### Microsoft Power Bl



# Agenda

- What is Power BI?
- Why Power BI?
- Gartner
- Power BI Products
- Licenses & Prices
- Connectivity Types
- Exploring
- Demo



### What is Power BI?

- Power BI is a business analytics solution that lets you visualize your data and share insights
  across your organization or embed them in your app or website. Connect to hundreds of
  data sources and bring your data to life with live dashboards and reports.
- Make informed decisions quickly. Connect, model, and then explore your data with visual reports that you can collaborate, publish, and share. Power BI integrates with other tools, including Microsoft Excel, so you can get up to speed quickly and work seamlessly with your existing solutions.
- Connect to hundreds of data sources on premises and in the cloud.
- Use Power Query to simplify data ingestion, transformation, integration, and enrichment.
- Create reports using built-in visuals or create your own custom visuals.

## Why Power BI?

- Rely on one of the largest and fastest growing business intelligence clouds.
- Create and share interactive data visualizations across global data centers, including national clouds to meet your compliance and regulation needs.
- Better protect Power BI data with Microsoft Information Protection and Microsoft Cloud App Security.
  - •Apply sensitivity labels familiar in Office365 apps like Word, Excel, PowerPoint, and Outlook to Power BI data.
  - •Extend protection and governance policies to Power BI data—including exported data—with Microsoft Information Protection.
  - •Better meet privacy and regulatory requirements with oversight of sensitive data through Microsoft Cloud App Security.
  - •Help prevent exposure of sensitive data by blocking risky user activities, in real

# Why Power BI? (Cont.)

### Find answers fast with industry-leading Al.

Take advantage of the latest advances in Microsoft AI to help non-data scientists prepare data, build machine learning models, and find insights quickly from both structured and unstructured data, including text and images.

### Get unparalleled Excel integration.

Anyone who's familiar with Office 365 can easily connect Excel queries, data models, and reports to Power BI Dashboards—helping to quickly gather, analyze, publish, and share Excel business data in new ways.

### Turn insights into action.

Go from data to insights and insights to action with the Microsoft Power Platform—combining Power BI with PowerApps and Power Automate to easily build business applications and automate workflows.

### Stream analytics in real time

Know what's happening now, not just in the past. From factory sensors to social media sources, get access to real-time analytics so you're always ready to make timely decisions.

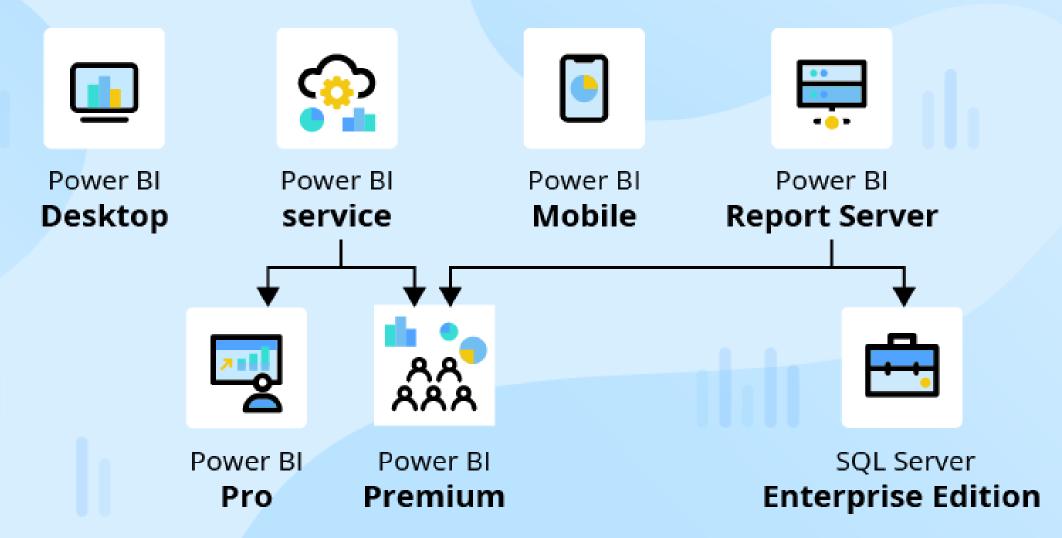
2020 Gartner
Magic Quadrant
for Analytics and
Business
Intelligence
Platforms



