

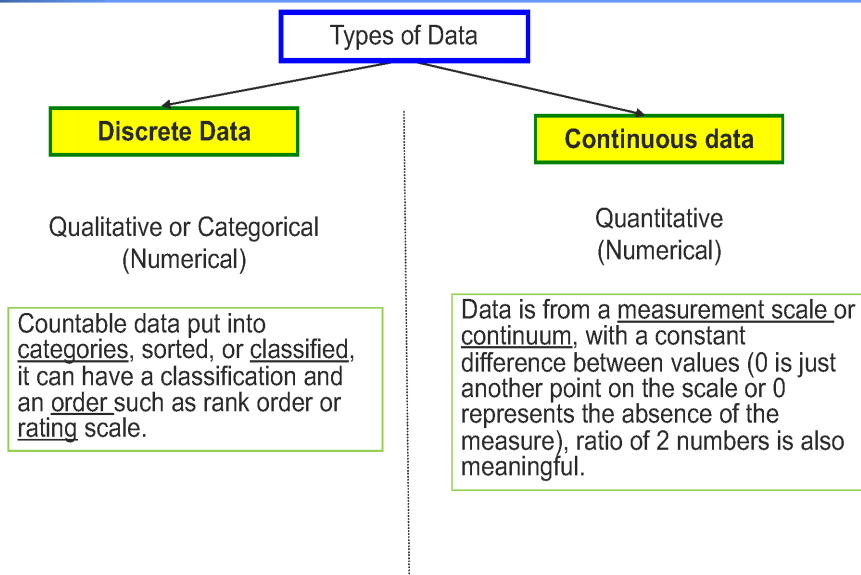
1.4 Types of Data: Pros and Cons

MBC 638

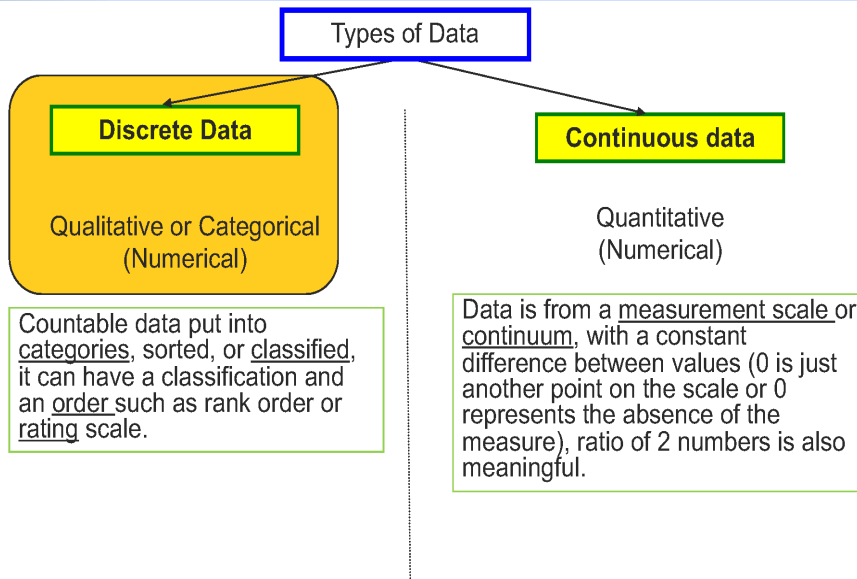
Data Analysis and Decision Making

It's important to identify data type before starting any analysis, measurement, or control.

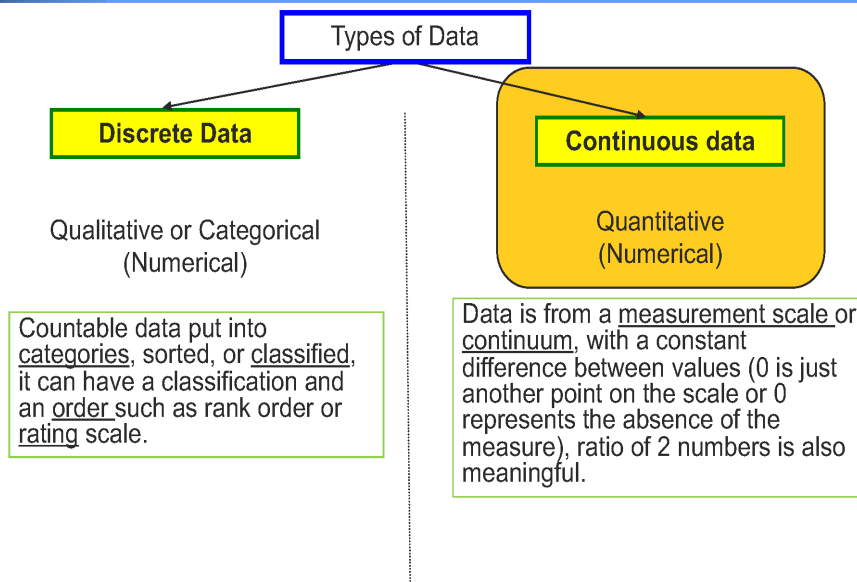
Types of Data



Types of Data



Types of Data



Types of Data: Examples

Discrete Data	Continuous Data
Eye color	Weight
Marital status	Height
Good/bad	Distance
Boy/girl	Money
Poor, okay, good, better, best	Time
Customer satisfaction (1–5)	Temperature
Course grade (A–F)	
Cooked meat (well, medium)	
Objects that only come in units (people, cars, animals)	

