



# SUCCESSful data visualization using International Business Communication Standards

MI2 Data Lab Summer Internship 2021

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# About us



**Wydział Matematyki i Nauk Informatycznych**

POLITECHNIKA WARSZAWSKA

# What is IBCS and SUCCESS?

- The IBCS Association is an open not-for-profit organization
- Promotion, maintenance and further development of the International Business Communication Standards (IBCS®).
- Business communication in a proper **conceptual** way

Say – convey a message

Structure – organize content

# What is IBCS and SUCCESS?

- The IBCS Association is an open not-for-profit organization
- Promotion, maintenance and further development of the International Business Communication Standards (IBCS®).
- Business communication in a proper conceptual, **perceptual** way

Say – convey a message

Condense – increase information density

Check – ensure visual integrity

Express – choose proper visualization

Simplify – avoid clutter

Structure – organize content

# What is IBCS and SUCCESS?

- The IBCS Association is an open not-for-profit organization
- Promotion, maintenance and further development of the International Business Communication Standards (IBCS®)
- Business communication in a proper conceptual, perceptual and **semantic** way

Say – convey a message

Unify – apply semantic notation

Condense – increase information density

Check – ensure visual integrity

Express – choose proper visualization

Simplify – avoid clutter

Structure – organize content

# Implementation details

Scalable Vector Graphics:

- Objects exactly in place
- No change in quality when zooming
- Works well in HTML
- Transparent background

```
<svg width="800" height="600" xmlns="http://www.w3.org/2000/svg">  
  <rect x="80" y="150" width="50" height="200"/>  
  <text x="70" y="121" text-anchor="start" >some text</text>  
</svg>
```

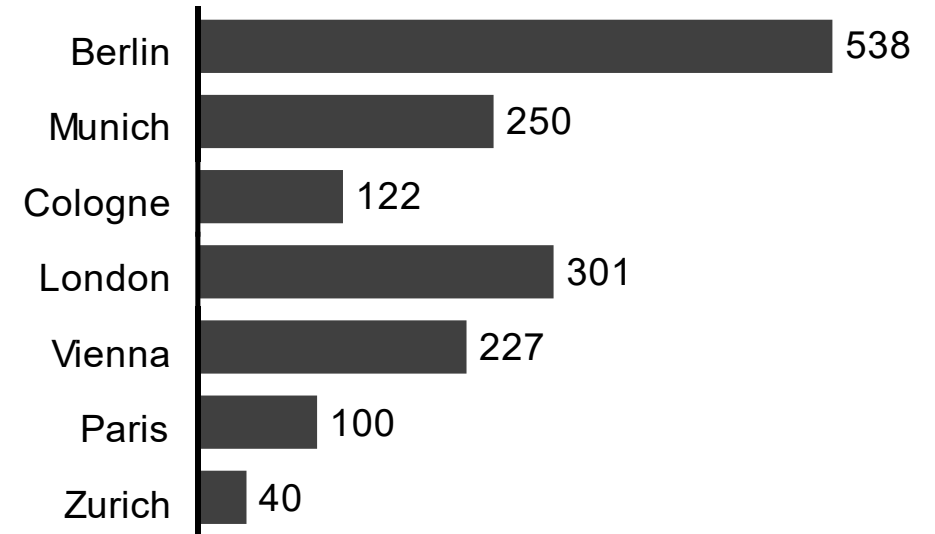
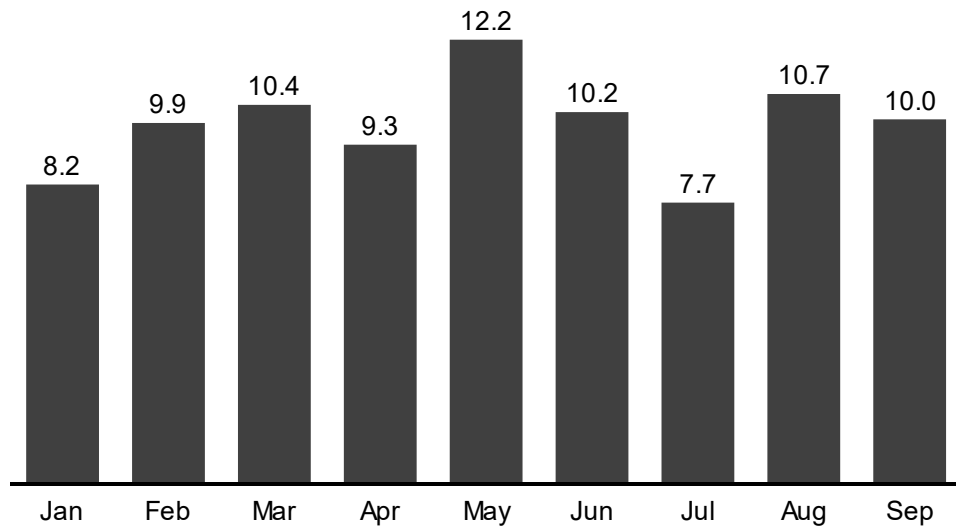


