

SESSION WILL BE DIVIDED INTO

1. What is meant by storage in Power BI?
2. Different Types of Storage Modes
3. Understanding with Examples (Case Study)
4. Implementing (Loading Data)
5. Exploring Each Visual

SECTION 1

STORAGE IN POWER BI

- Storage refer to how Power BI handles and manages data retrieved from data sources.
- In simple terms, storage in Power BI is nothing but bringing the data into our Power BI report.



DATA



customer_code	customer_name	customer_type
Cus001	Surge Stores	Brick & Mortar
Cus002	Nomad Stores	Brick & Mortar
Cus003	Excel Stores	Brick & Mortar
Cus004	Surface Stores	Brick & Mortar
Cus005	Premium Stores	Brick & Mortar
Cus006	Electricalsara Stores	Brick & Mortar
Cus007	Info Stores	Brick & Mortar
Cus008	Acclaimed Stores	Brick & Mortar
Cus009	Electricalsquipo Stores	Brick & Mortar
Cus010	Atlas Stores	Brick & Mortar
Cus011	Flawless Stores	Brick & Mortar
Cus012	Integration Stores	Brick & Mortar
Cus013	Unity Stores	Brick & Mortar
Cus014	Forward Stores	Brick & Mortar
Cus015	Electricalsbea Stores	Brick & Mortar
Cus016	Logic Stores	Brick & Mortar
Cus017	Epic Stores	Brick & Mortar

SECTION 2

DIFFERENT DATA STORAGE MODES

There are three data storage modes in Power BI: -

1. Import Storage Mode
2. Direct Query Mode

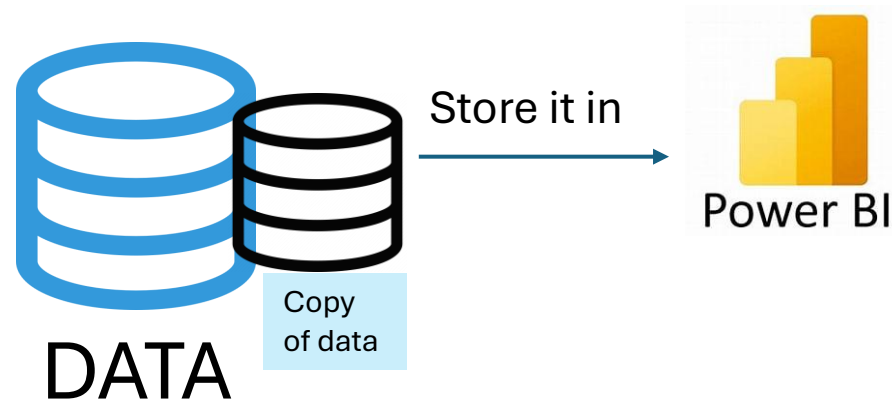
SECTION 2

DIFFERENT DATA STORAGE MODES

There are two data storage modes in Power BI: -

1. Import Storage Mode

Import Storage mode is a mode of data connectivity in which we copy the data from the data source, bring it to our Power BI desktop, **store it there**, use it for our analysis.



Copy of the data in technical terms is also referred as **cached data**.

SECTION 2

DIFFERENT DATA STORAGE MODES

There are two data storage modes in Power BI: -

1. Import Storage Mode

- Larger model sizes may not be supported by your capacity. Shared capacity can host models up to 1 GB in size, while Premium capacities can host larger models depending on the SKU. For further information, read the [Power BI Premium support for large semantic models](#) article. (Semantic models were [previously known as datasets](#).)

With Premium we can go beyond 10 GB of data as well depending upon the complexity of the model.

