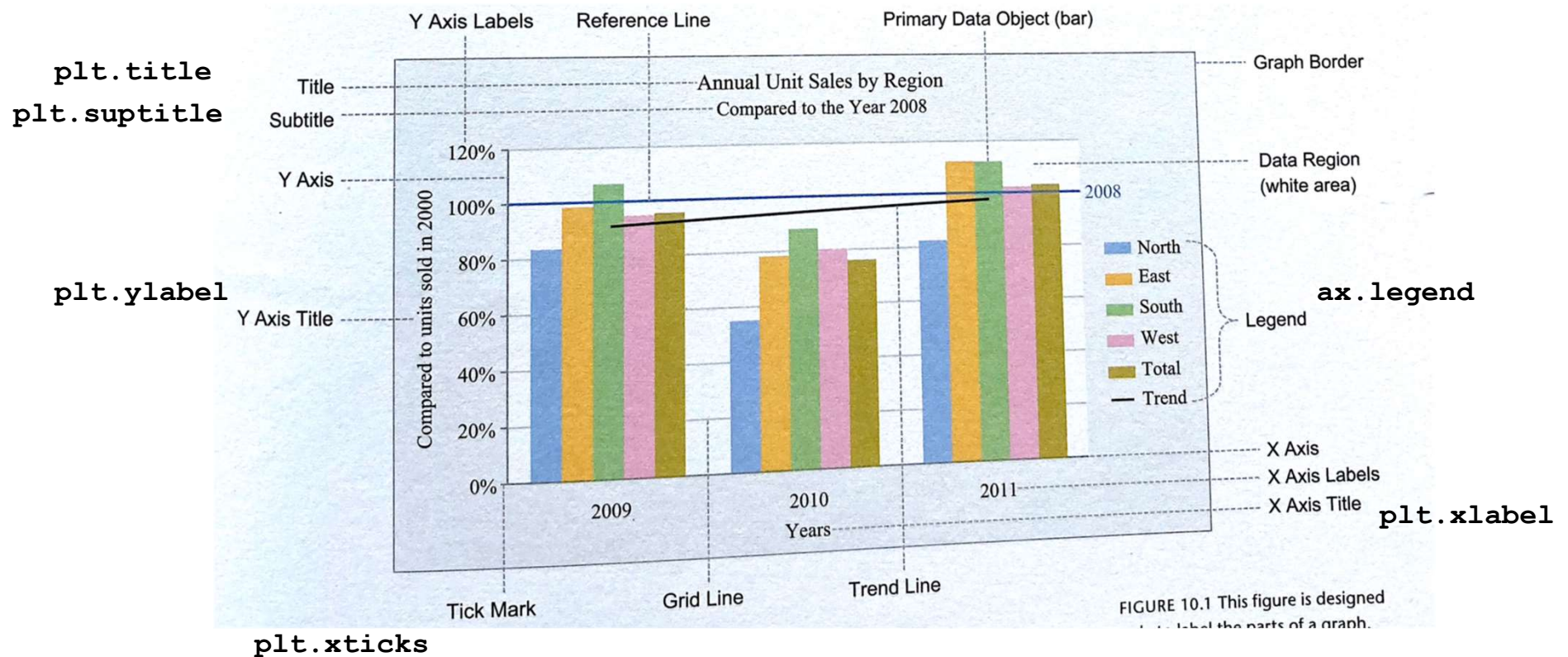


# Component Level Graph Design

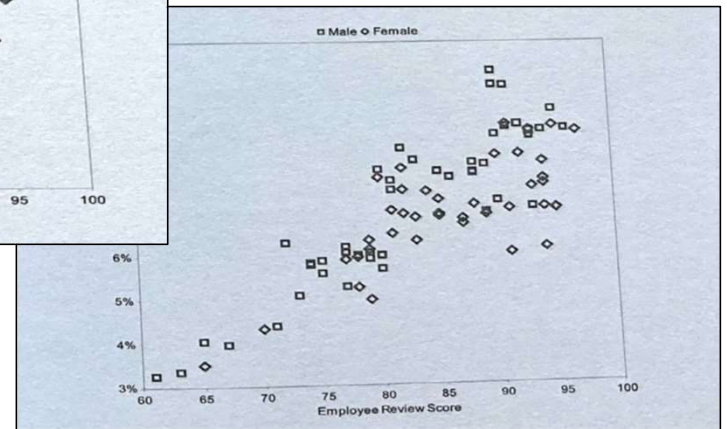
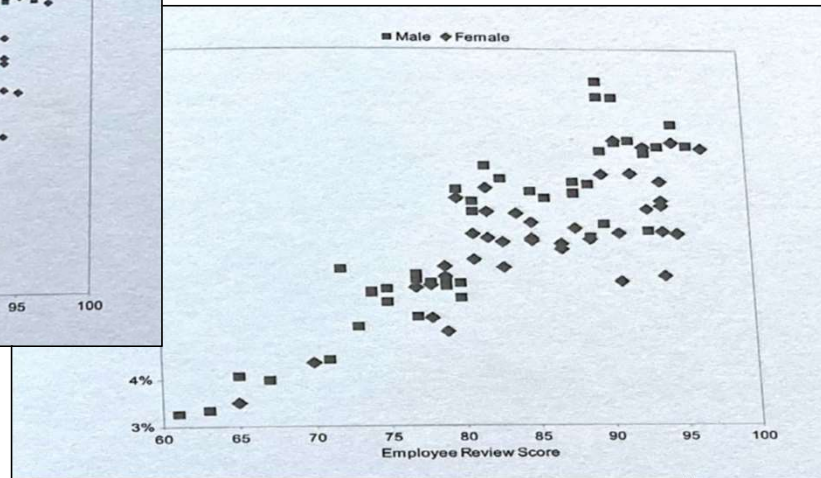
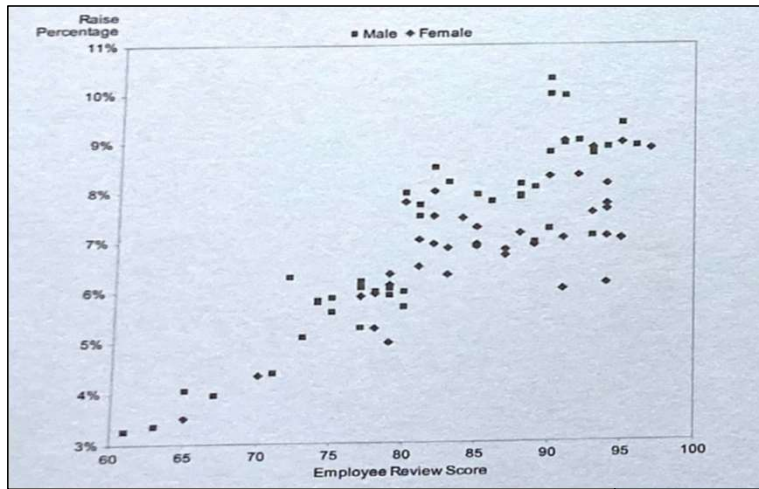
Darryl Ackley  
CYBS505 – Fall 2022

