Getting started with data visualization in Excel
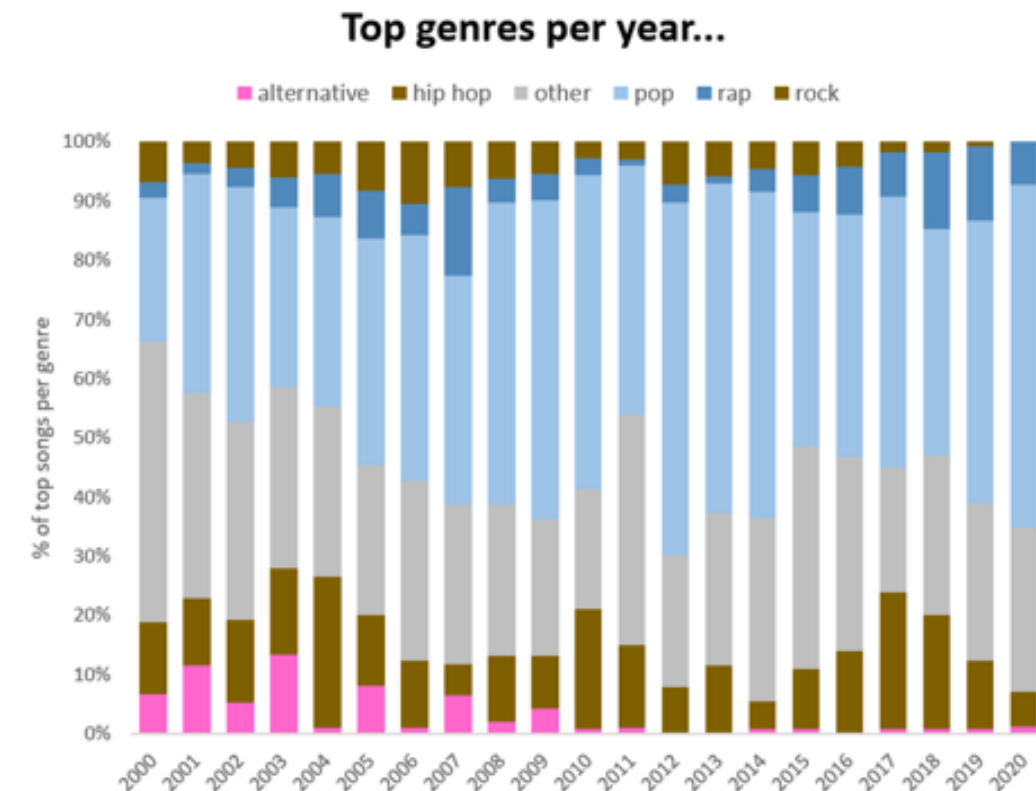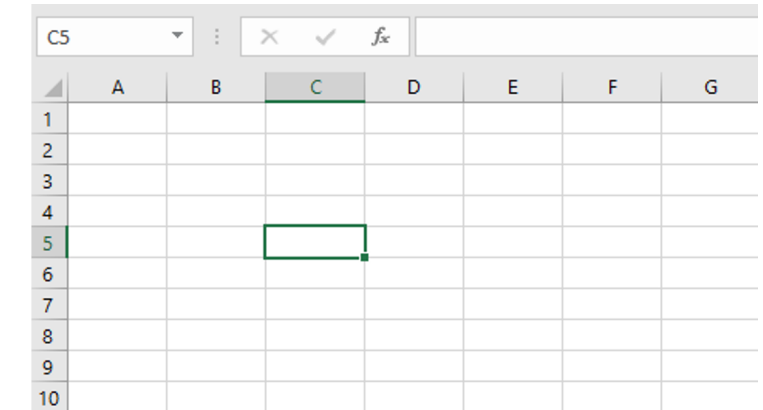
DATA VISUALIZATION IN EXCEL

Agata Bak-Geerinck
Senior Data Analyst, Telenet

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Excel - the world's most versatile data analysis tool

- World's favorite data analysis tool[1].

- Flexible and versatile thanks to cells.

- Can **also** visualize data.

- First step towards other data visualization tools (Tableau / Power BI)

[1] https://www.computerworld.com/article/3315737/use-microsoft-excel-to-learn-about-data-analytics.html

What is Data Visualization?

