

# Exploring more complex charts

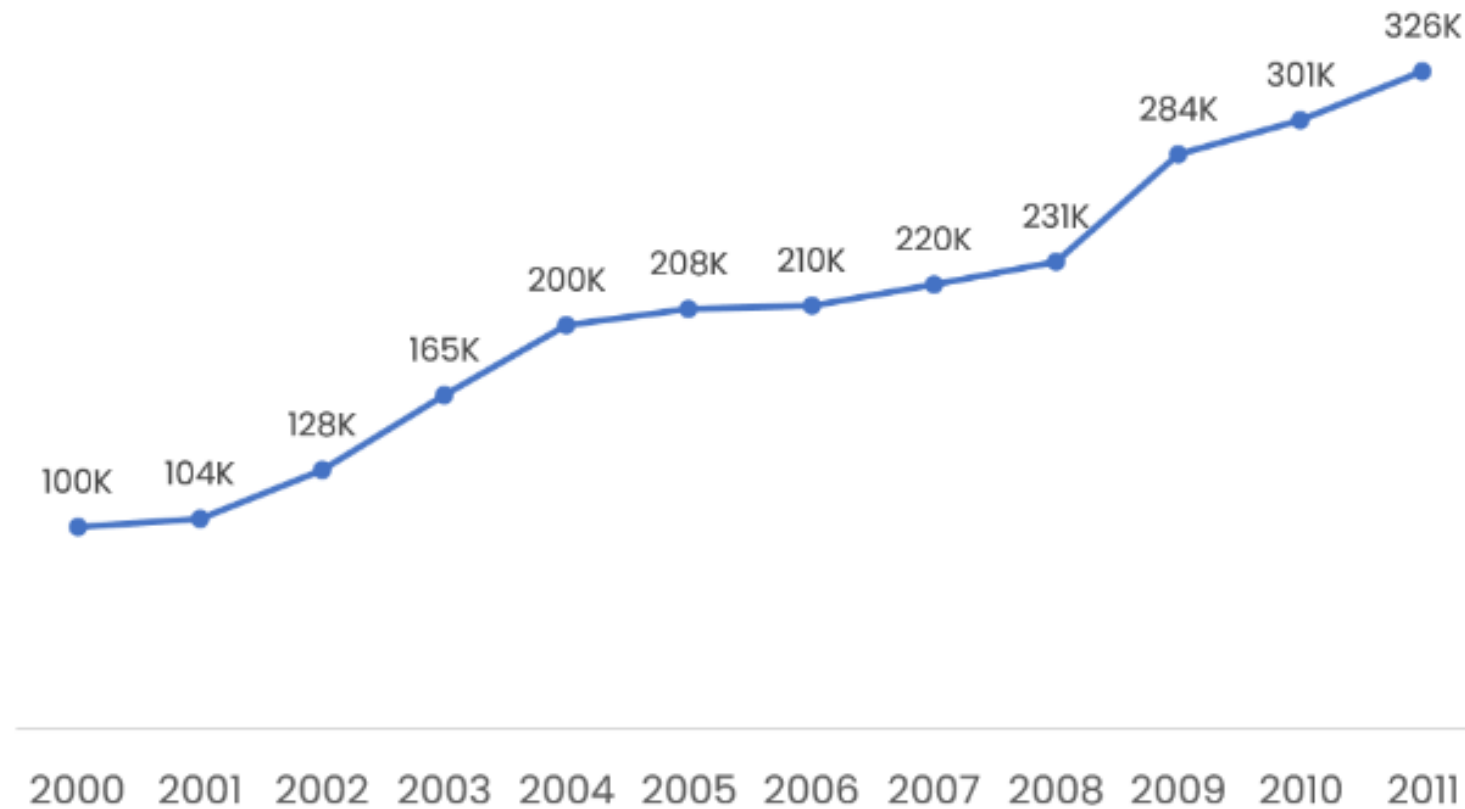
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