*From: Show Me the Numbers, Stephen Few*

# Terminology

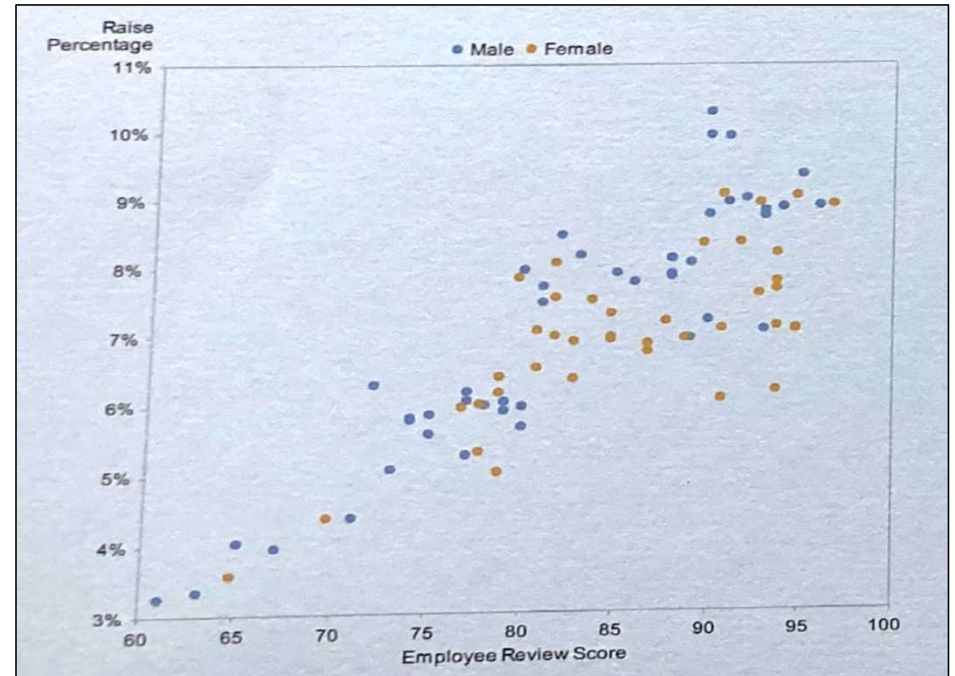
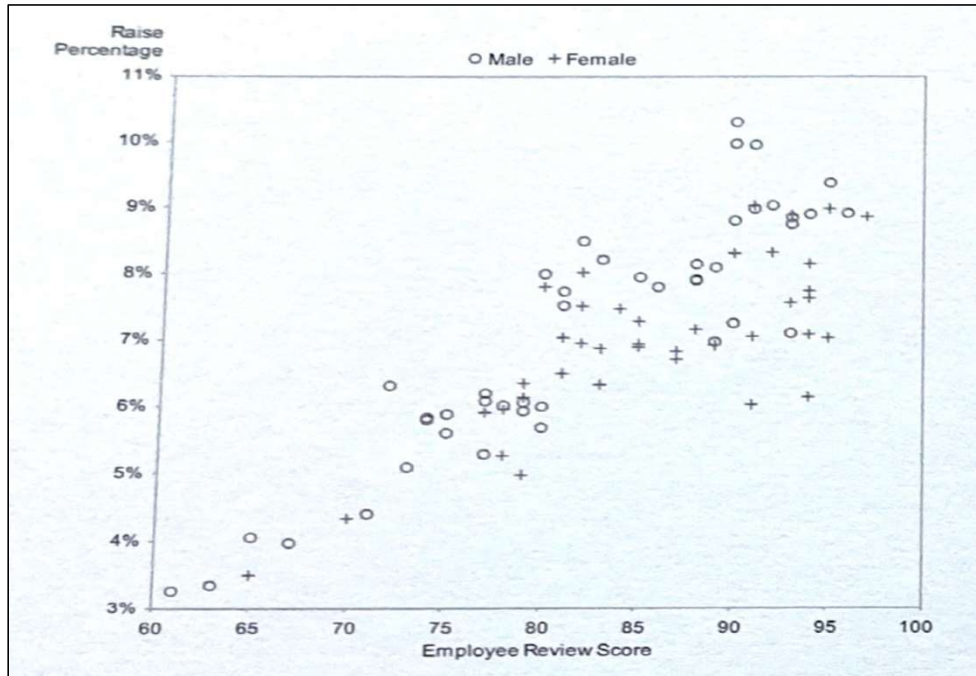