Types of Data: Examples

Discrete Data	Continuous Data
Eye color	Weight
Marital status	Height
Good/bad	Distance
Boy/girl	Money
Poor, okay, good, better, best	Time
Customer satisfaction (1–5)	Temperature
Course grade (A–F)	
Cooked meat (well, medium)	
Objects that only come in units (people, cars, animals)	

Types of Data: Examples

Discrete Data	Continuous Data
Eye color	Weight
Marital status	Height
Good/bad	Distance
Boy/girl	Money
Poor, okay, good, better, best	Time
Customer satisfaction (1–5)	Temperature
Course grade (A–F)	
Cooked meat (well, medium)	
Objects that only come in units (people, cars, animals)	

Types of Data: Examples

Discrete Data	Continuous Data
Eye color	Weight
Marital status	Height
Good/bad	Distance
Boy/girl	Money
Poor, okay, good, better, best	Time
Customer satisfaction (1–5)	Temperature
Course grade (A–F)	
Cooked meat (well, medium)	
Objects that only come in units (people, cars, animals)	

Types of Data: Examples

Discrete Data	Continuous Data
Eye color	Weight
Marital status	Height
Good/bad	Distance
Boy/girl	Money
Poor, okay, good, better, best	Time
Customer satisfaction (1–5)	Temperature
Course grade (A–F)	
Cooked meat (well, medium)	
Objects that only come in units (people, cars, animals)	

Types of Data: Examples

Discrete Data	Continuous Data
Eye color	Weight
Marital status	Height
Good/bad	Distance
Boy/girl	Money
Poor, okay, good, better, best	Time
Customer satisfaction (1–5)	Temperature
Course grade (A–F)	
Cooked meat (well, medium)	
Objects that only come in units (people, cars, animals)	

Types of Data: Examples

Discrete Data	Continuous Data
Eye color	Weight
Marital status	Height
Good/bad	Distance
Boy/girl	Money
Poor, okay, good, better, best	Time
Customer satisfaction (1–5)	Temperature
Course grade (A–F)	
Cooked meat (well, medium)	
Objects that only come in units (people, cars, animals)	

Types of Data: Examples

Discrete Data	Continuous Data
Eye color	Weight
Marital status	Height
Good/bad	Distance
Boy/girl	Money
Poor, okay, good, better, best	Time
Customer satisfaction (1–5)	Temperature
Course grade (A–F)	
Cooked meat (well, medium)	
Objects that only come in units (people, cars, animals)	

Types of Data: Examples

Discrete Data	Continuous Data
Eye color	Weight
Marital status	Height
Good/bad	Distance
Boy/girl	Money
Poor, okay, good, better, best	Time
Customer satisfaction (1–5)	Temperature
Course grade (A–F)	
Cooked meat (well, medium)	
Objects that only come in units (people, cars, animals)	

Types of Data: Examples

Discrete Data	Continuous Data
Eye color	Weight
Marital status	Height
Good/bad	Distance
Boy/girl	Money
Poor, okay, good, better, best	Time
Customer satisfaction (1–5)	Temperature
Course grade (A–F)	
Cooked meat (well, medium)	
Objects that only come in units (people, cars, animals)	

Types of Data: Examples

Discrete Data	Continuous Data
Eye color	Weight
Marital status	Height
Good/bad	Distance
Boy/girl	Money
Poor, okay, good, better, best	Time
Customer satisfaction (1–5)	Temperature
Course grade (A–F)	
Cooked meat (well, medium)	
Objects that only come in units (people, cars, animals)	

Types of Data: Examples

Discrete Data	Continuous Data
Eye color	Weight
Marital status	Height
Good/bad	Distance
Boy/girl	Money
Poor, okay, good, better, best	Time
Customer satisfaction (1–5)	Temperature
Course grade (A–F)	
Cooked meat (well, medium)	
Objects that only come in units (people, cars, animals)	

Types of Data: Examples

Discrete Data	Continuous Data
Eye color	Weight
Marital status	Height
Good/bad	Distance
Boy/girl	Money
Poor, okay, good, better, best	Time
Customer satisfaction (1–5)	Temperature
Course grade (A–F)	
Cooked meat (well, medium)	
Objects that only come in units (people, cars, animals)	

Types of Data: Examples

Discrete Data	Continuous Data
Eye color	Weight
Marital status	Height
Good/bad	Distance
Boy/girl	Money
Poor, okay, good, better, best	Time
Customer satisfaction (1–5)	Temperature
Course grade (A–F)	
Cooked meat (well, medium)	
Objects that only come in units (people, cars, animals)	



Discrete Data: Pros and Cons

Discrete Data: Pros and Cons

- **Pro:**

Discrete Data: Pros and Cons

- **Pro:**
 - Simple and fast to collect

Discrete Data: Pros and Cons

- **Pro:**
 - Simple and fast to collect
- **Con:**
 - Can be used to measure subjective concepts (e.g., customer experience)

Discrete Data: Pros and Cons

- **Pro:**
 - Simple and fast to collect
- **Con:**
 - Can be used to measure subjective concepts (e.g., customer experience)
 - Prone to greater error due to subjectivity

Discrete Data: Pros and Cons

- **Pro:**
 - Simple and fast to collect
- **Con:**
 - Can be used to measure subjective concepts (e.g., customer experience)
 - Prone to greater error due to subjectivity
 - Cannot measure variability

Discrete Data: Pros and Cons

- **Pro:**
 - Simple and fast to collect
- **Con:**
 - Can be used to measure subjective concepts (e.g., customer experience)
 - Prone to greater error due to subjectivity
 - Cannot measure variability
 - Requires large amounts of data for statistical testing

When designing your projects, think about how to collect continuous data.





