greatly enhances visuals coming from Excel.

DAX extends creation options.

Qlik Sense 2015 modeled after Tableau feature set to increase competition.

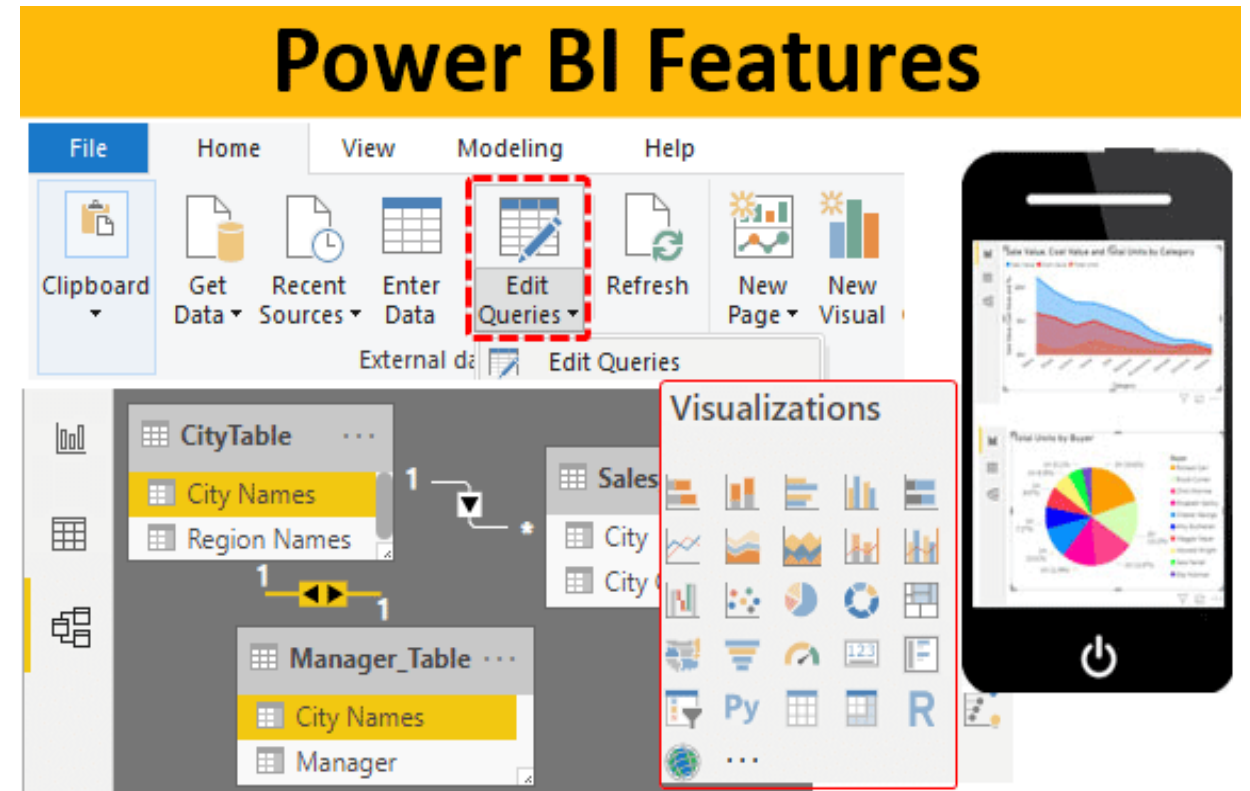
★ Automated Associative Indexing for table imports; dynamic Data Model with programmatic options.

Smart Search with suggested KPI's and Charts recommendations. Learning curve with user interface.

Direct SQL integration for aggregation and customization. SET Expressions.

