

# Steps in the Data Science Process

# After this video you will be able to..

- Identify the steps in the data science process
- Understand what each step involves

```
graph LR; A[ACQUIRE] --> B[PREPARE]; B --> C[ANALYZE]; C --> D[REPORT]; D --> E[ACT]
```

ACQUIRE

PREPARE

ANALYZE

REPORT

ACT

**ACQUIRE**

PREPARE

ANALYZE

REPORT

ACT

# Step 1: Acquire Data



Identify data sets

Retrieve data

Query data

ACQUIRE

PREPARE

ANALYZE

REPORT

ACT

## Step 2: Prepare Data

Step 2-A: Explore

Step 2-B: Pre-process

ACQUIRE

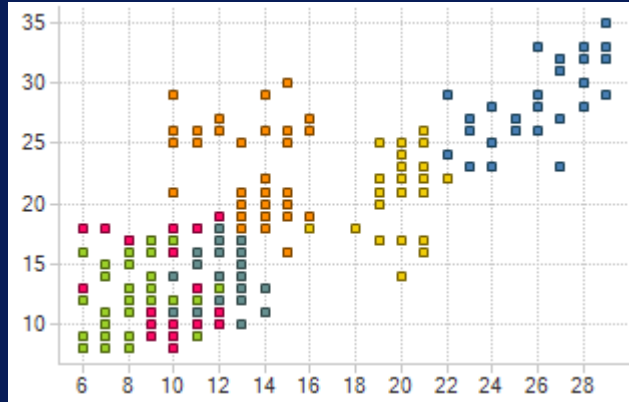
PREPARE

ANALYZE

REPORT

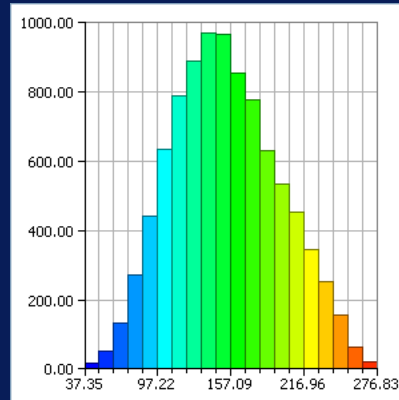
ACT

## Step 2-A: Explore Data



Understand  
nature of data

Preliminary  
analysis



ACQUIRE

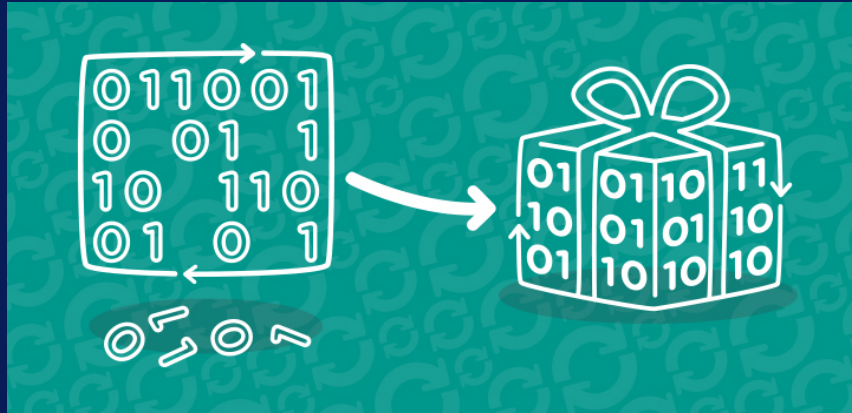
PREPARE

ANALYZE

REPORT

ACT

## Step 2-B: Pre-process Data



Clean

Integrate

Package

ACQUIRE

PREPARE

**ANALYZE**

REPORT

ACT

## Step 3: Analyze Data



Select analytical techniques

Build models



ACQUIRE

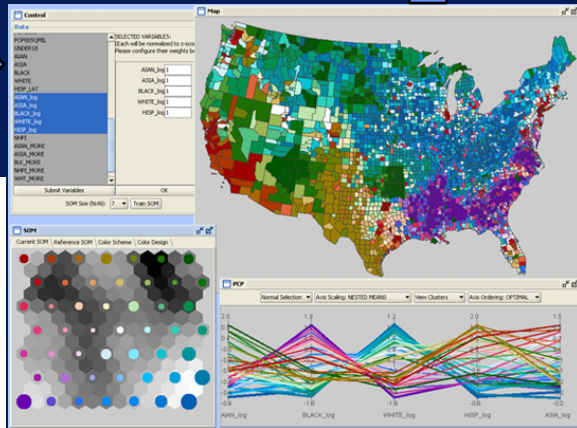
PREPARE

ANALYZE

REPORT

ACT

# Step 4: Communicate Results



ACQUIRE

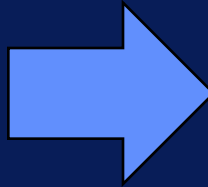
PREPARE

ANALYZE

REPORT

ACT

## Step 5: Apply Results



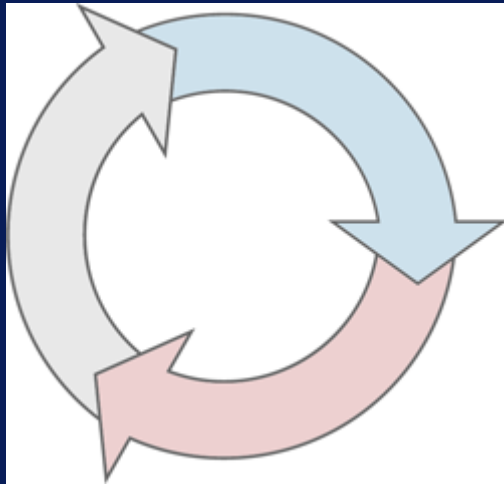
ACQUIRE

PREPARE

ANALYZE

REPORT

ACT



**Iterative process**