

**What is  
Power BI?**

**Transform**

**Model**

**Visualize**

**Analyze**

**Share & Collaborate**

**What is  
Power BI?**

**Power BI Desktop**

**Power BI Cloud**

**Power BI Mobile**

**Transform**

**Model**

**Visualize**

**Analyze**

**Share & Collaborate**

**PBI on Mobile**

**What is  
Power BI?**

**What will you  
learn in this course?**

**Preparing our Project**

**Data Transformation I**

**Data Transformation II**

**Creating our Model**

**Visualizing Data**

**Storytelling with Data**

**Analyze with DAX**

**Power BI Cloud**

**Power BI Mobile**

**Other Data Sources**

**How to continue**

**Advanced**

**Advanced**

**Advanced**

**What will you  
learn in this course?**

**How to learn best?**

**Make use of the  
Udemy tools**

**Let's practice!**

**Use the resources**

**Ask questions**

**Find your own pace**

**Do the exercises**

**Project files & more**

**Help others**

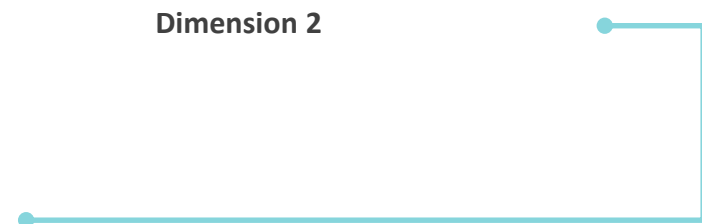
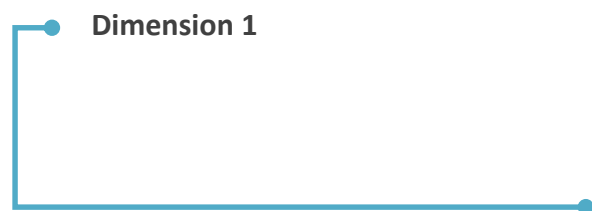
**How to learn best?**

# The star schema



# Fact- Dimension- Model

(Star Schema)







**Fact Table**




# Supermarket

Transaction-ID	Product-ID	Price	Date	Location-ID
12345	1	25\$	01-01-2020	1
...	2	13\$	01-01-2020	2
	5	10	02-01-2020	1

## Fact Table

10.000 data rows



Location-ID	Location	Employees	Sales area	...
1	Vancouver	10	110sqm	
2	Chicago	15	165sqm	
3	New York	12	105sqm	

## Dimensionstabelle

5 data rows

# Supermarket

## Foreign Key

Transaction-ID	Product-ID	Price	Date	Location-ID
12345	1	25\$	01-01-2020	1
...	2	13\$	01-01-2020	2
	5	10	02-01-2020	1

## Primary Key

Location-ID	Location	Employees	Sales area	...
1	Vancouver	10	110sqm	
2	Chicago	15	165sqm	
3	New York	12	105sqm	

**Year dimension**

Historic events in this year,  
world wide climate average

**Continent dimension**

Size, climate zone

Country	Year	GDP	Country-ID	Continent-ID
Canada	2014	X	2	1
Canada	2015	Y	1	1
Canada	2016	Z	3	1
...				

**Fact Table**

**country dimension**

Year of formation,  
climate zone,

# Merge queries (join types)

Product-ID		Price
1		10\$
2		20\$
3		30\$
4		40\$

Left Table

Product-ID		Name
1		Product1
2		Product 2
3		Product 3
5		Product 5

Right Table

## Left Outer Join

Produkt-ID	Preis	Name
1	10\$	Product 1
2	20\$	Product 2
3	30\$	Product 3
4	40\$	<i>null</i>

Product-ID	Price
1	10\$
2	20\$
3	30\$
4	40\$

Left Table

Product-ID	Name
1	Product1
2	Product 2
3	Product 3
5	Product 5

Right Table

## Right Outer Join

Product-ID	Price	Name
1	10\$	Product 1
2	20\$	Product 2
3	30\$	Product 3
5	<i>null</i>	Product 5



Product-ID		Price
1		10\$
2		20\$
3		30\$
4		40\$

Left Table

Product-ID		Name
1		Product1
2		Product 2
3		Product 3
5		Product 5

Right Table

## Full Outer Join

Product-ID	Price	Name
1	10\$	Product 1
2	20\$	Product 2
3	30\$	Product 3
4	40\$	<i>null</i>
5	<i>null</i>	Product 5