Top 8 Features

1. Data Connection
2. Data Relationships
3. Power Query & Power Pivot
4. Ease of Chart Creation
5. Power BI's Q&A
6. Cost of Power BI
7. Report Sharing
8. Mobile App



Power BI Intro

Terms, Navigation & Query Editor

Launch and Explore

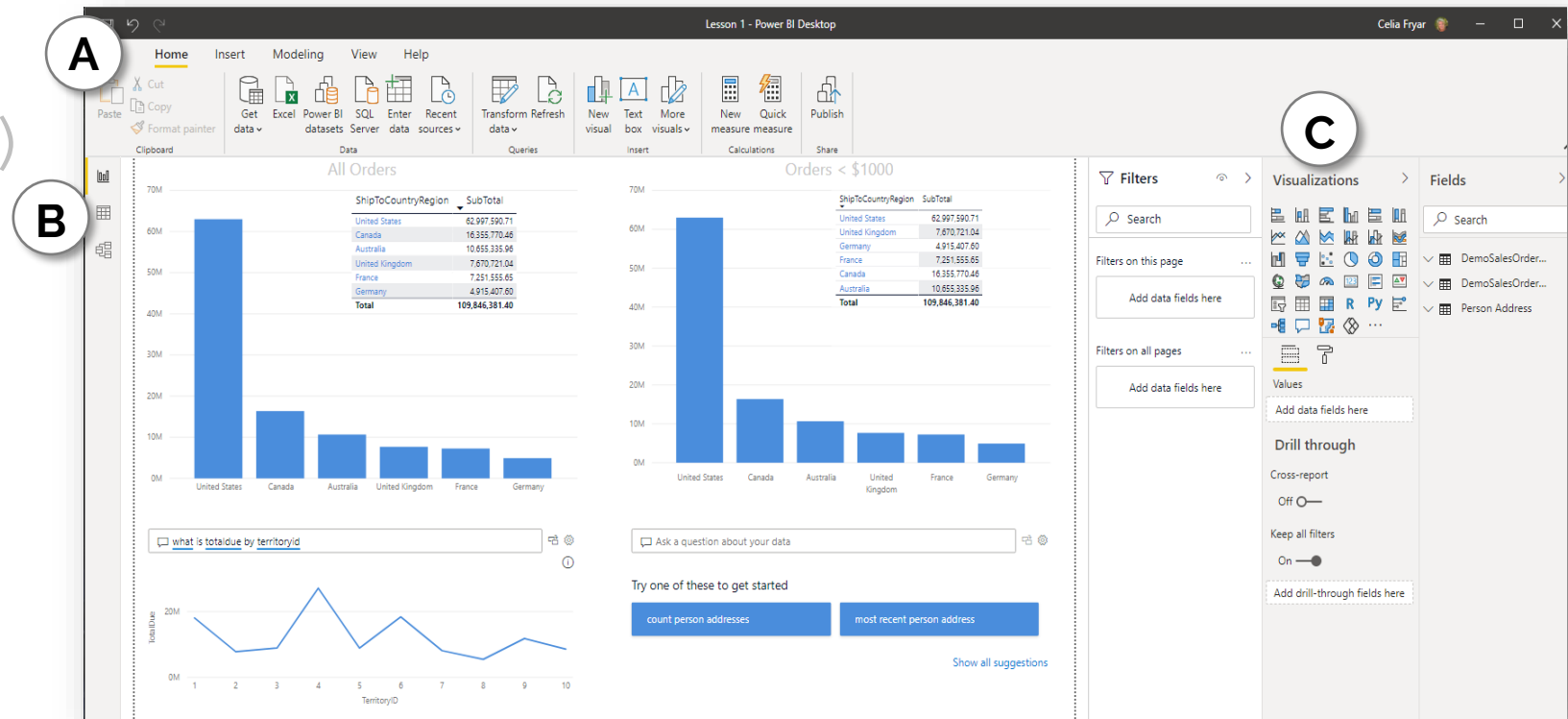
MS Ribbon Menu System **A**

3 Views **B**

- Report (default)
- Data
- Model

3 Chart Panes **C**

- Filters
- Visualizations
- Fields



Power BI Workflow

- **Load Data:** csv, txt,xlsx, database files and more.
- **Data Modelling:** define relationships between tables
- **Query Editor:** transform & manipulate data
- **Visualize:** select chart parameters & attributes

