Visualizing Two Categorical and One Numeric Variables



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Overview



Visualizing Two Categorical and One Numeric Variables

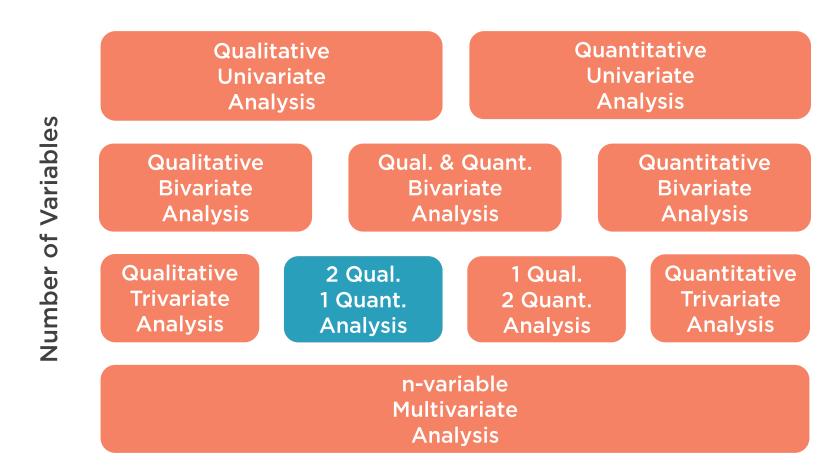
Demo (Base)

Demo (Lattice)

Demo (ggplot2)



Types of Data Analysis





Trivariate Analysis for Two Qualitative and One Quantitative Variables

Two categorical variables

One numeric variable

Aggregate measure

Average Box Office Revenue (\$M)			
Rating	No Awards	Won Awards	
G	19.2	76.4	
PG	22.4	76.9	
PG-13	24.4	75.5	
R	11.8	29.3	



Trivariate Analysis for Two Qualitative and One Quantitative Variables

Two categorical variables

One numeric variable

Aggregate measure

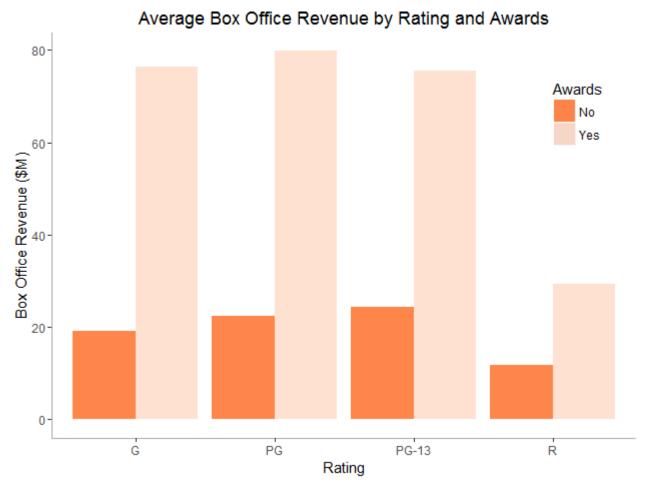
Multiple table formats

Average Box Office Revenue (\$M)		
Rating	Awards	Box Office
G	Won Awards	19.2
G	No Awards	76.4
PG	Won Awards	22.4
PG	No Awards	79.9
PG-13	Won Awards	24.4
PG-13	No Awards	75.5
R	Won Awards	11.8
R	No Awards	29.3