- A graphical representation of information

- Communication of (complex) data to wide audiences

- Selection of most suited charts and elements of visual design

Room for growth

Internet use, % of population, 2016
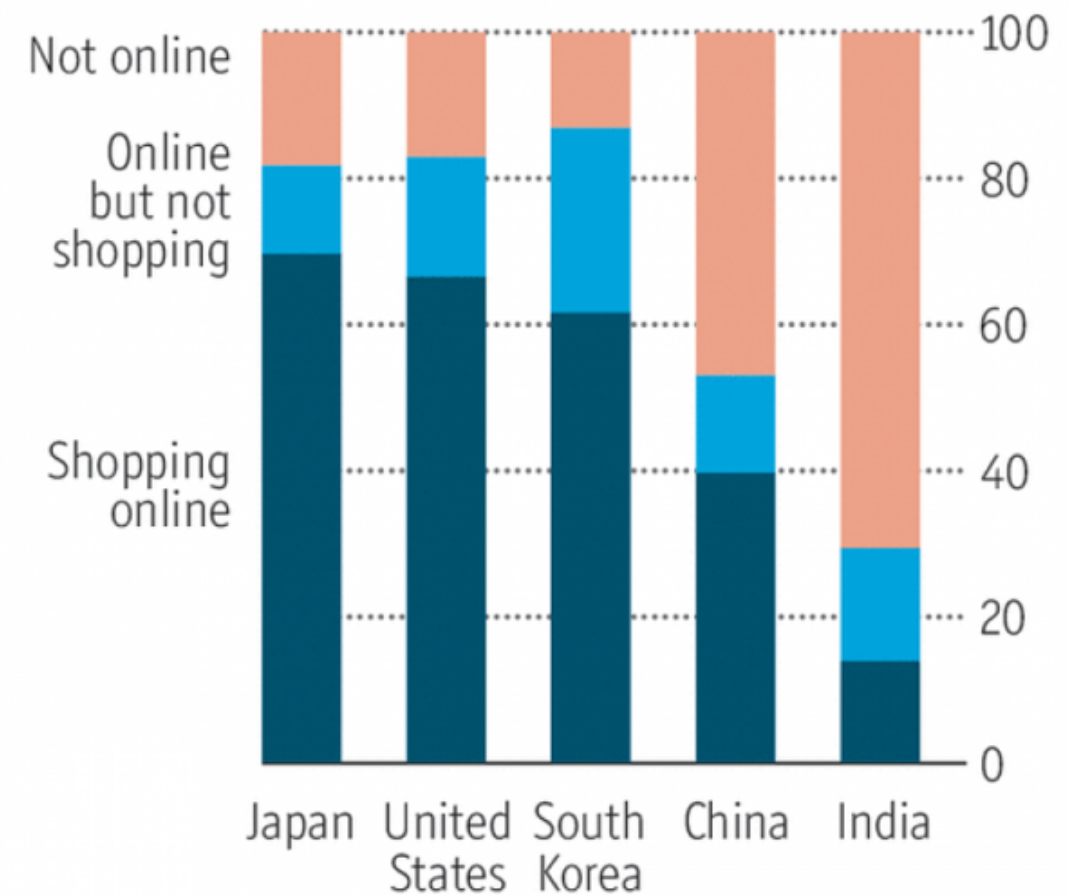
Source: eMarketer