some text



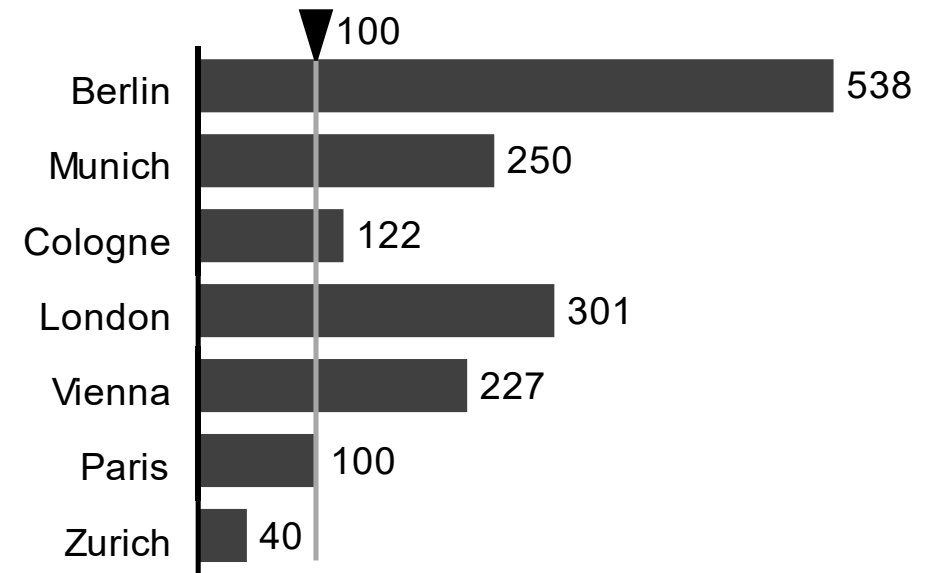
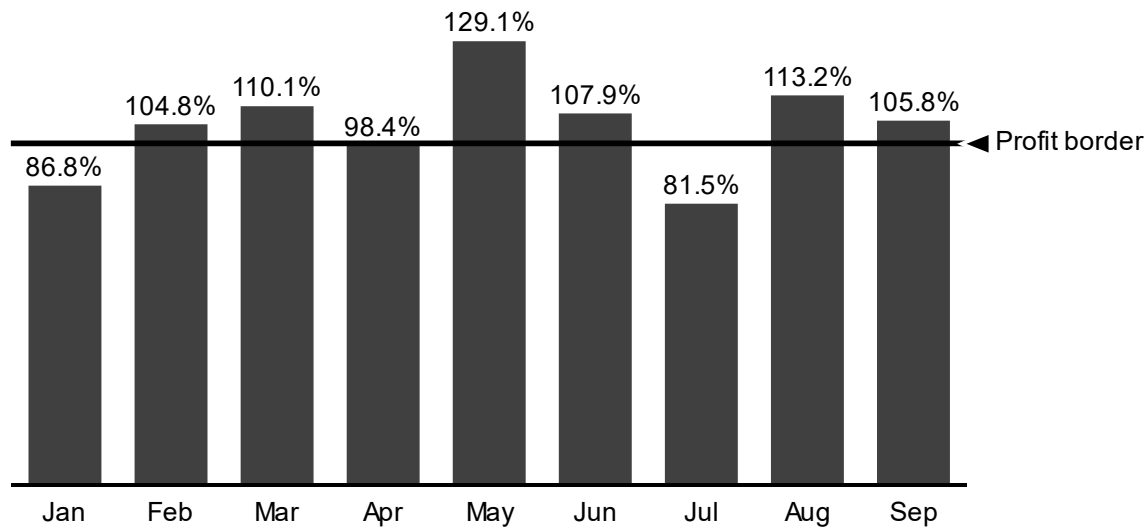
# How to choose the proper plot type?