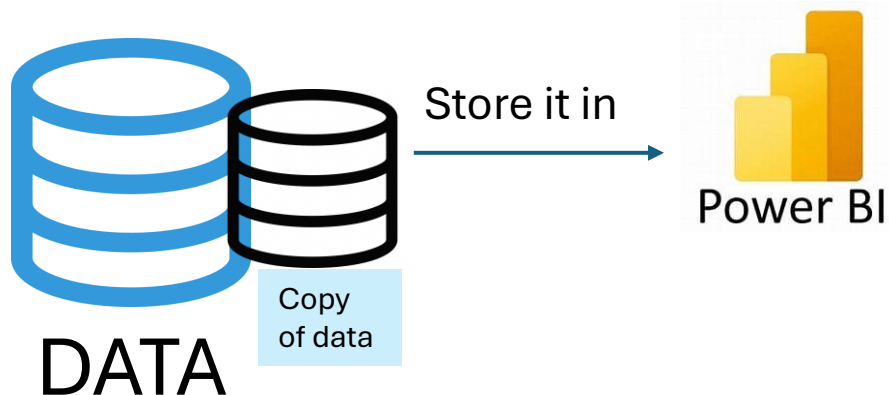
SECTION 2

DIFFERENT DATA STORAGE MODES

There are two data storage modes in Power BI: -

2. Direct Query Storage Mode

- In Direct Query mode of connectivity, we do not create a copy of the data and store it in the Power BI report.
- Instead, we fetch the data schema from the dataset and directly access the data from the database itself.



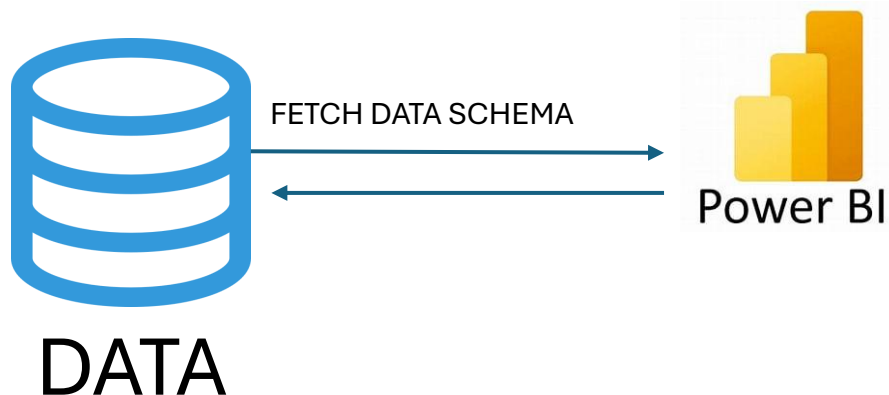
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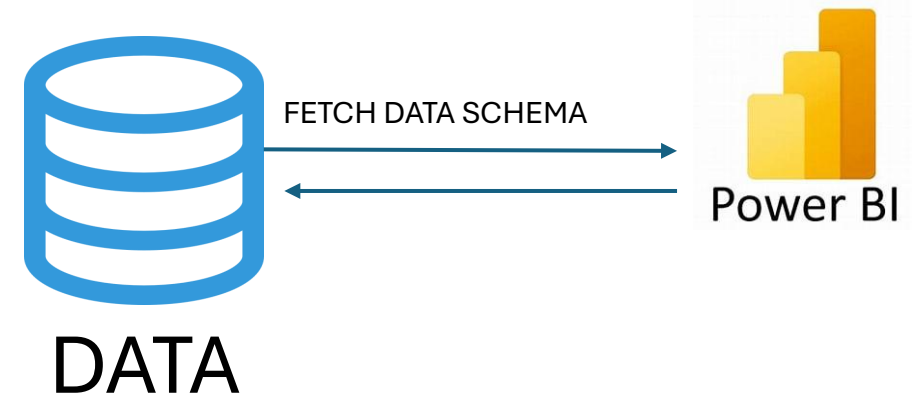
SECTION 2

DIFFERENT DATA STORAGE MODES

There are two data storage modes in Power BI: -

2. Direct Query Storage Mode

- When to use Direct Query Mode?
 1. Handle large amount of data which is not possible to connect with import storage mode.
 2. When we need to have near real time reporting of the data.
 3. The underlying source of the data defines and applies security.