Economist.com

The power of visualizing your data

90 %[1] of the
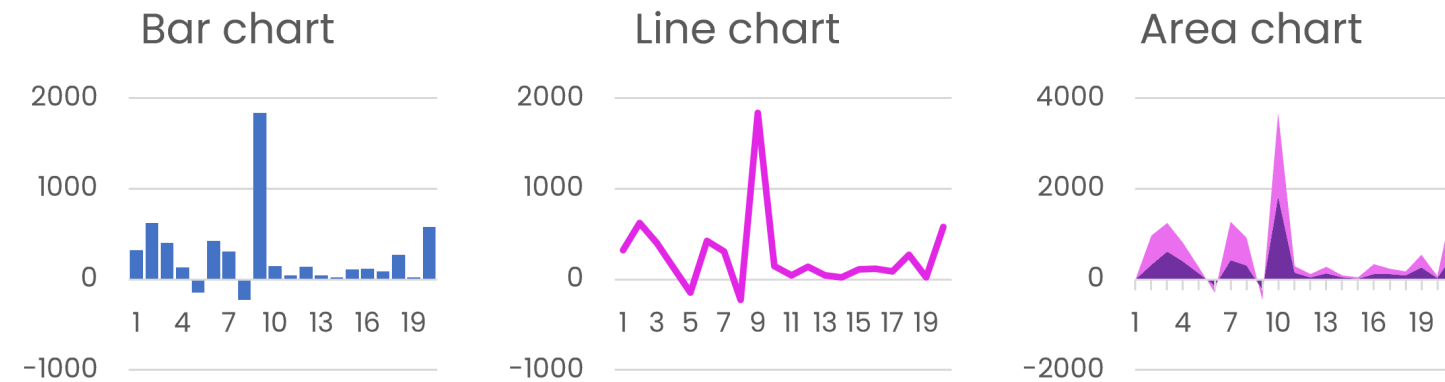information absorbed
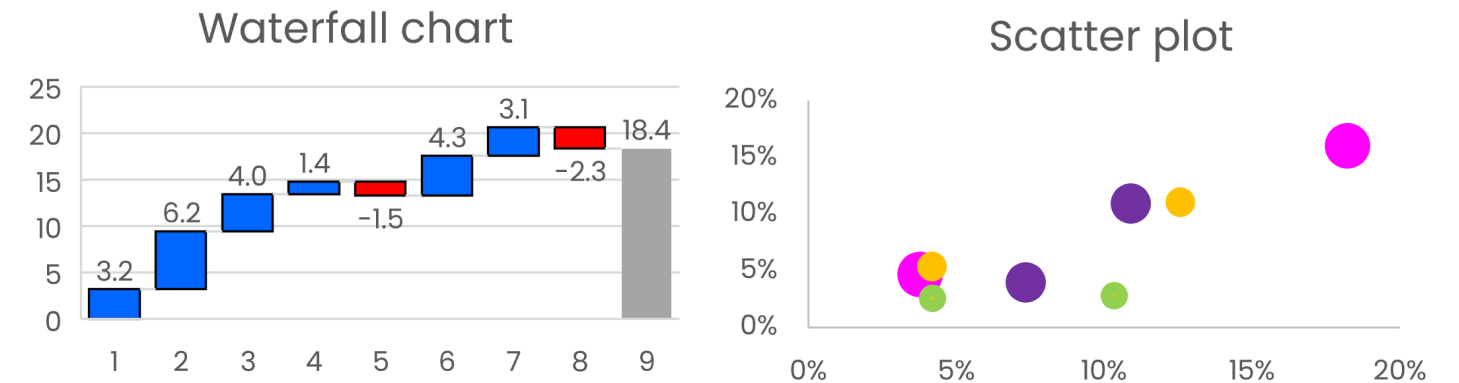by the brain is **VISUAL**

[1] https://elearningindustry.com/visual-learning-6-reasons-visuals-powerful-aspect-elearning
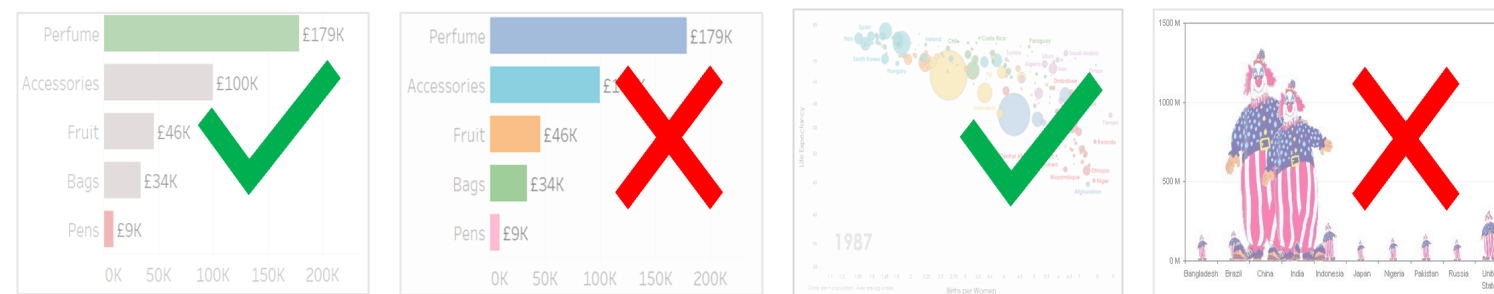
What will we cover in this course?