Product-ID	Price
1	10\$
2	20\$
3	30\$
4	40\$

Left Table

Product-ID	Name
1	Product1
2	Product 2
3	Product 3
5	Product 5

Right Table

## Inner Join

Product-ID	Price	Name
1	10\$	Product 1
2	20\$	Product 2
3	30\$	Product 3

Product-ID		Price
1		10\$
2		20\$
3		30\$
4		40\$

Left Table

Product-ID		Name
1		Product1
2		Product 2
3		Product 3
5		Product 5

Right Table

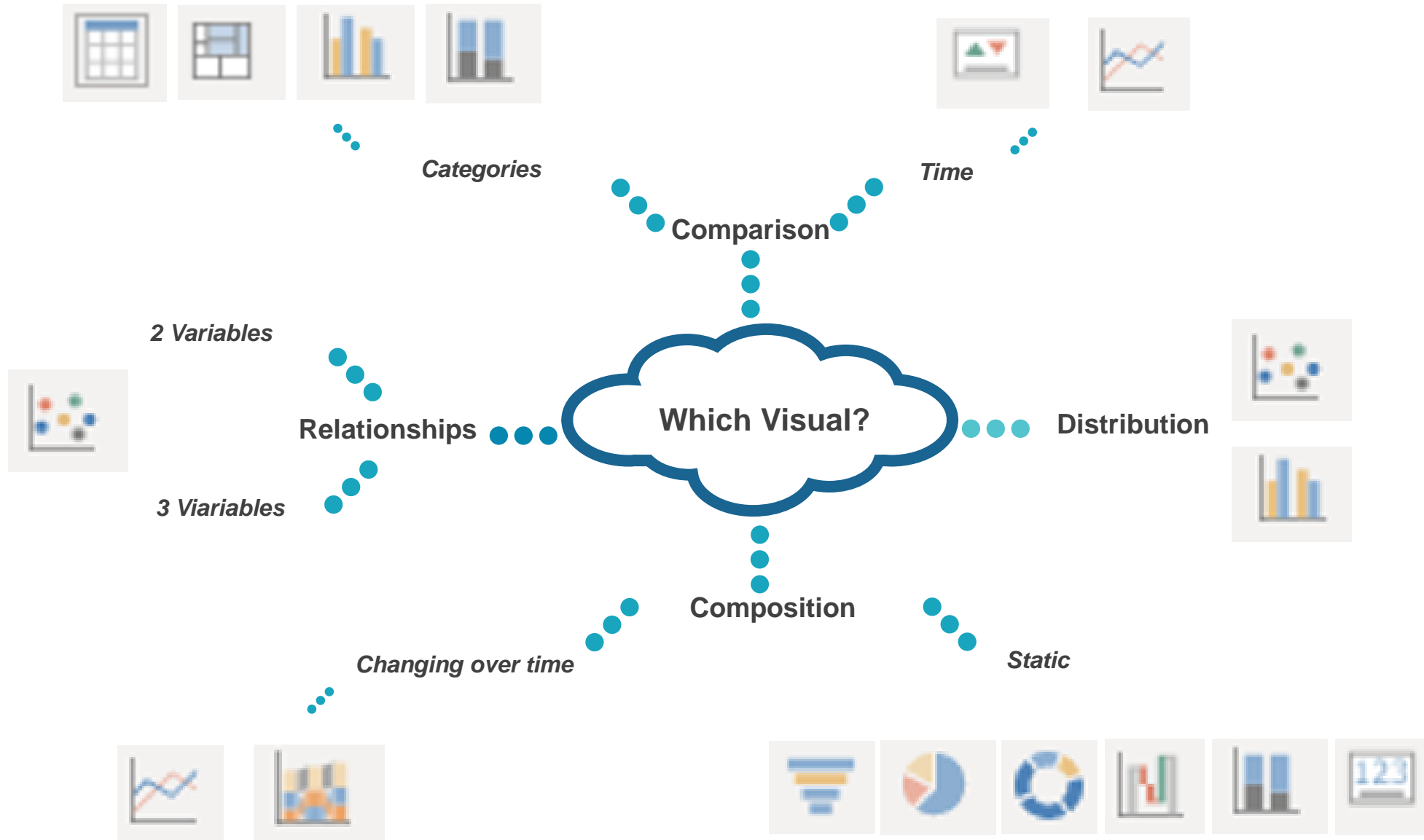