Figure 1: Magic Quadrant for Analytics and Business Intelligence Platforms

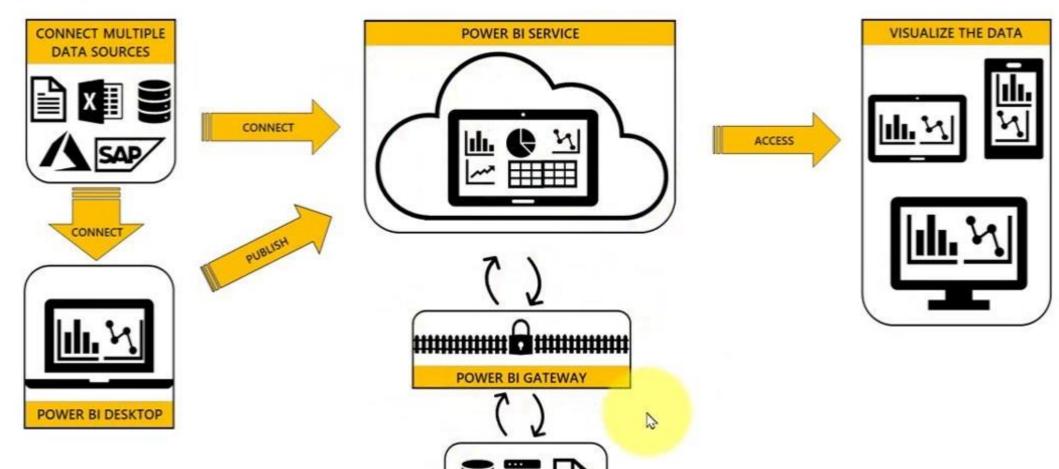
Source: Gartner (February 2021)

# Power BI Products





# How Power BI Works...?







ORGANIZATION DATA

### Power BI Prices

Power BI Pro

Per user

\$9.99

Per user/month

License individual users with modern, self-service analytics to visualize data with live dashboards and reports, and share insights across your organization.

- . Power BI Pro is included in Microsoft 365 E5.
- Available to buy now with a credit card.<sup>1</sup>

#### **Power BI Premium**

Per user

\$20

Per user/month 2

License individual users to accelerate access to insights with advanced AI, unlock self-service prep for big data, and simplify data management and access at enterprise scale.

- Includes all the <u>features</u> available with Power BI Pro.
- Available to buy now with a credit card.<sup>1</sup>

Per capacity

from

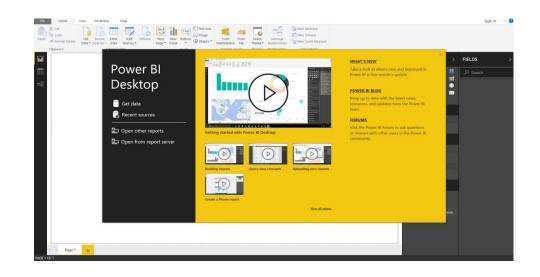
\$4,995

Per capacity/month

License your organization with capacity to accelerate access to insights with advanced Al, unlock self-service prep for big data, and simplify data management and access at enterprise scale—without per-user licenses for content consumers.

- Requires a Power BI Pro license for publishing content into Power BI Premium capacity.
- Enable <u>autoscale</u> with your Azure subscription to automatically scale Power BI Premium capacity.

# Power BI Desktop







Power BI



# Power BI Connectivity Types

	Connectivity Types			
	LiveConnection	DirectQuery	Import	Composite
	For Enterprise Solutions No data stored in memory Full Reporting No data transformation No data modelling High-performing Data stored at source Queries sent to source No refresh required	<ul> <li>Full Reporting</li> <li>No data stored in memory</li> <li>No data transformation</li> <li>Limited data modelling</li> <li>Lower-performing</li> <li>Data stored at source</li> <li>Queries sent to source</li> <li>No refresh required</li> </ul>	Full Reporting No data stored in memory Full data transformation Full data modelling High-performing Data stored in Power BI Queries not sent to source Refresh required Supports Q&A & Quick Insights	<ul> <li>Combine DQ &amp; Import</li> <li>Larger volumes of data</li> <li>No Analysis Services</li> </ul>
	Analysis Services Power BI Dataset	SQL Databases	SQL Databases	SQL SQL Databases (Import) (DirectQuery)
Power Bi Data Source	Data Model	Data		Data
Power BI	Visuals	Model Visuals	Data Model Visuals	Data Model Vis