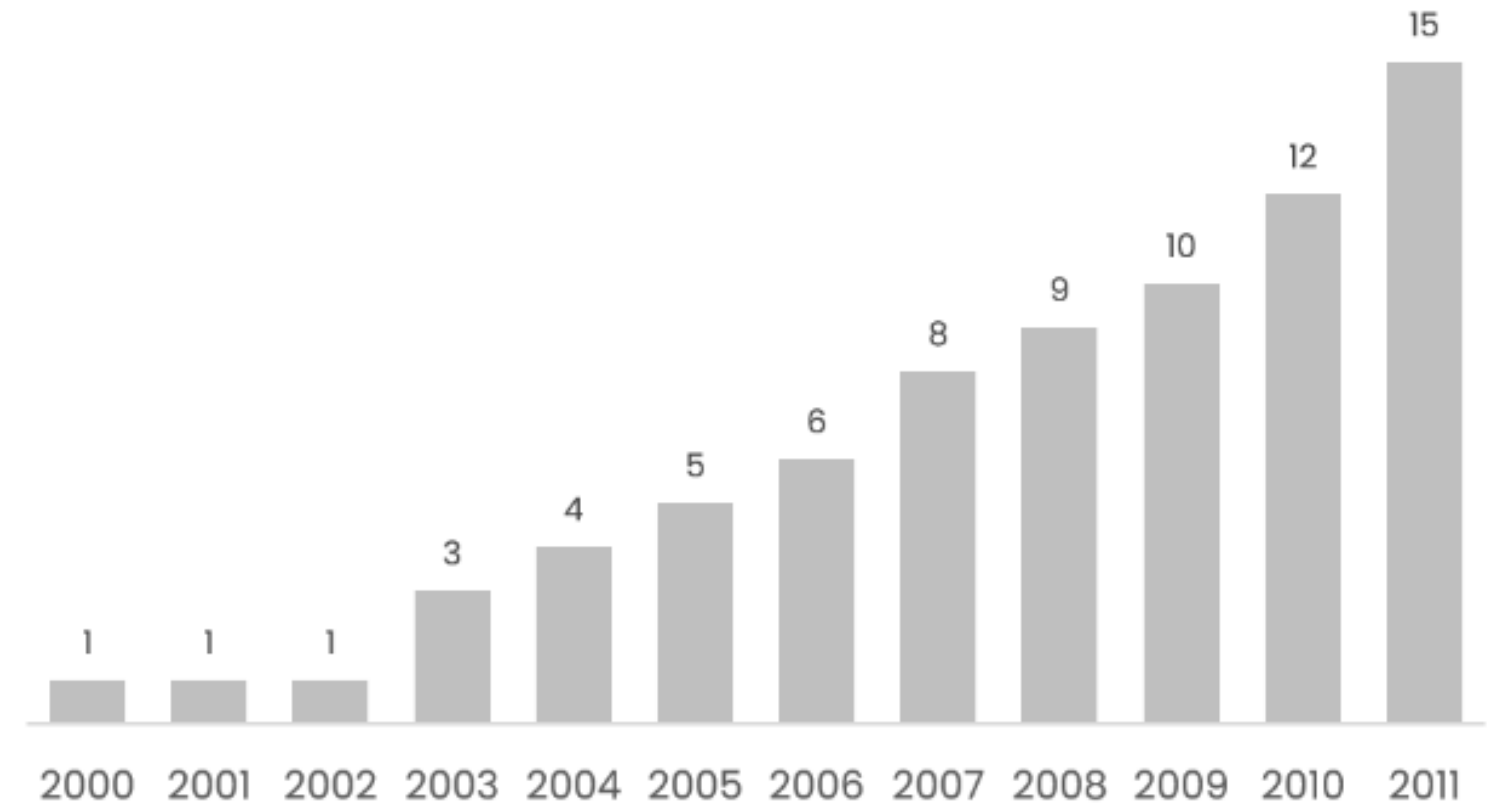
**Agata Bak-Geerinck**  
Senior Data Analyst, Telenet