# Primary Component Design: Points



# Primary Component Design: Points

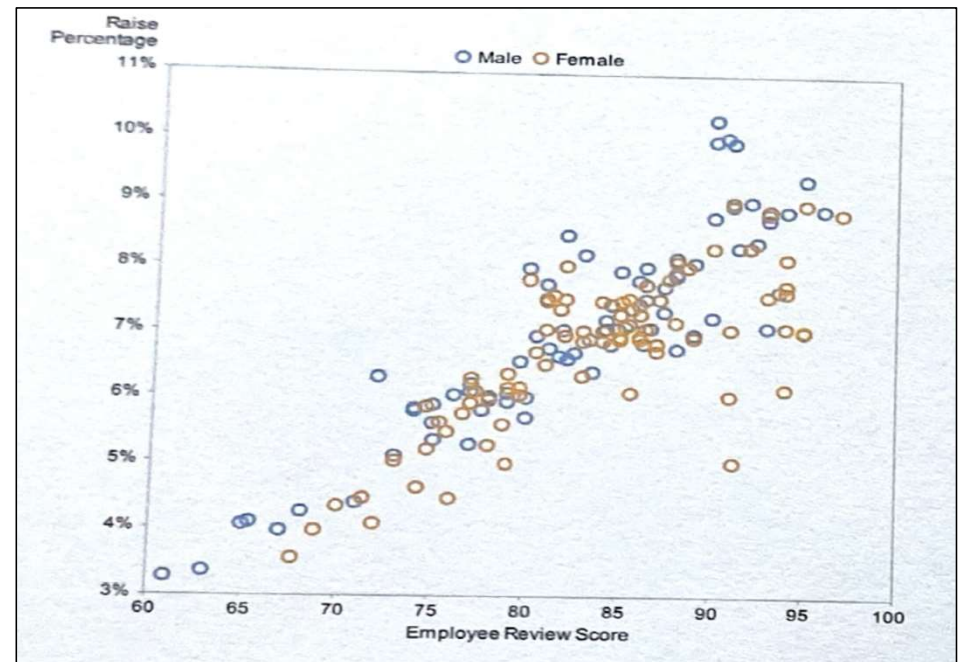
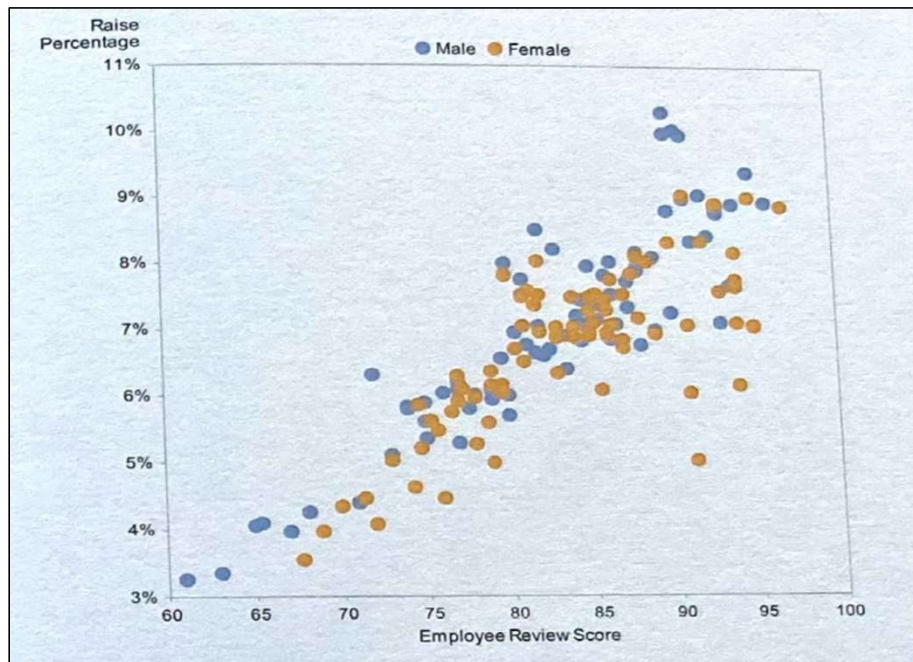
- Additional Strategies: Shapes, Colors, Combined