## Left Anti Join

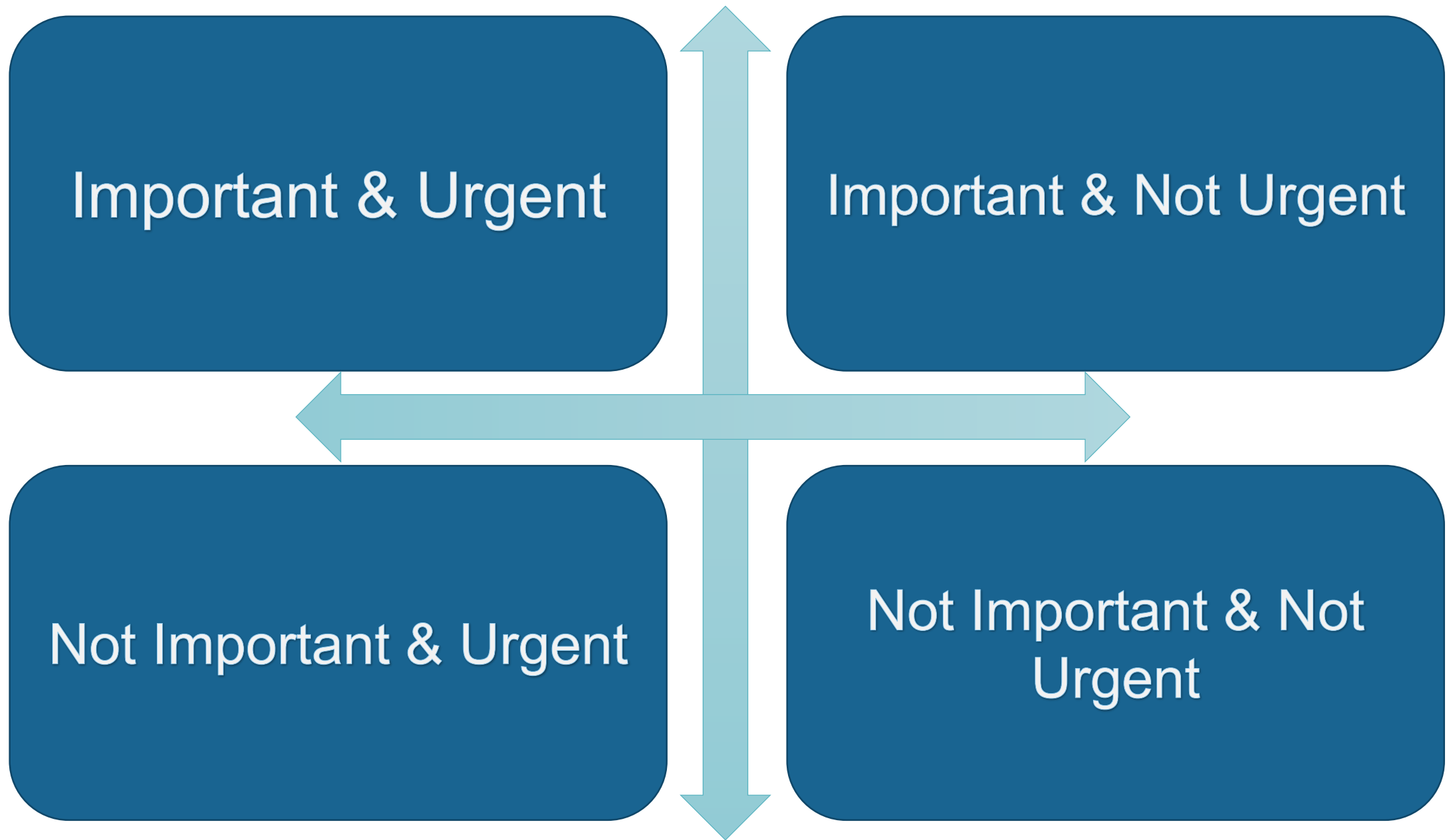
Product-ID	Price	Name
4	40\$	<i>null</i>

## Right Anti Join

Product-ID	Price	Name
5	<i>null</i>	Product 5

# Storytelling with Data





Cloud

How do we  
continue?



Single User



Power BI Desktop



**Publish**

**Finish**

Power BI Pro (Service)



Power BI Mobile

Organization



Power BI Desktop



**Publish**

Power BI Pro (Service)



Power BI Mobile