# Single vs multi-series charts

Sales

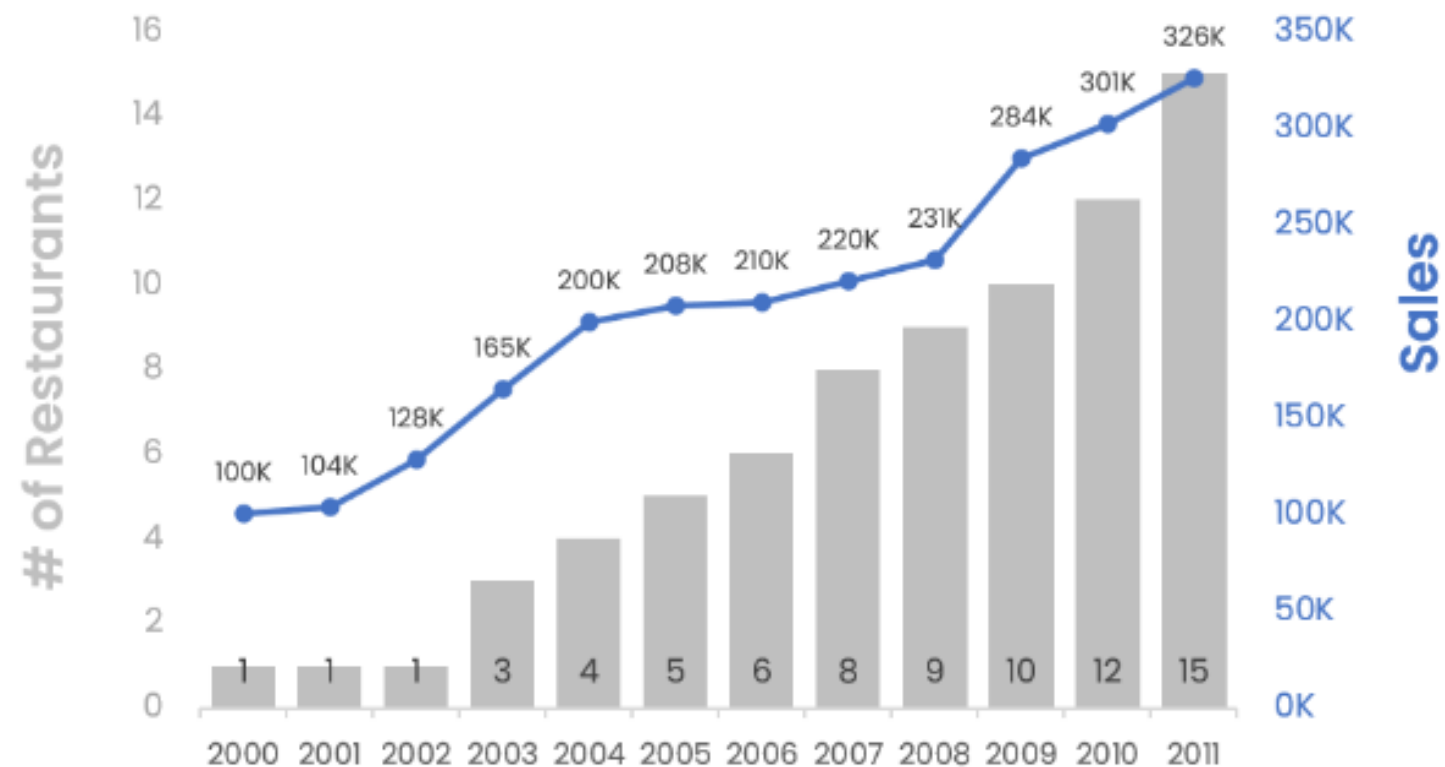


# of Restaurants

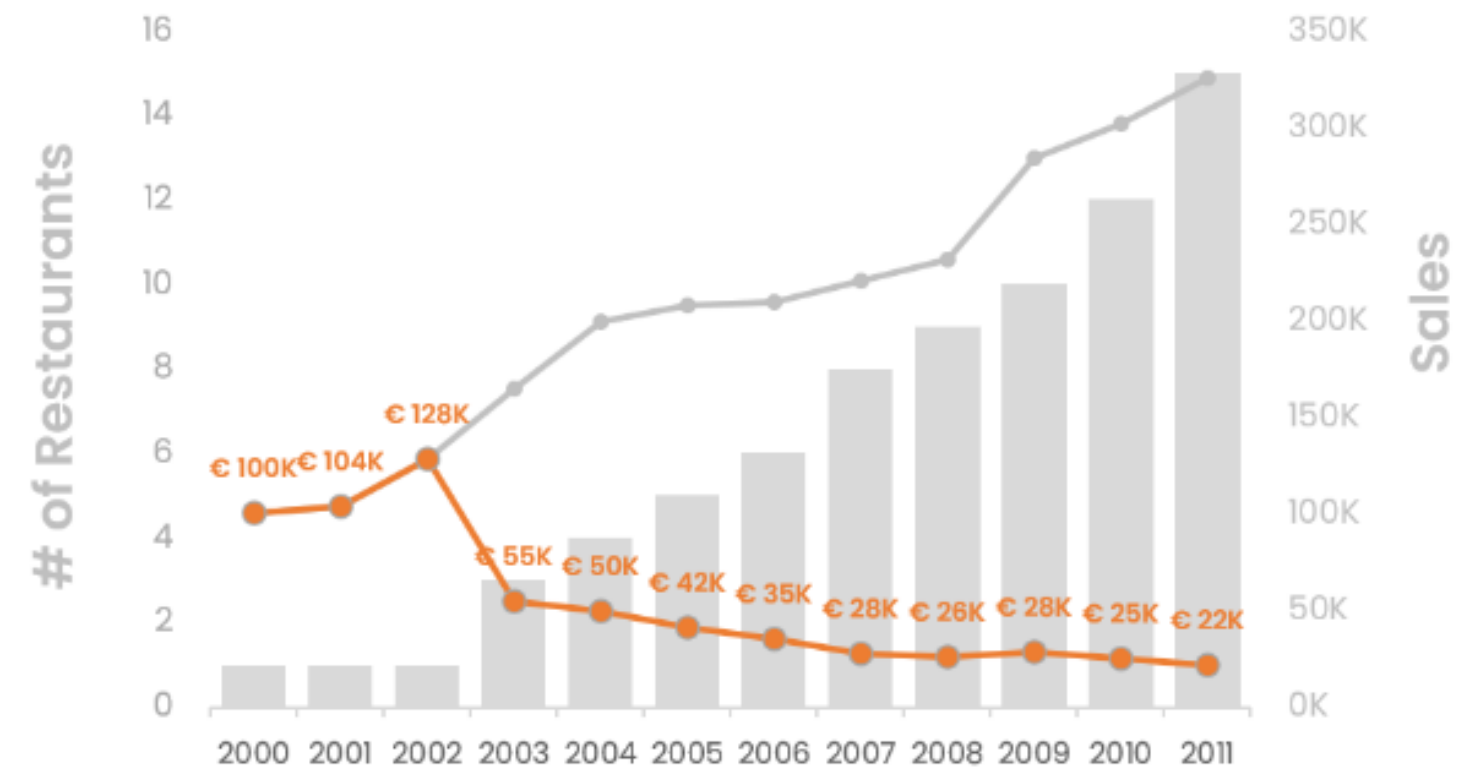


# Single vs multi-series charts

## Sales and # of Restaurants



## Average Sales per Restaurant

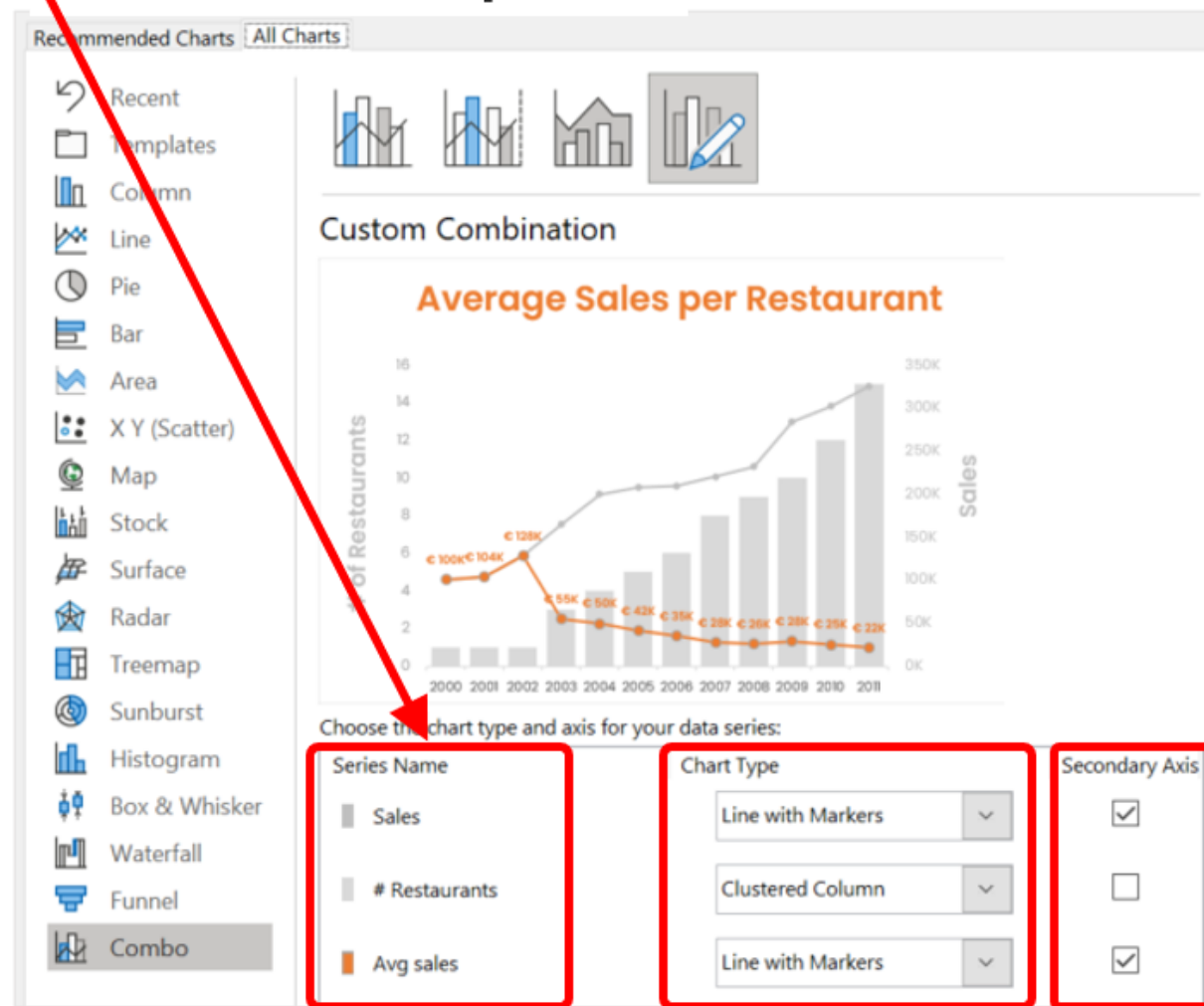


# Combo charts

## Multi-series data

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Sales	100K	104K	128K	165K	200K	208K	210K	220K	231K	284K	301K	326K
# Restaurants	1	1	1	3	4	5	6	8	9	10	12	15
Avg sales	€ 100K	€ 104K	€ 128K	€ 55K	€ 50K	€ 42K	€ 35K	€ 28K	€ 26K	€ 28K	€ 25K	€ 22K