Basic charts
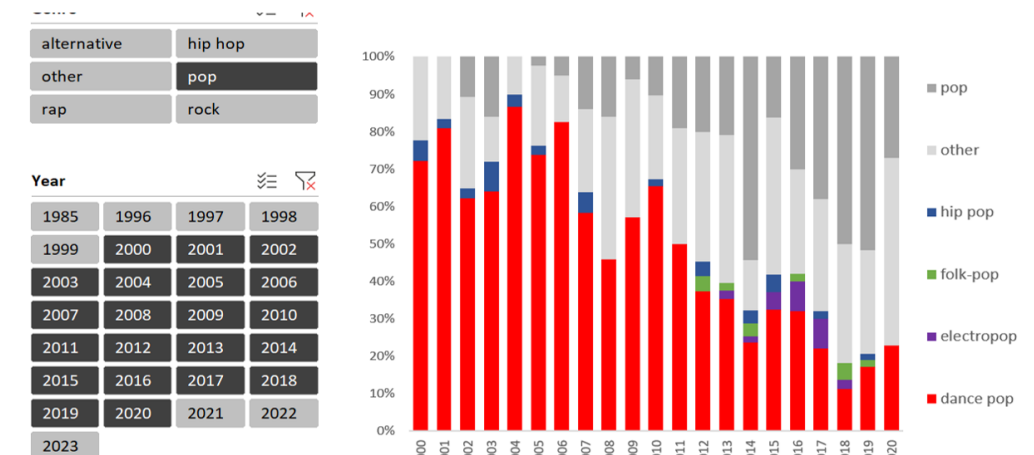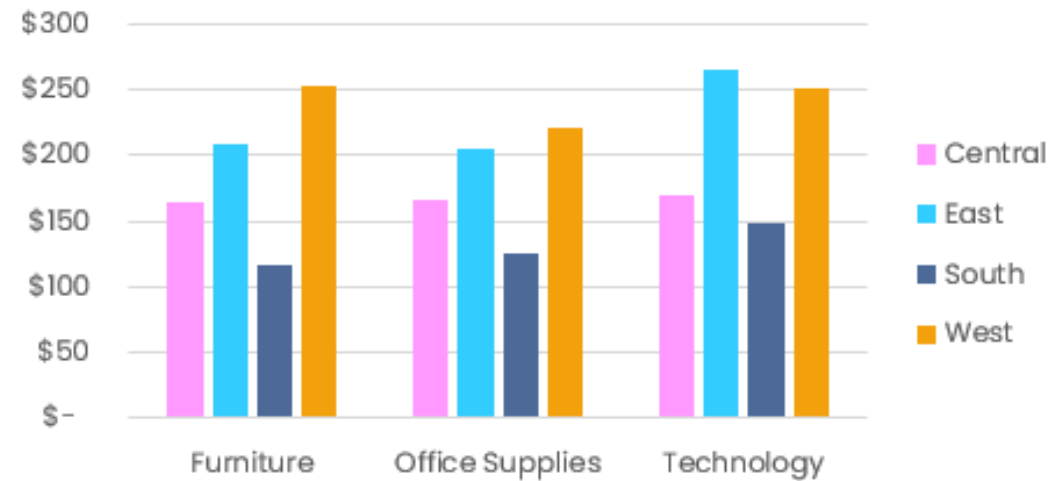