- Bar width indicates axis interval
- No value axis
- Labels with values



# Reference charts

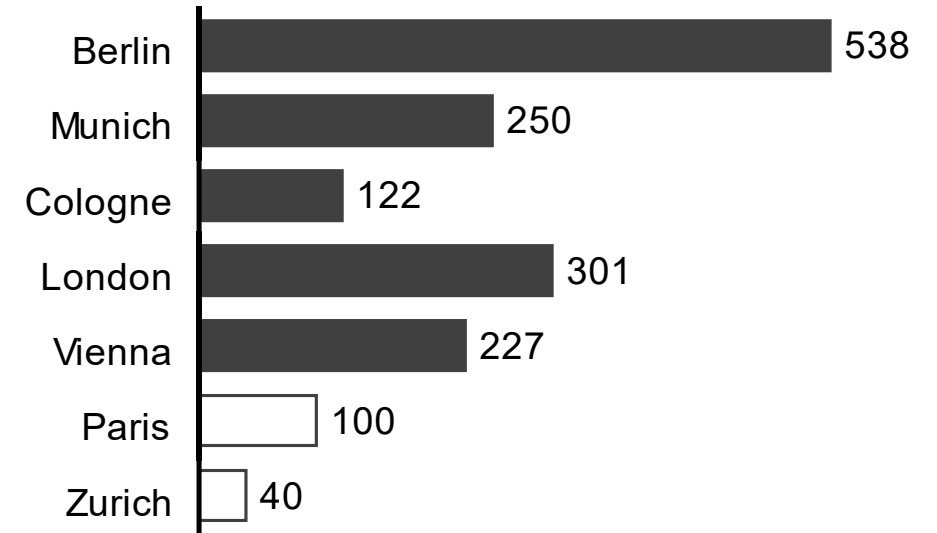
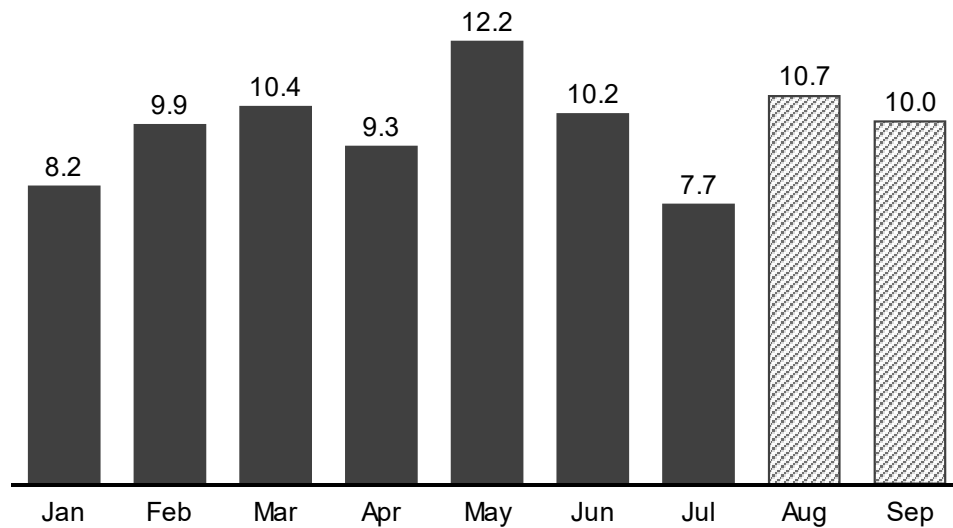
- Line indicating index or reference value