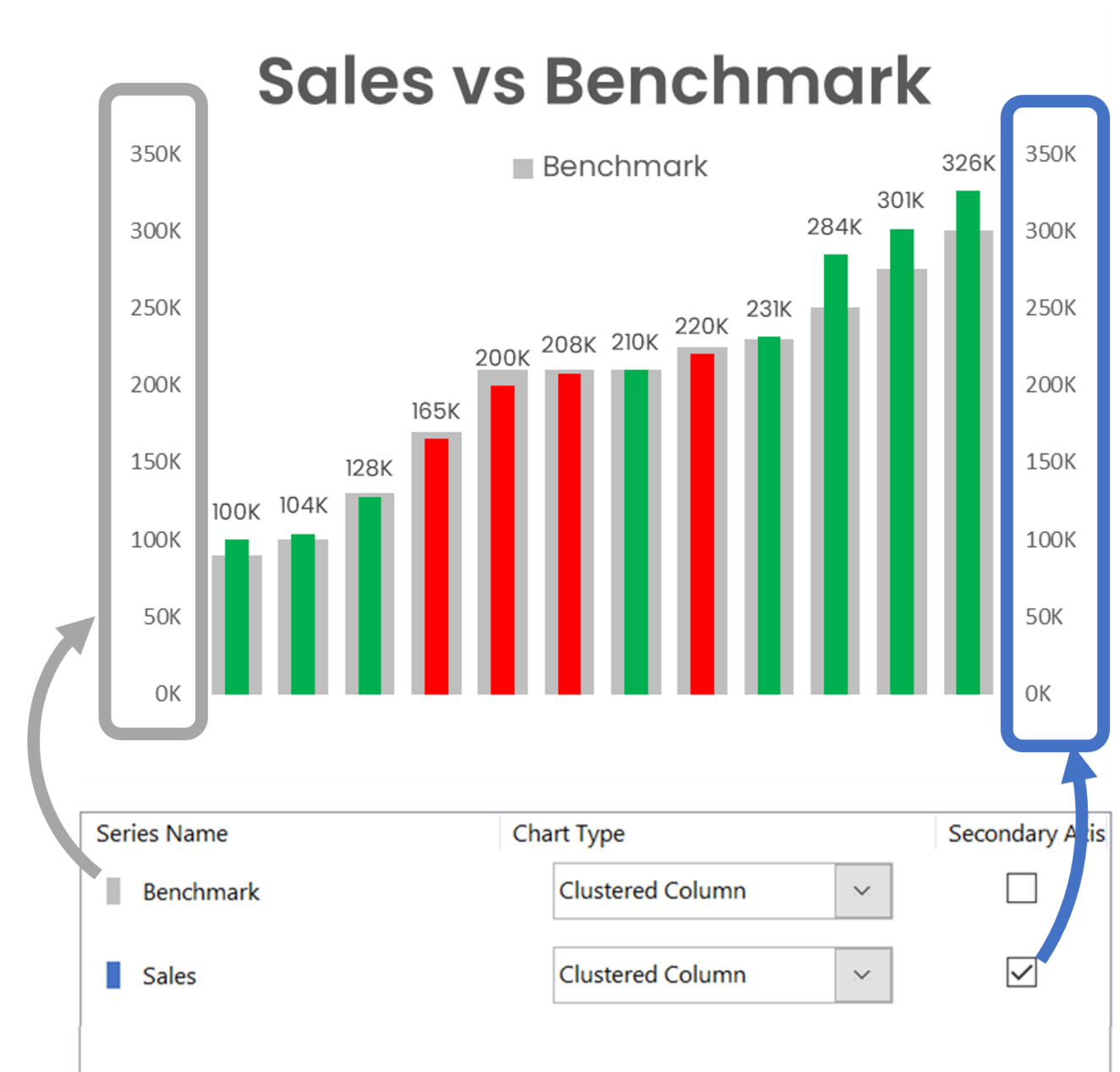
## Combo chart options



- Excel offers multi-series charts
- Each series can be visualized differently:
  - e.g., Line charts vs. column charts
- Series can be plotted on primary or secondary axis
  - e.g., useful when the level of data magnitude largely varies