Advanced charts

Best practices of data viz

Pivot charts and dashboards

Bar and column charts
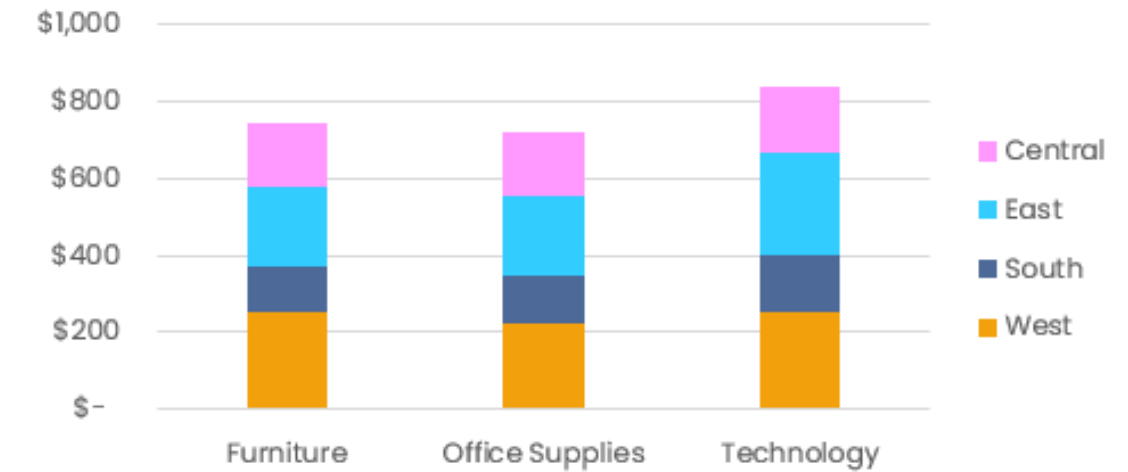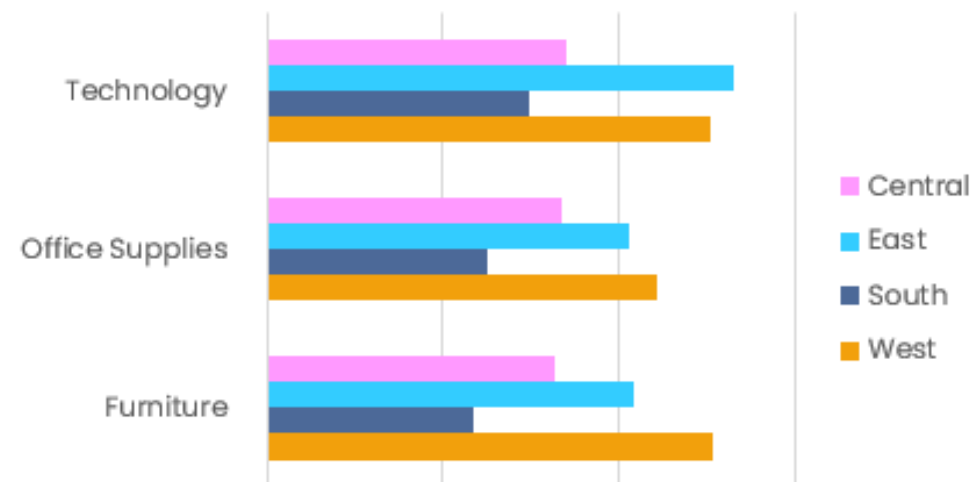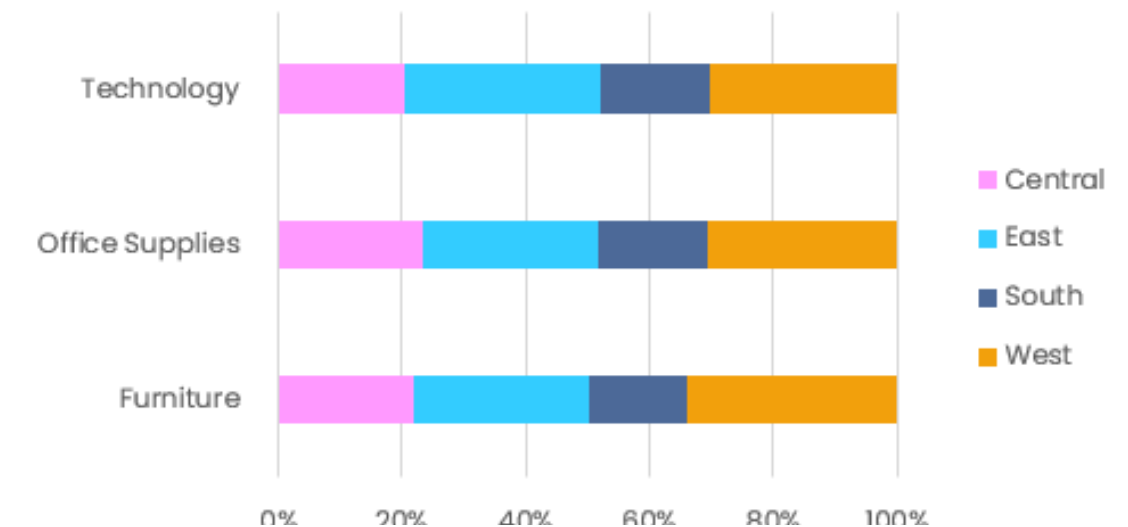
Line and area