Grouped Bar Chart

Grouped bars
Aggregate measure



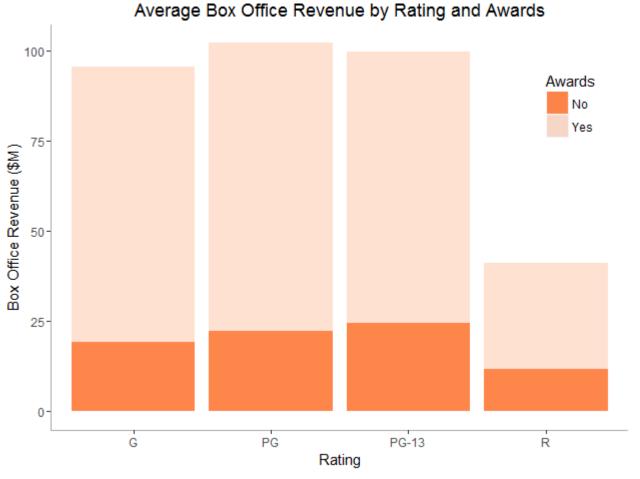


Stacked Bar Chart

Stacked bars

Aggregate measure

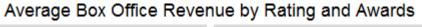
Marginal value

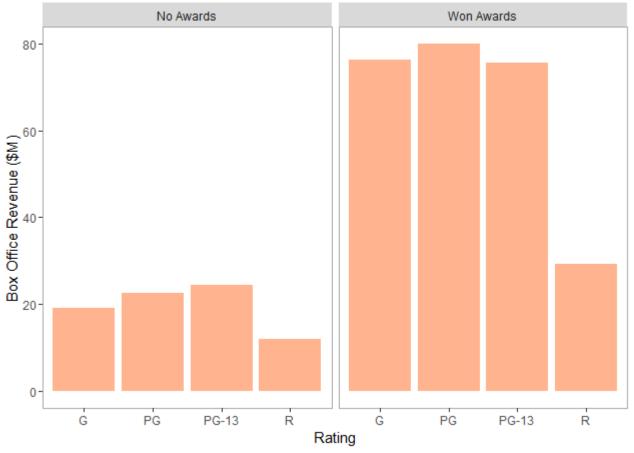




Faceted Bar Chart

Faceted bar plots
Aggregate measure



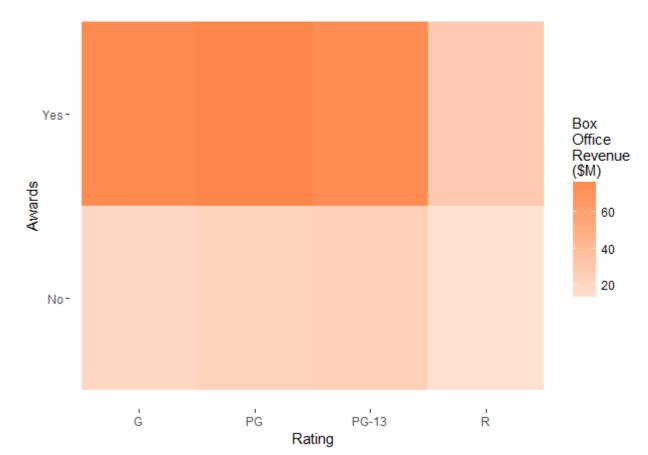




Heat Map

Visual matrix
Color-coded cells
Visual patterns

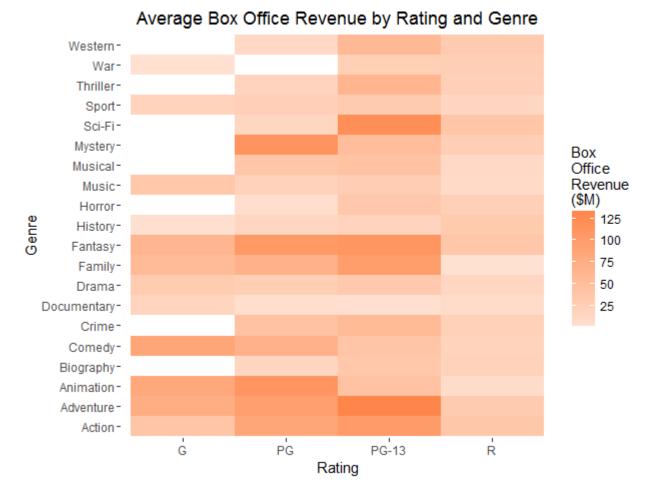
Average Box Office Revenue by Rating and Awards





Heat Map

Visual matrix
Color-coded cells
Visual patterns







- 1. How does box office revenue compare across award status and rating?
- 2. Are there any patterns?



Create Row Function



Create Tabular Matrix



Create Grouped Bar Chart



Create a Stacked Bar Chart



Create Faceted Bar Chart



Create Heat Map



Create Row-wise Table



Create Grouped Bar Chart



Create Stacked Bar Chart



Create Faceted Bar Chart



Create Heat Map



Create Grouped Bar Chart



Create Stacked Bar Chart



Create Faceted Bar Chart



Create Heat Map





Summary



Visualizing Two Categorical and One Numeric Variables

Demo (Base)

Demo (Lattice)

Demo (ggplot2)