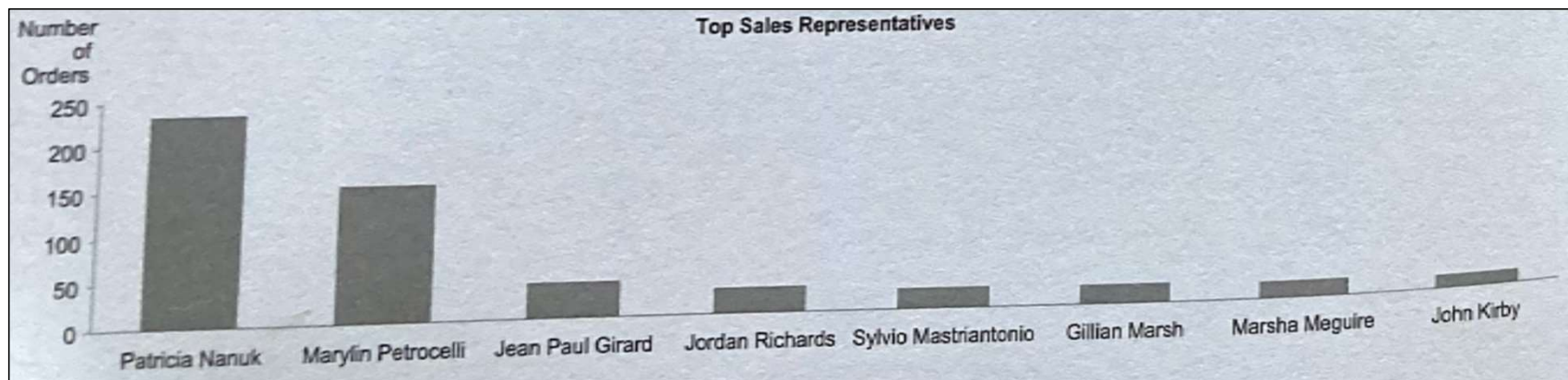
# Primary Design Components: Points

- Problems: *over-plotting*



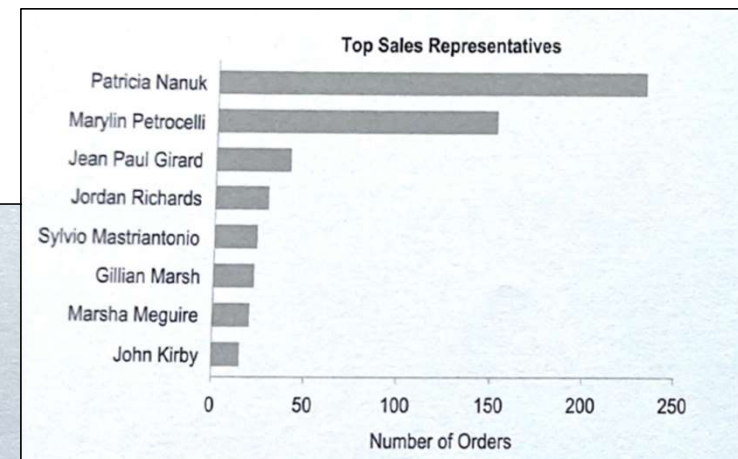
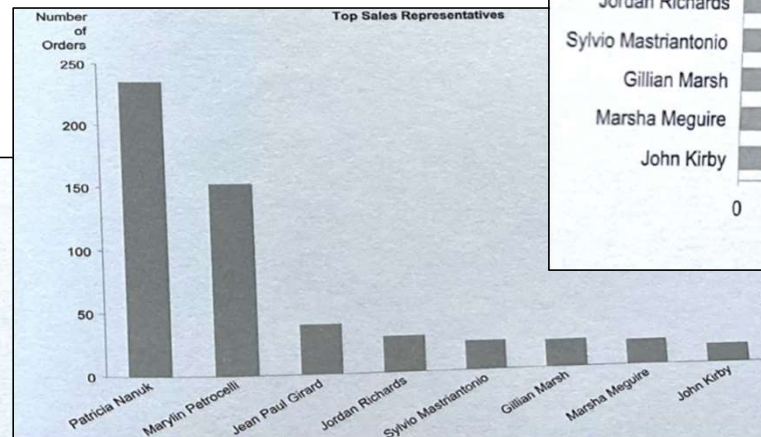
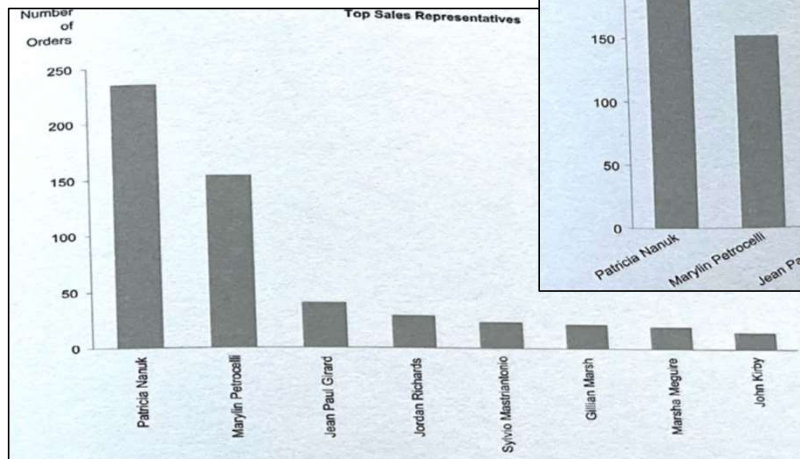
# Primary Design Components: Bars

- Important characteristics:
  - Orientation
  - Proximity
  - Fills
  - Borders
  - Base value



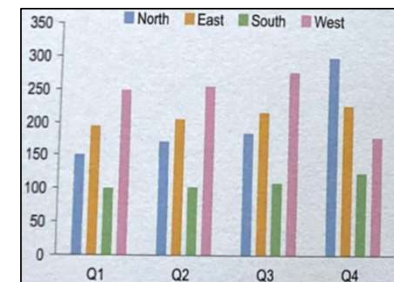
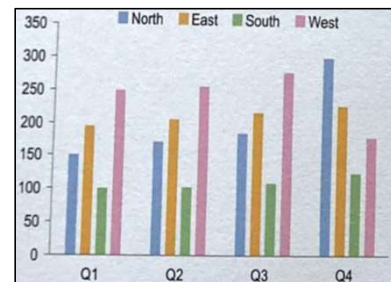
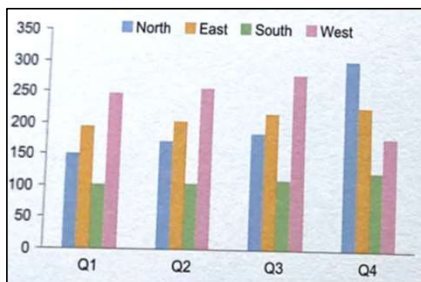
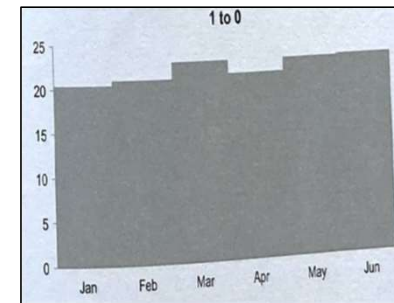
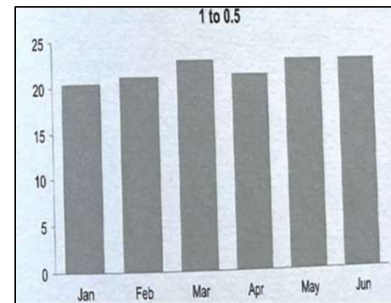
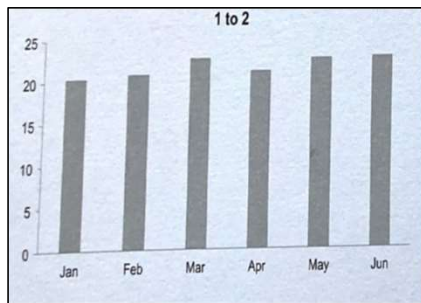
# Primary Design Components: Bars