Line charts

Line – multi category
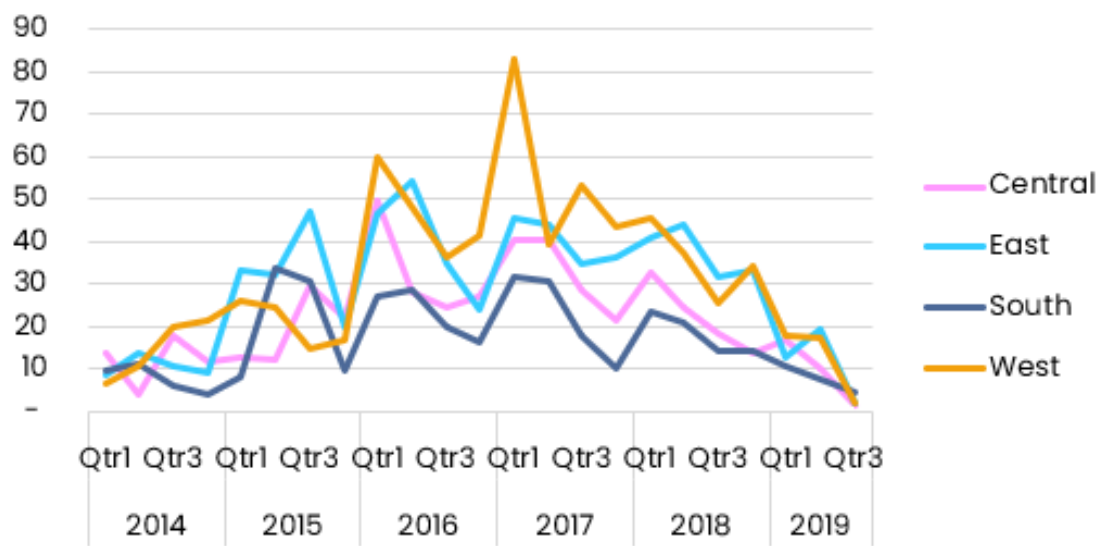
Area stacked
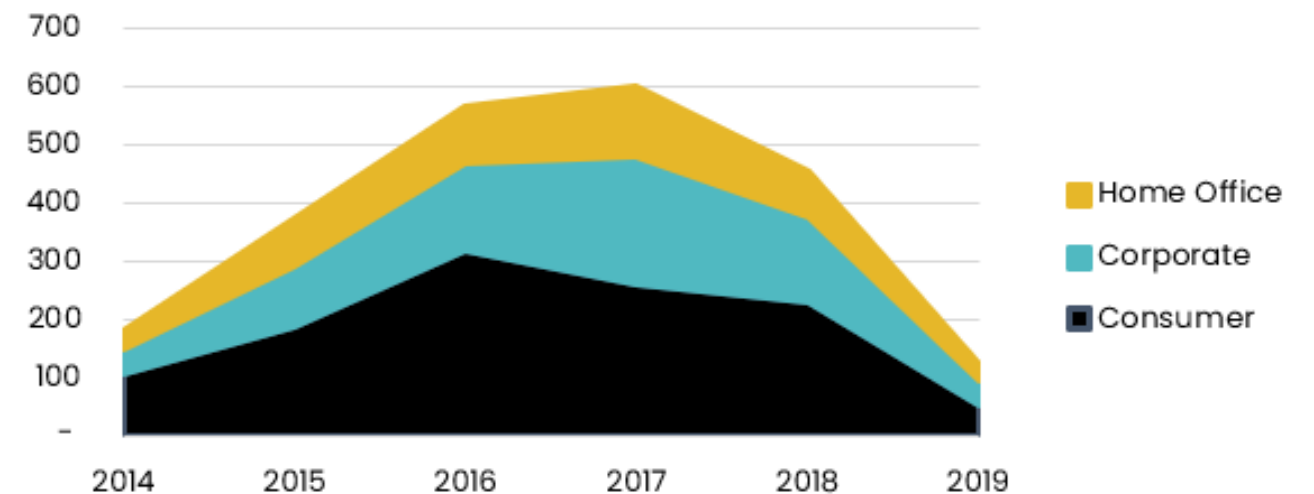
Area stacked (100%)

