

## **Single Variable Linear Regression**

### **Case Study: Disney Box Office vs. DVD Sales (Dataset Attached)**

#### **Scenario:**

Walt Disney Studios wants to predict DVD sales based on box office performance.

#### **Tasks:**

1. Load historical data for 20 movies
2. Plot a scatter plot between box office and DVD sales
3. Perform linear regression in Excel
4. Interpret:
  - Regression coefficients
  - R-squared
  - Forecast DVD sales for a new movie with \$100M box office

#### **Learning Outcome:**

- Conduct and interpret simple linear regression
- Use Excel's regression tools for forecasting