- X-axis Label Orientation
- *Note: exception for time*



# Primary Design Components: Bars

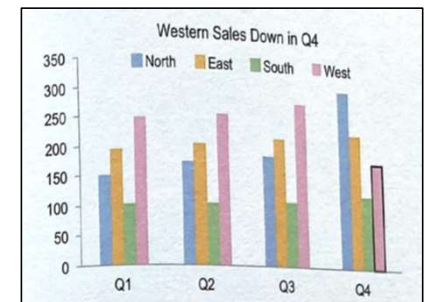
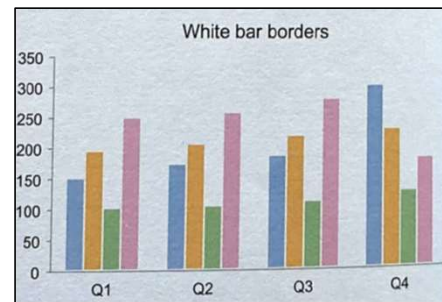
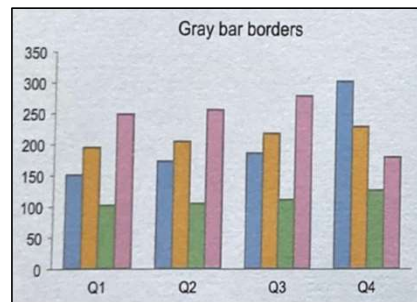
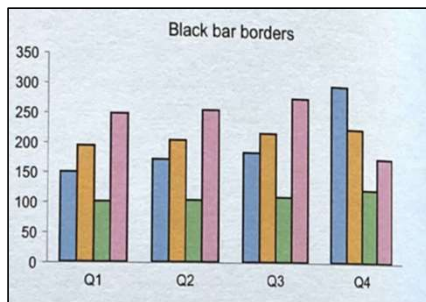
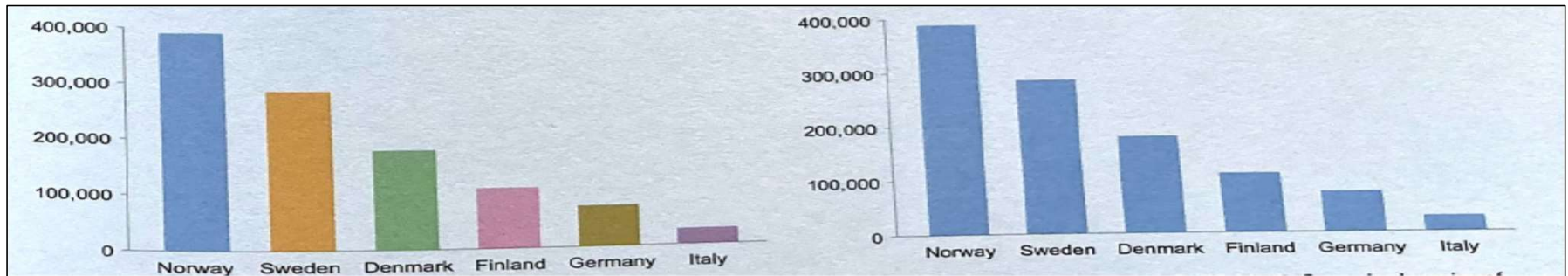
- Spacing (Single / Multiple Categories)





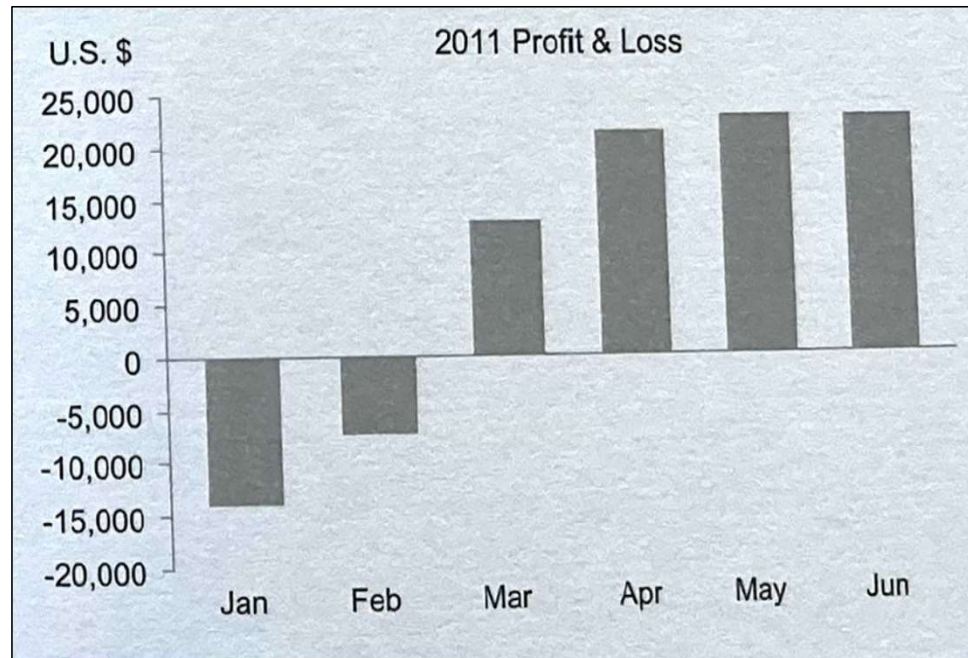
# Primary Design Components: Bars

- Fills and Borders



# Primary Design Components: Bars

- Base Value (*base* and *endpoint*)