Pies and doughnuts

Pies and doughnuts

Pie

- Accessories
- Appliances
- Art
- Binders
- Bookcases
- Chairs
- Copiers
- Envelopes
- Fasteners
- Furnishings
- Labels
- Machines
- Paper
- Phones
- Storage
- Supplies
- Tables

Doughnut

- Accessories
- Appliances
- Art
- Binders
- Bookcases
- Chairs
- Copiers
- Envelopes
- Fasteners
- Furnishings
- Labels
- Machines
- Paper
- Phones
- Storage
- Supplies
- Tables

6% 51% 43%

- Furniture
- Office Supplies
- Technology

6% 51% 43%

- Furniture
- Office Supplies
- Technology

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DATA VISUALIZATION IN EXCEL

Our dataset for this course: "We Have It All"

- Commercial dataset

- Sales and orders of a department store

- Various dimensions, e.g., region, product category

- Various measures, e.g., sales, profit, discounts

- **Disaggregated data** = raw dataset

- **Aggregated data** = summary data tables

Raw data (disaggregated)

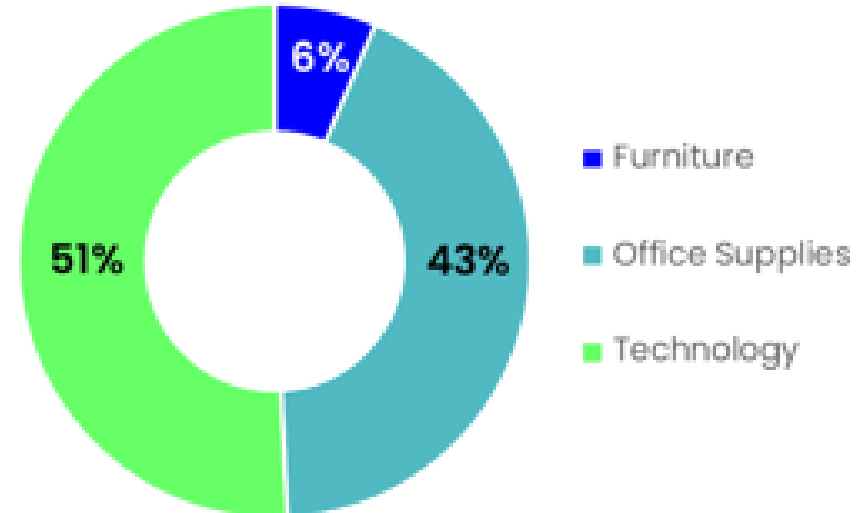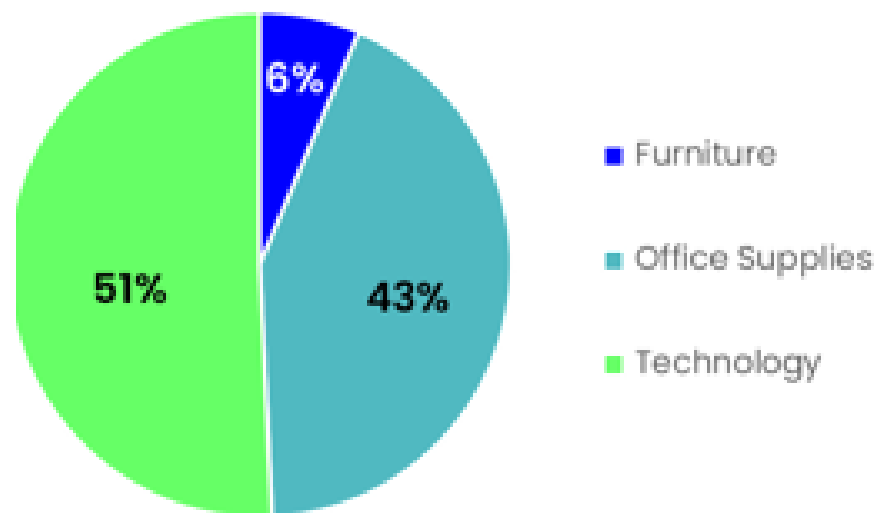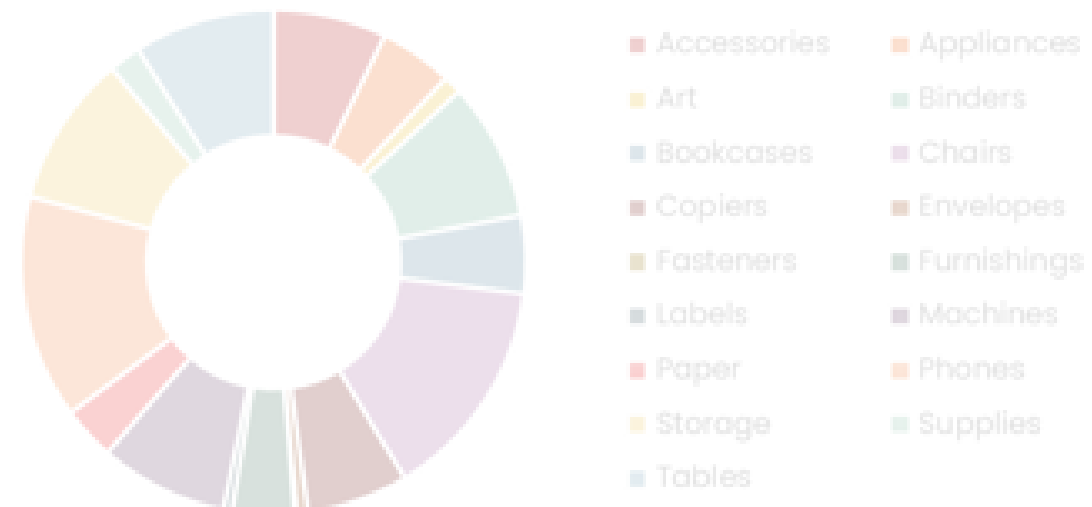| Order ID	Order Date	Segment	State	Region	Sub-Category	Sales	Quantity	Profit
CA-2016-152156	11/08/2016	Consumer	Kentucky	South	Bookcases	262	2	42
CA-2016-152156	11/08/2016	Consumer	Kentucky	South	Chairs	732	3	220