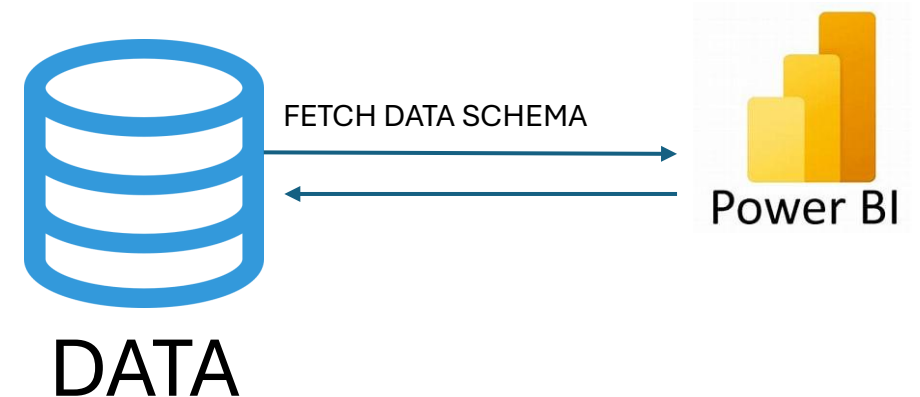
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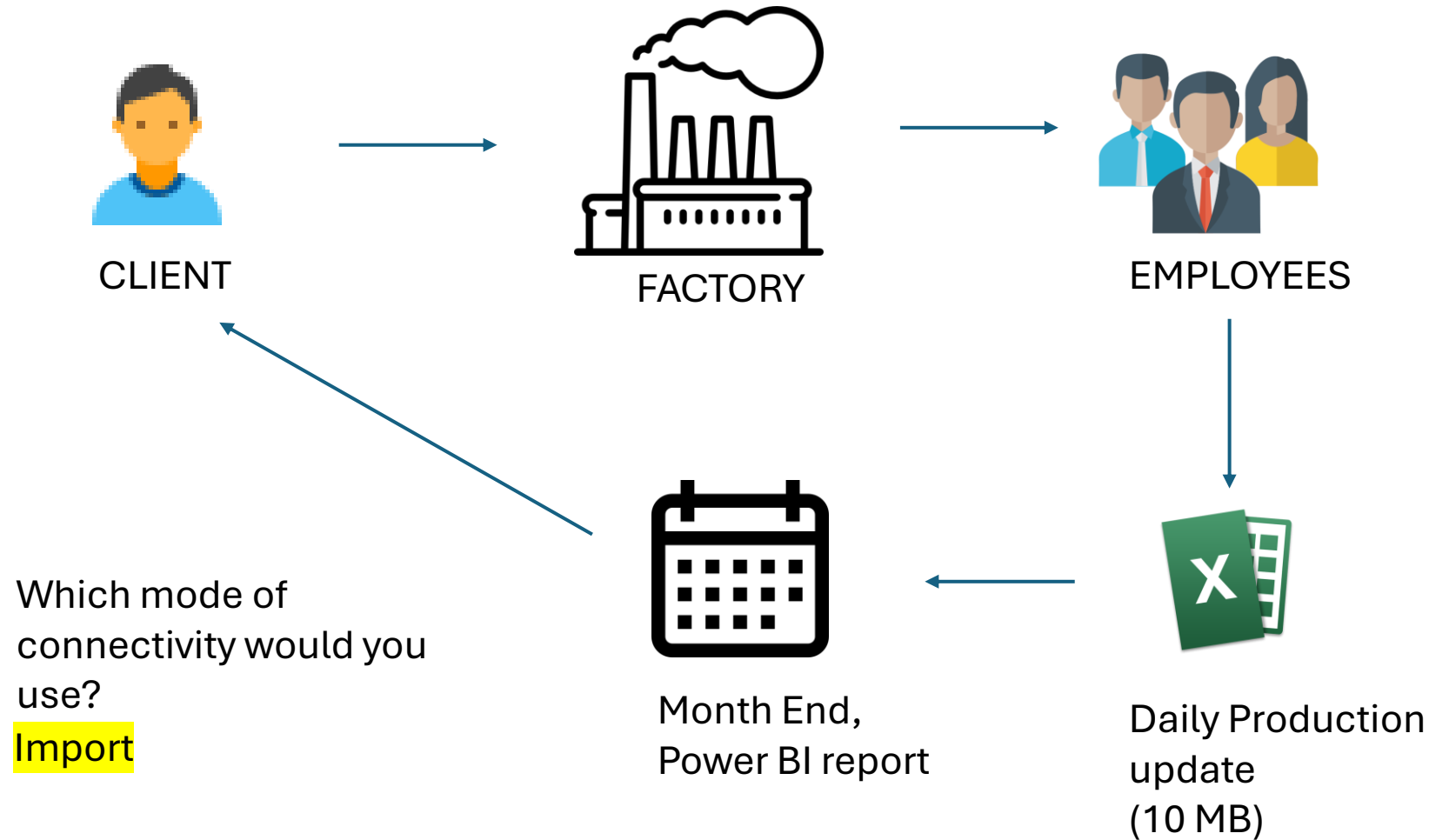
2. Direct Query Storage Mode