Exploring Power BI Desktop



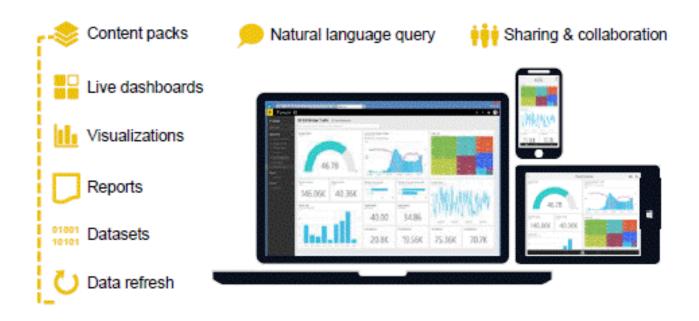
Demo



### Power BI Service

Cloud Based SaaS BI Solution

### Power BI service



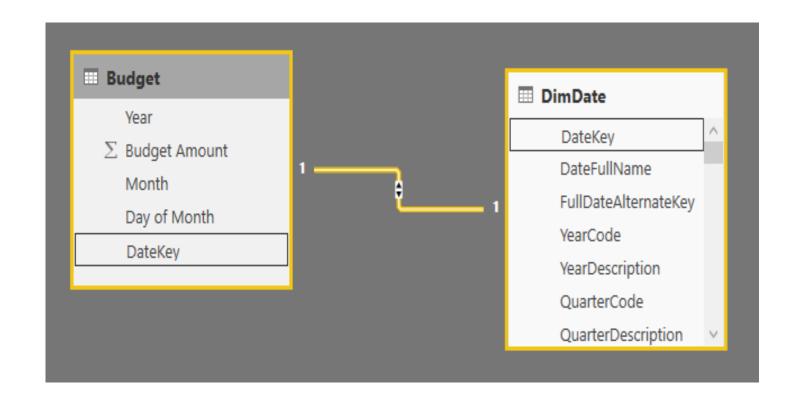
Exploring Power BI Service



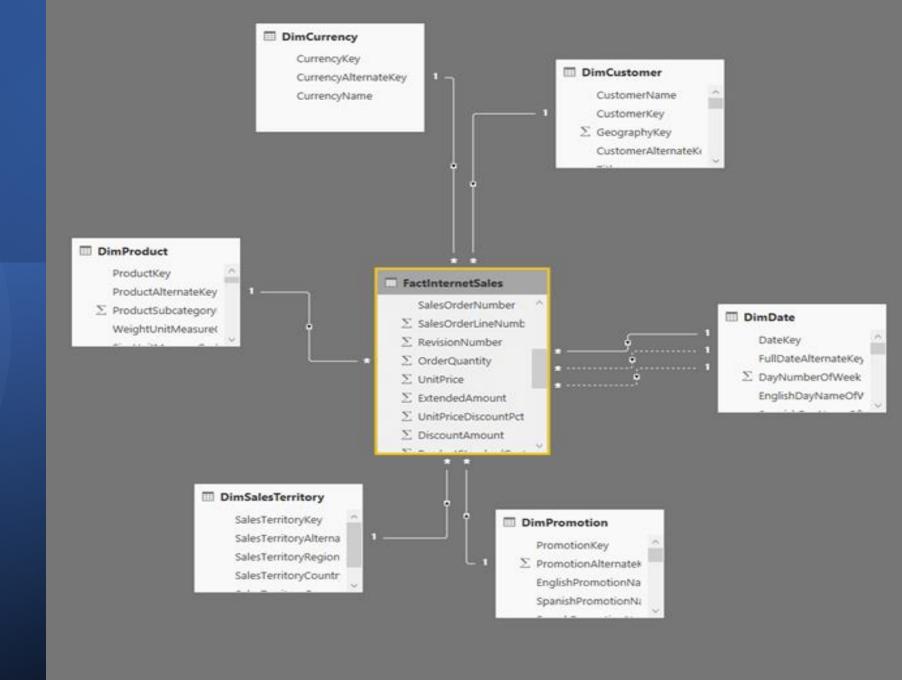
### Power BI Relationships

- Cardinality
  - One to One (1:1)
  - One to Many (1:\*)
  - Many to One (\* : 1)
  - Many to Many (\* : \*)

- Cross Filter Direction
  - Single
  - Both



### Power BI Relationships



### Power Bl Gateways

	On-premises data gateway (standard mode)	On-premises data gateway (personal mode)
Cloud services it works with	Power BI, Power Apps, Azure Logic Apps, Power Automate, Azure Analysis Services, Dataflows	Power Bl
Serves multiple users with access control per data source	•	
Runs as an app for users who aren't administrators		•
Runs as a single user with your credentials		•
Import data and set up scheduled refresh	•	•
DirectQuery support	•	
Support for a live connection to Analysis Services	•	

### Power BI RLS

## Row Level Security (RLS) in Power BI



Demo



Questions?



Thank you