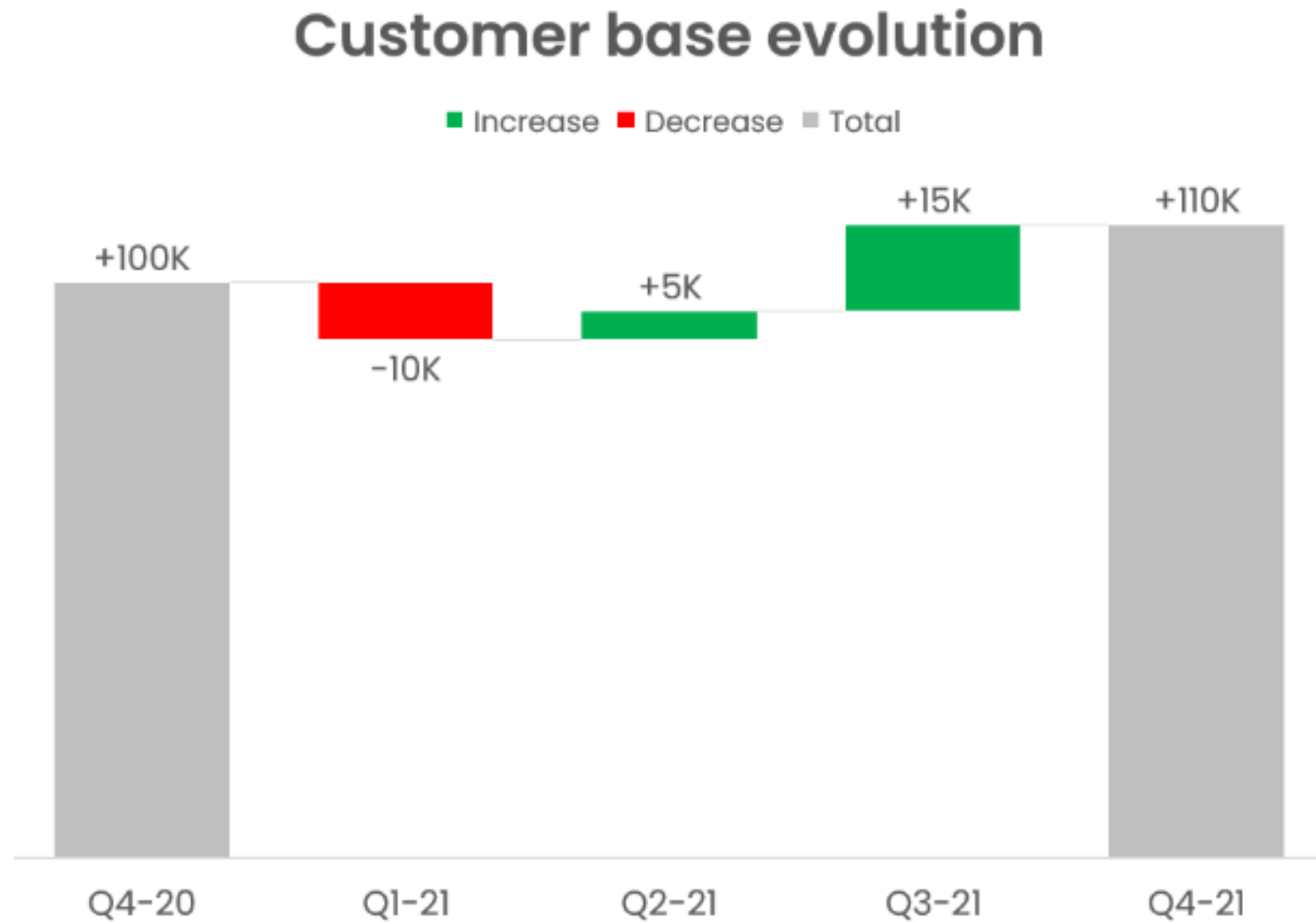
# Bullet chart

- Bullet chart, by Stephen Few<sup>1</sup>
- Useful for comparing results versus benchmark
- Require working with dual axes
- Consist of clustered columns on primary and secondary axes