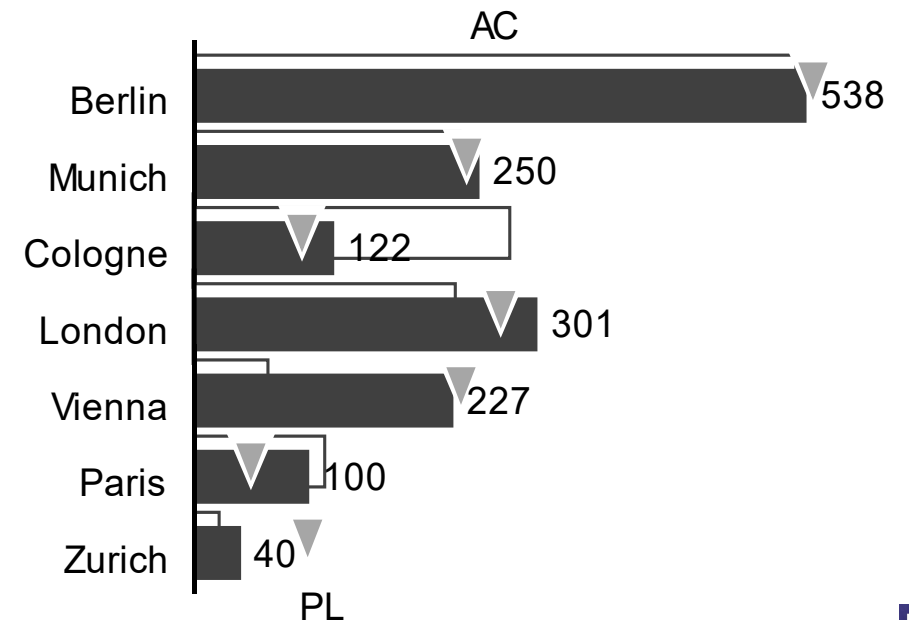
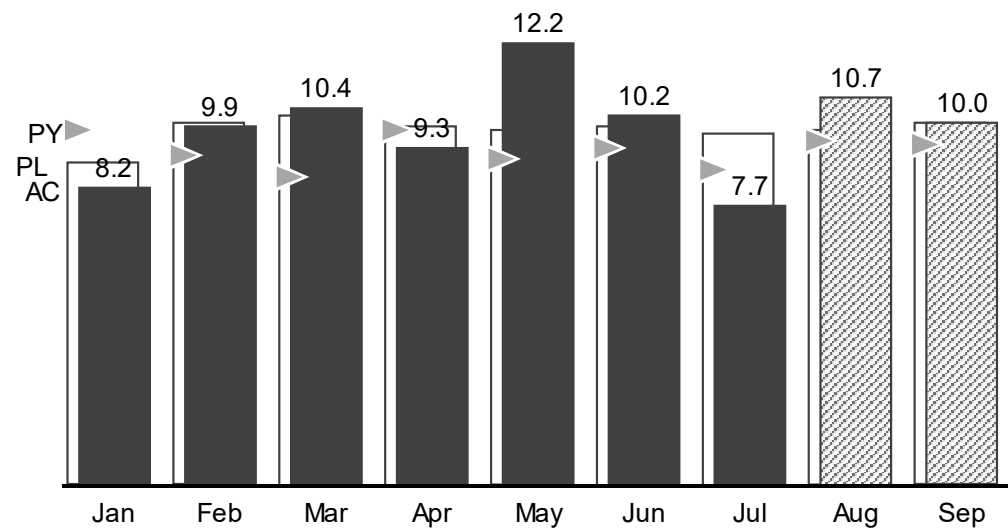
# Styling