- Benefits of using Direct Query?
 1. Handle large amount of data which is not possible to connect with import storage mode.
 2. More Security features.



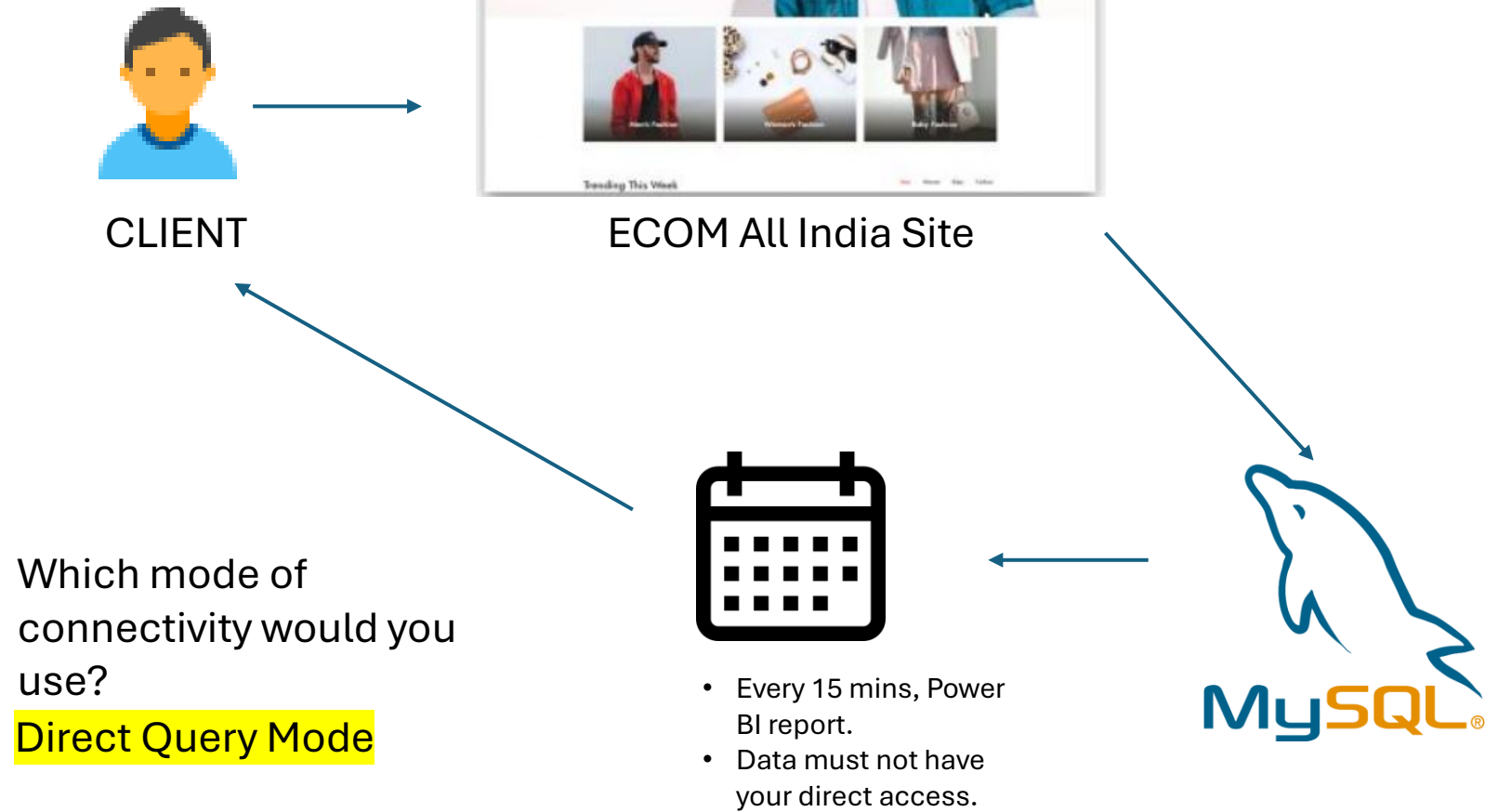
SECTION 3

Understanding with an example CASE STUDY



SECTION 3

Understanding with an example CASE STUDY



SECTION 4

PRACTICAL IMPLEMENTATION

LET US GO TO



SECTION 5

Exploring Each Visual

- Chart 7 – Line Chart
- When to Use:
 - Use a **Line Chart** when you want to show trends or changes in data over time, especially when the data points are continuous.
 - Ideal for tracking metrics like sales, temperature, or stock prices over days, months, or years.
- Why to Use:
 - A line chart clearly visualizes **trends and patterns** over time, making it easier to spot upward or downward trends. It's especially effective for identifying growth, declines, or seasonal variations in the data.

SECTION 5

Exploring Each Visual

- Chart 8 –Ribbon Chart
- When to Use:
 - Use a **Ribbon Chart** when you want to visualize rankings or changes in data ranking over time across different categories.
 - Ideal for showing how categories such as product sales or market share shift in rank from one period to another (e.g., monthly, quarterly).
- Why to Use:
 - A ribbon chart provides a unique way to **track rank changes** of categories over time, highlighting both the magnitude of the values and the movement in rank. This makes it ideal for understanding which categories are gaining or losing prominence within a dataset.

SECTION 4

Exploring Each Visual

- Chart 9 – Scatter Chart
- When to Use:
 - Use a **Scatter Chart** when you want to show the relationship or correlation between two numerical variables.