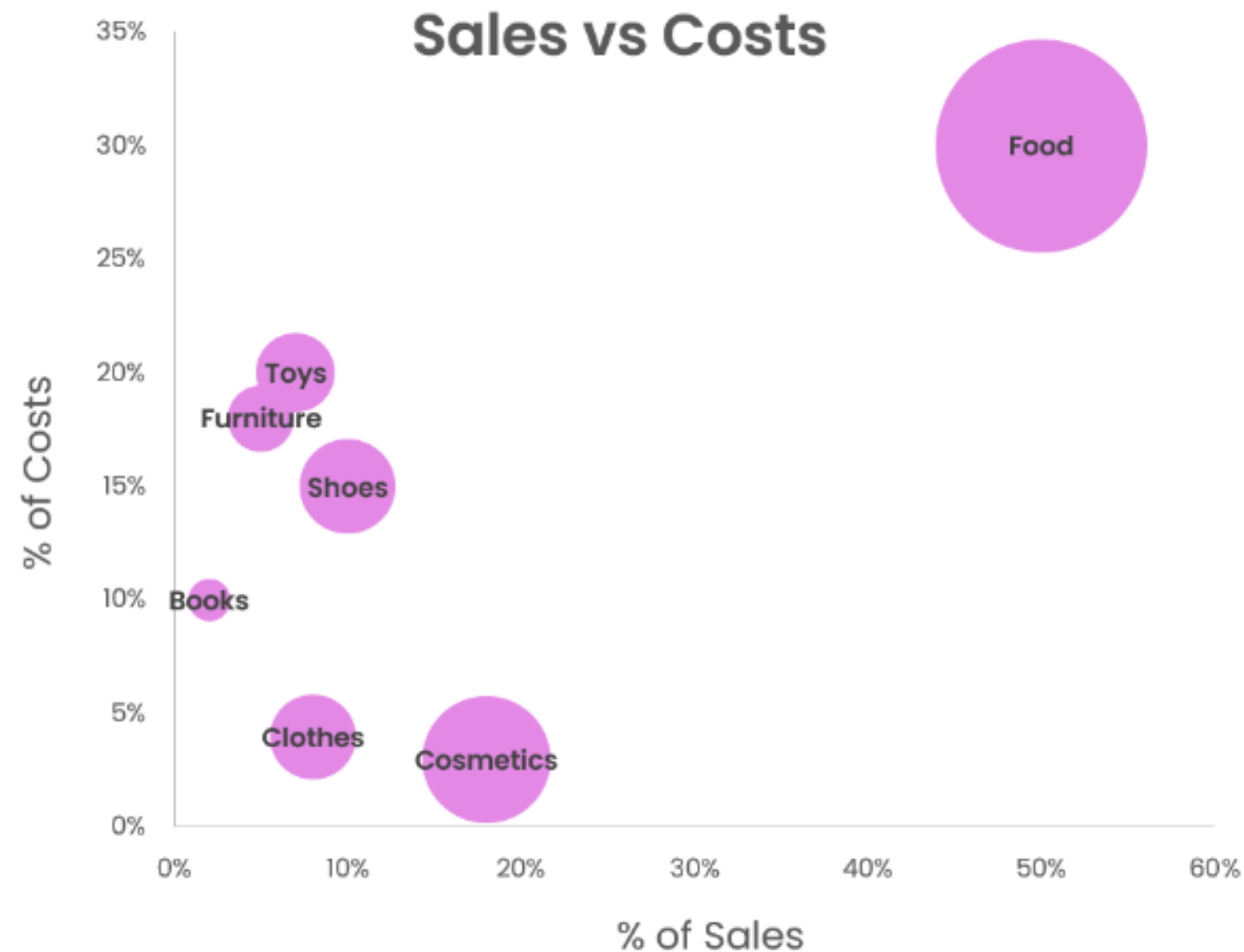
<sup>1</sup> Stephen Few is a data visualization expert, lecturer, and author of "Show Me the Numbers".