CA-2016-138688	06/12/2016	Corporate	California	West	Labels	15	2	7
US-2015-108966	10/11/2015	Consumer	Florida	South	Tables	958	5	(383)
US-2015-108966	10/11/2015	Consumer	Florida	South	Storage	22	2	3
CA-2014-115812	06/09/2014	Consumer	California	West	Furnishings	49	7	14
CA-2014-115812	06/09/2014	Consumer	California	West	Art	7	4	2
CA-2014-115812	06/09/2014	Consumer	California	West	Phones	907	6	91
CA-2014-115812	06/09/2014	Consumer	California	West	Binders	19	3	6
CA-2014-115812	06/09/2014	Consumer	California	West	Appliances	115	5	34
CA-2014-115812	06/09/2014	Consumer	California	West	Tables	1,706	9	85
CA-2014-115812	06/09/2014	Consumer	California	West	Phones	911	4	68

Summarized data (aggregated)

Region	Furniture	Office Supplies	Technology
Central	$ 163,797	$ 167,026	$ 170,416
East	$ 208,291	$ 205,516	$ 264,974
South	$ 117,299	$ 125,651	$ 148,772
West	$ 252,613	$ 220,853	$ 251,992

Sub-Category	Sales	Quantity	Profit
Bookcases	$ 114,880	868	$ -3,473
Chairs	$ 328,449	2,356	$ 26,590
Labels	$ 12,486	1,400	$ 5,546
Tables	$ 206,966	1,241	$ -17,725

Let's get started!

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Building the first charts

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Let's practice!

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