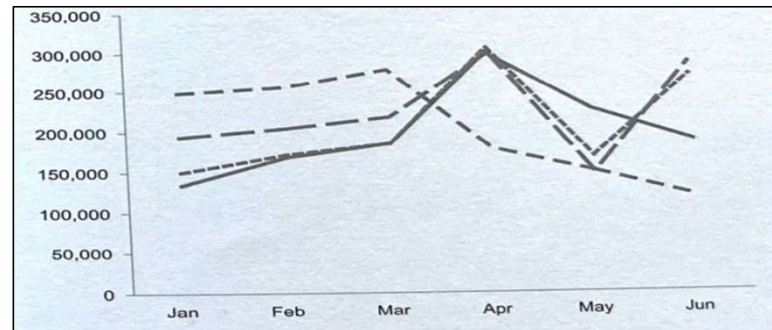
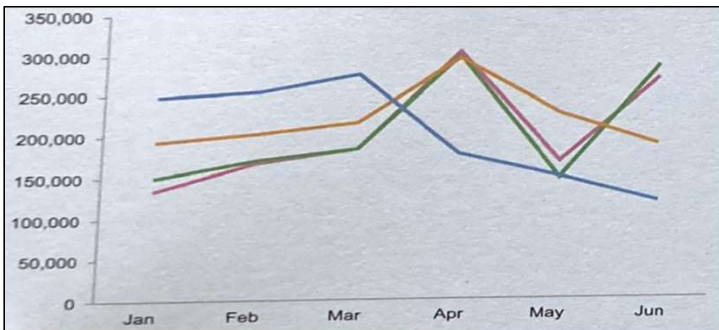
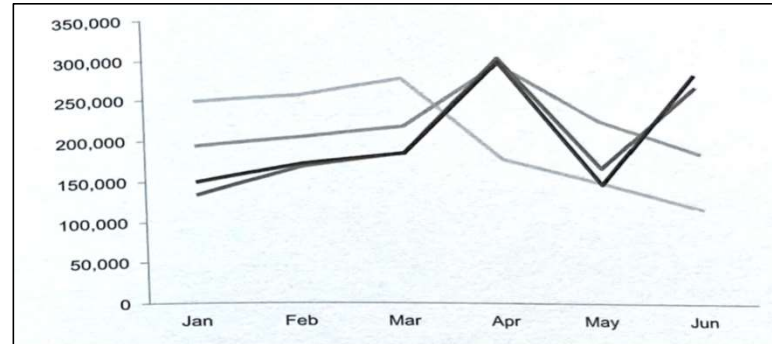
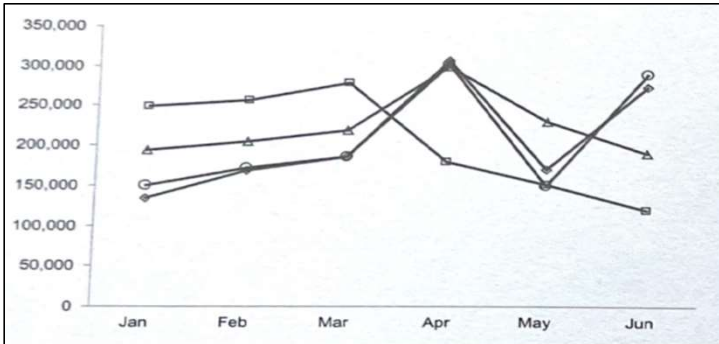


# Primary Design Components: Bars



# Primary Design Components: Lines

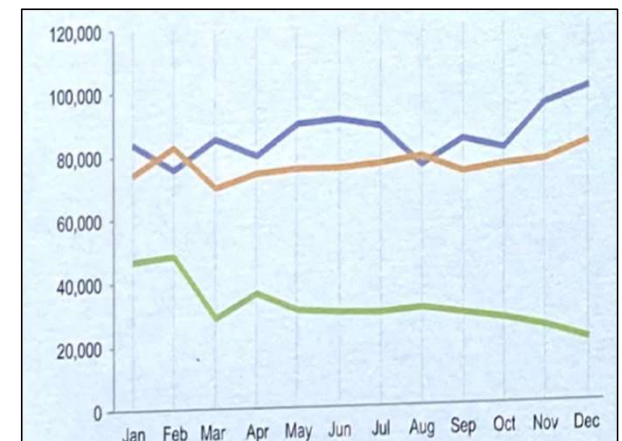
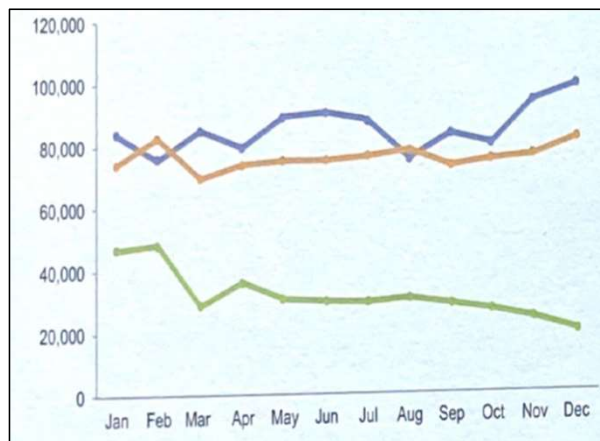
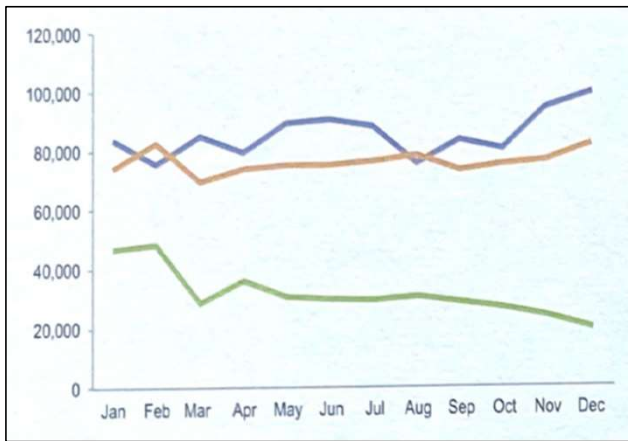
- Distinguishing Lines