# Waterfall chart



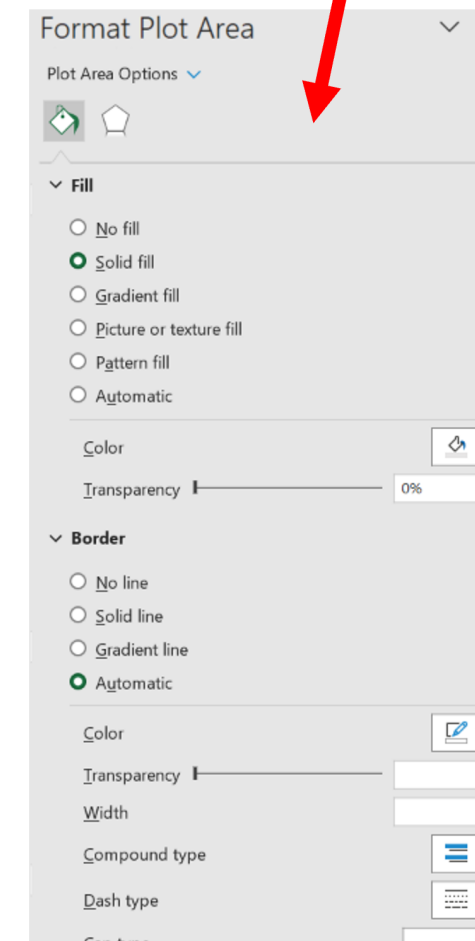
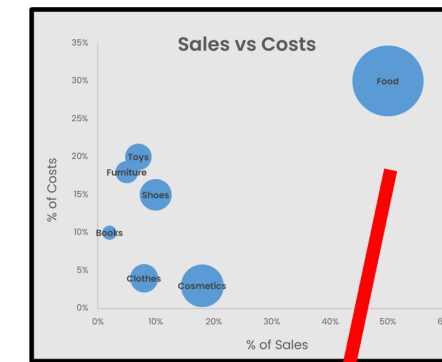
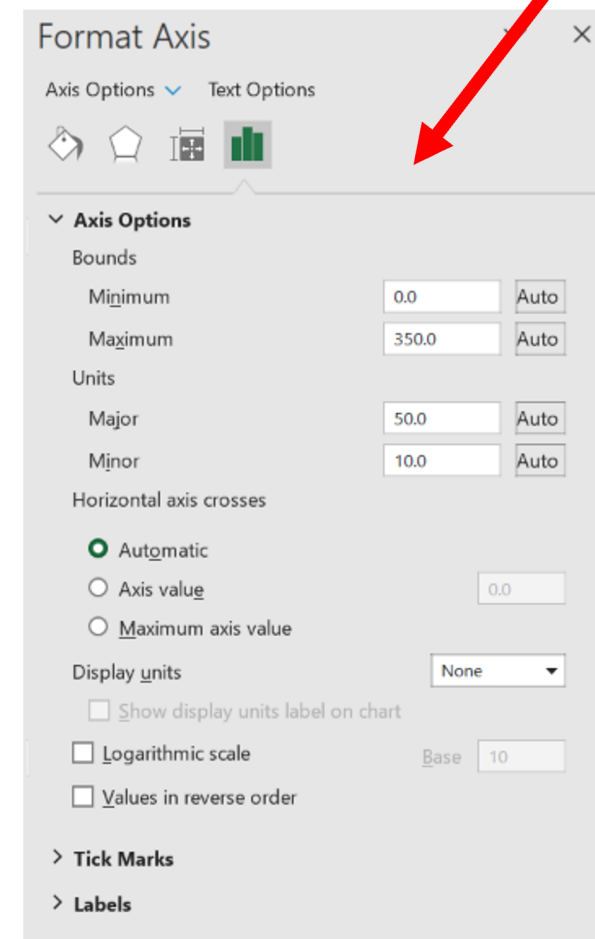
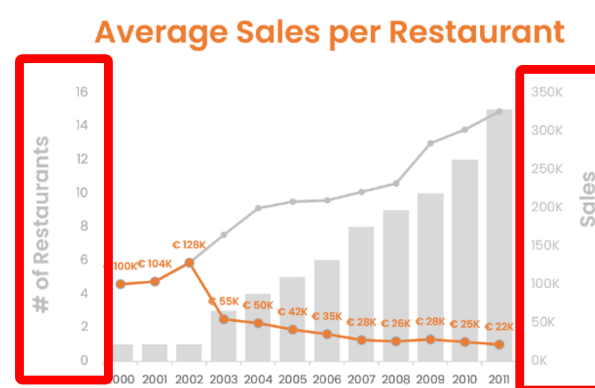
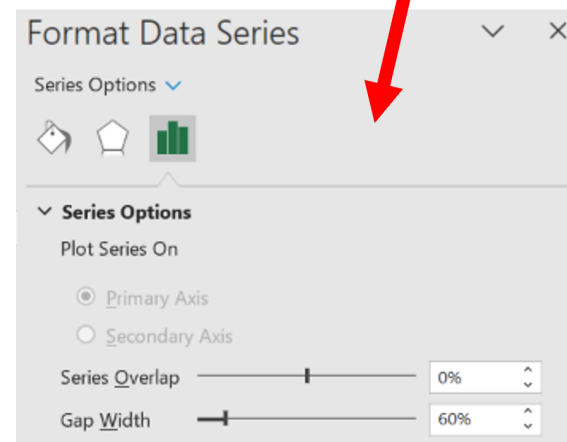
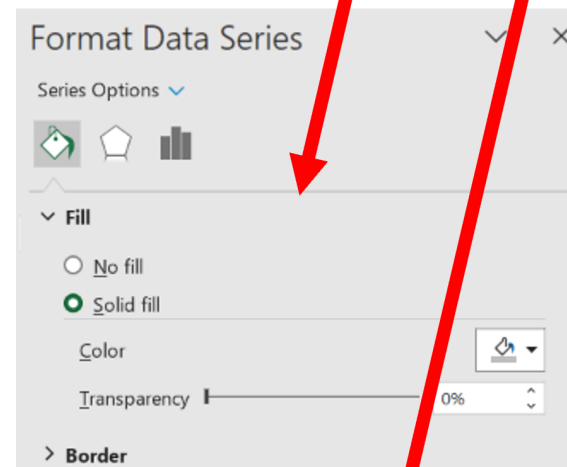
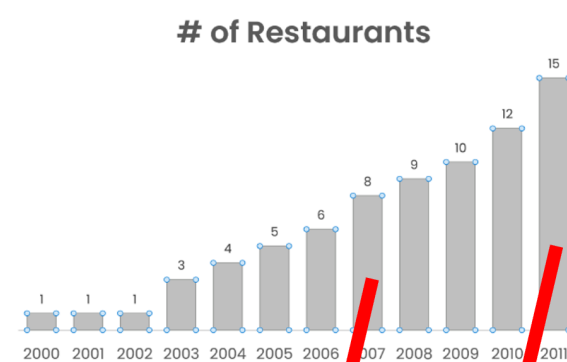
- Explains the net change in value between two points
- Starts at a baseline, followed by a series of columns, and ends in total
- Works great with colors
- Exposes the complexity hidden behind an aggregated number

# Scatter plot (bubble plot)



- Presenting the relationship between two numerical variables
- Disclose a correlation between two measures
- Size of the bubble = third measure
- May uncover unexpected insights

# Chart formatting options





**Let's practice!**  
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# Bullet, waterfall charts, and scatter plots

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**Let's practice!**  
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