 - Ideal for scenarios like comparing sales and profit across different products or identifying trends between two sets of data (e.g., advertising spend vs. sales revenue).
- Why to Use:
 - A scatter chart helps visualize the **relationship between two variables**, allowing you to identify correlations, trends, and outliers.

SECTION 5

Exploring Each Visual

- Chart 11 – Tree Map
- When to Use:
 - Use a **Tree Map** when you want to display hierarchical data or show proportions among categories with a visual representation of their relative sizes.
 - Ideal for scenarios like visualizing sales by region and subregion or product category with their subcategories, where you need to see both the hierarchy and the size of each part.
- Why to Use:
 - A tree map allows you to represent **hierarchical data** in a compact, space-efficient format, making it easy to spot both the size and relative importance of each category within the hierarchy. It's particularly useful for identifying patterns and outliers in large datasets.

SECTION 5

Exploring Each Visual

- Chart 12 – Pie Chart & Donut Chart

Aspect	Pie Chart	Donut Chart
Shape	Like a pie, without a hole in centre.	Like a donut, has a hole in the center
When to use	To show proportions or percentages of a whole.	Like a pie chart, used when to show additional information in center.
When to not use	When to many categories, usually (more than 5).	When to many categories, usually (more than 5).
Data Representation	Shows parts as whole as slices of a pizza.	Represents parts of a whole, but the center hole often makes it easier to read.