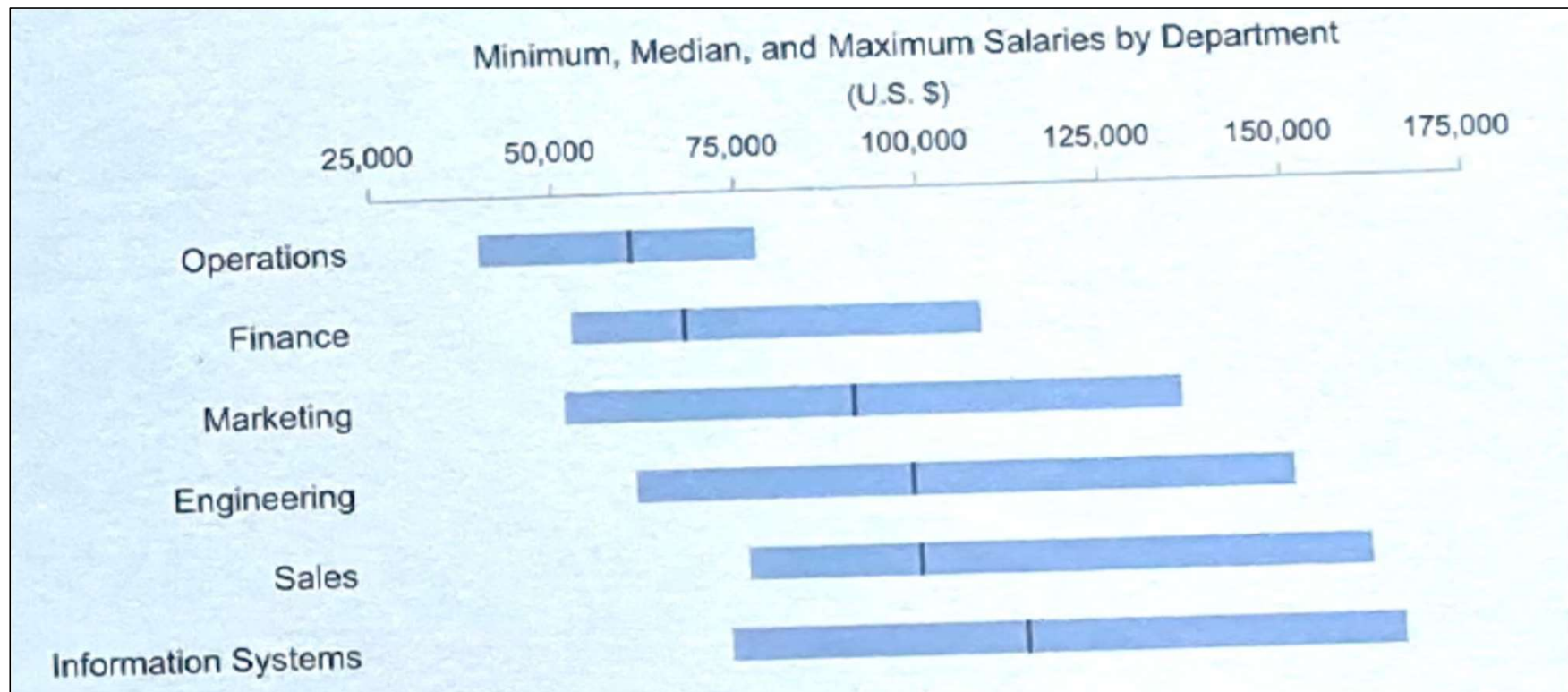


# Primary Design Components: Lines

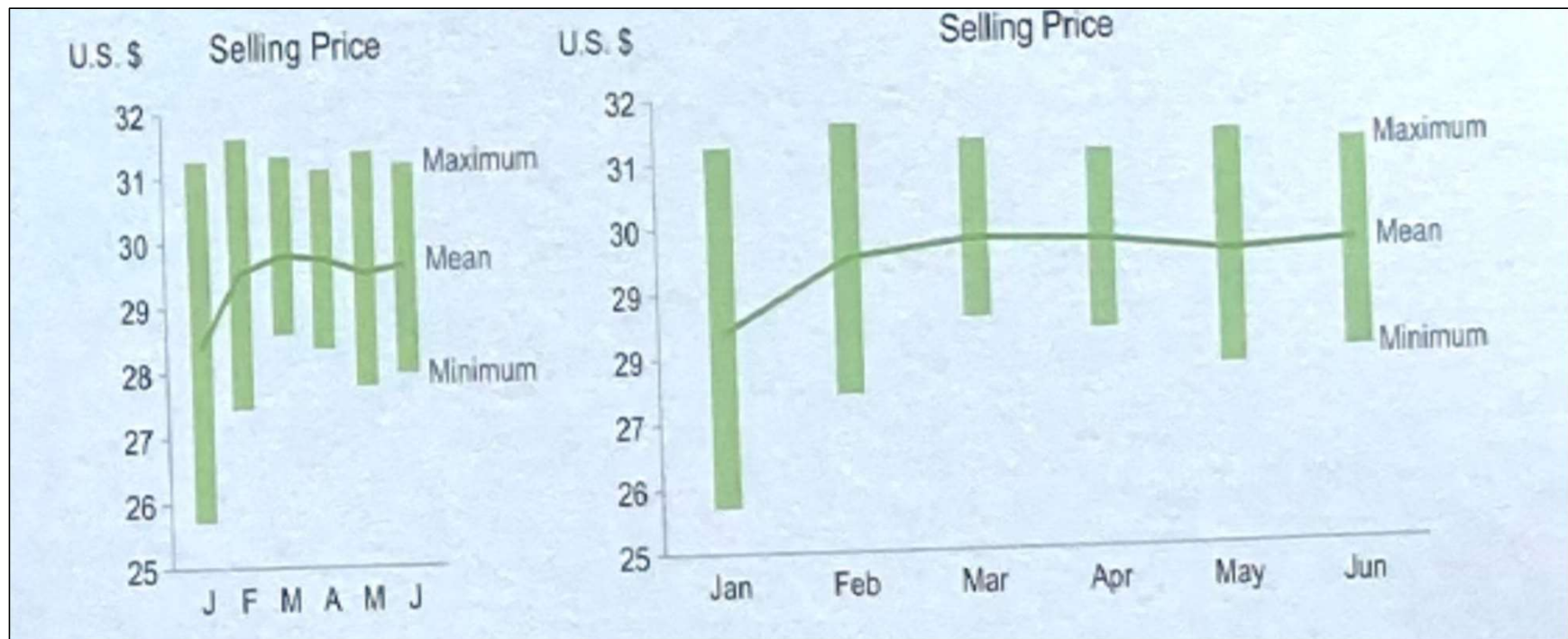
- Axis-oriented comparison strategies



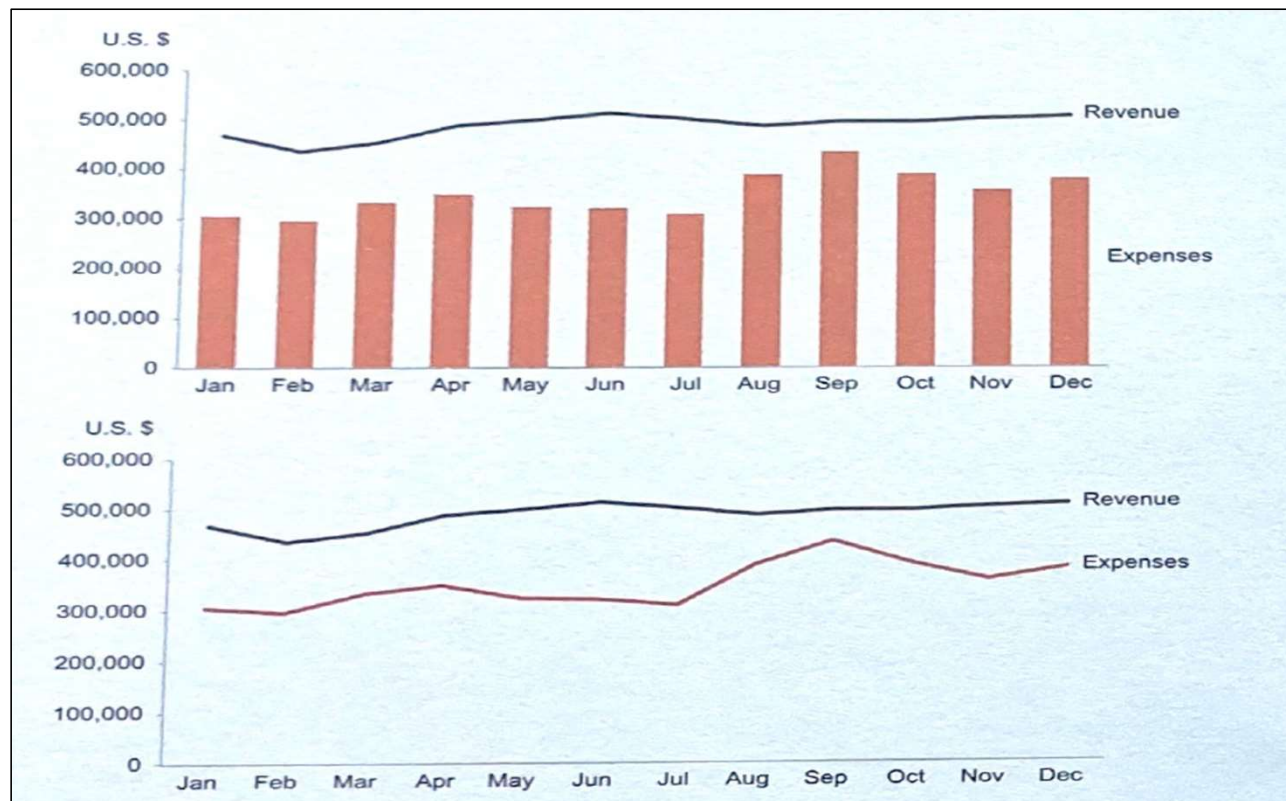
# Primary Design Components: Boxes



# Primary Design Components: Boxes



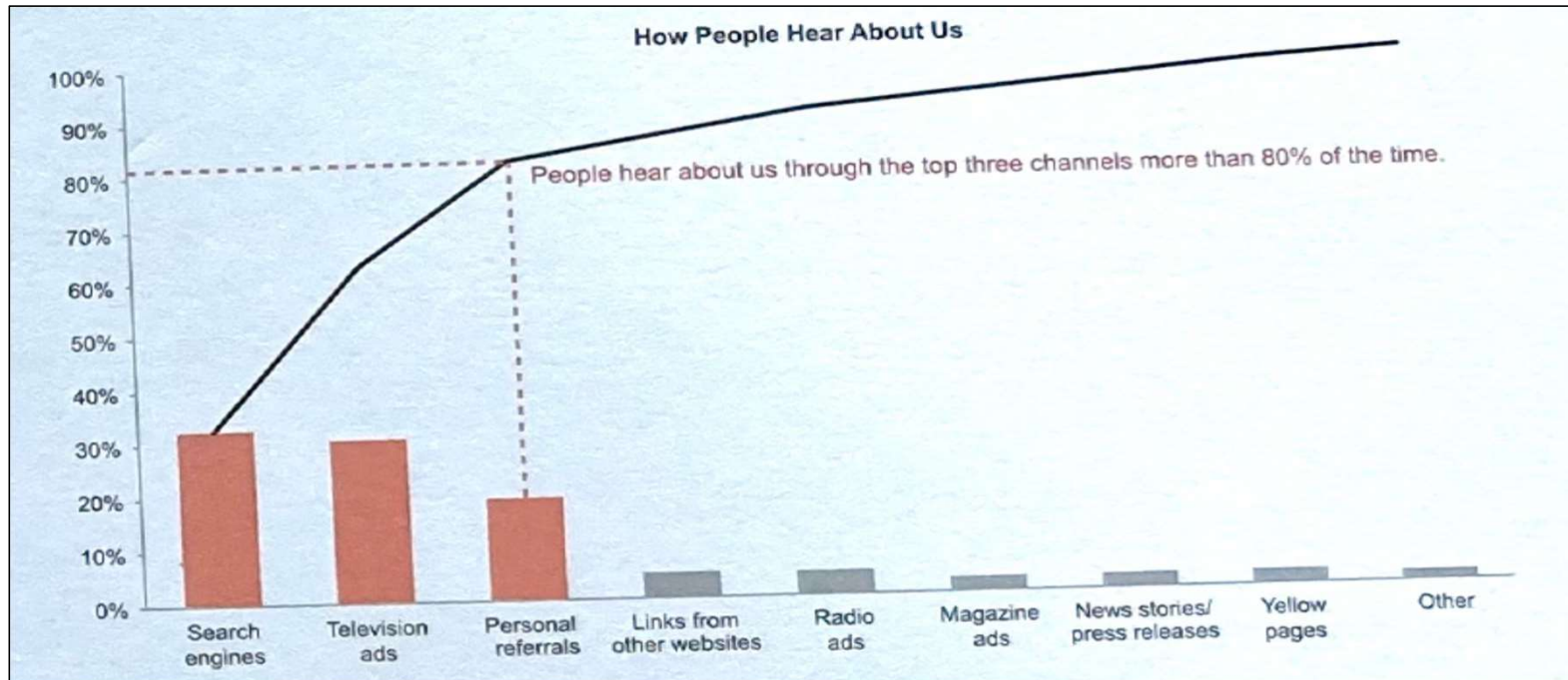
# Primary Design Components: Combinations





# Primary Design Components: Combinations

- Pareto Charts



# Primary Design Components: Combinations

- Bars and Points