- Different styles indicate different scenarios



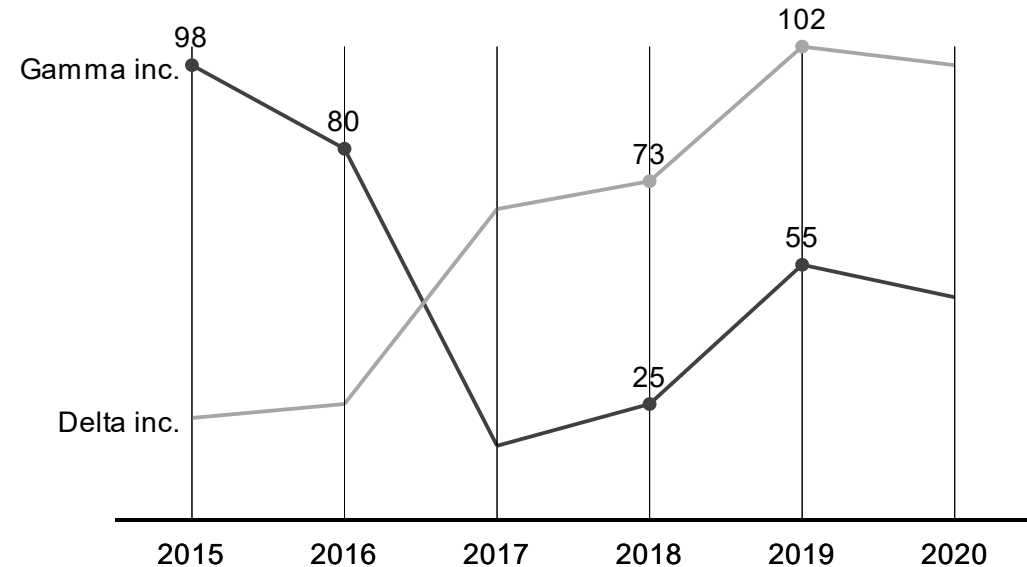
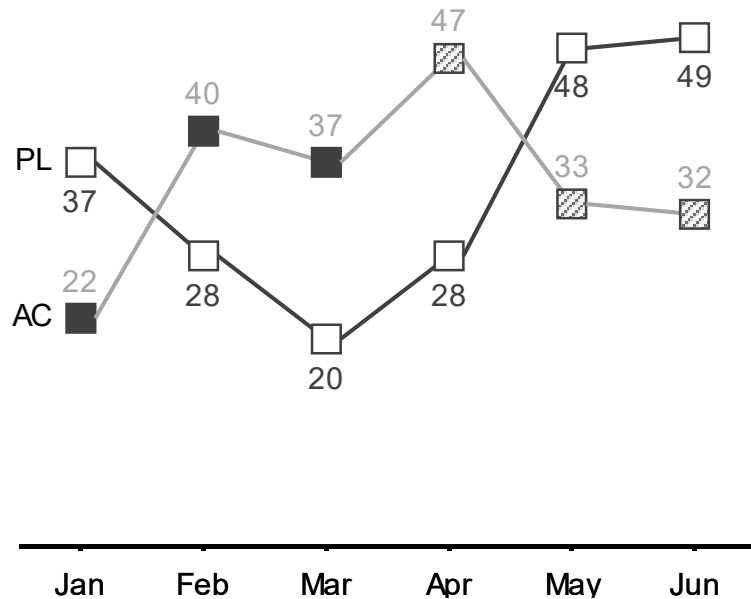
# How to show many series?

- Use grouped charts to visualize up to 3 series
- Style of markers indicates scenarios



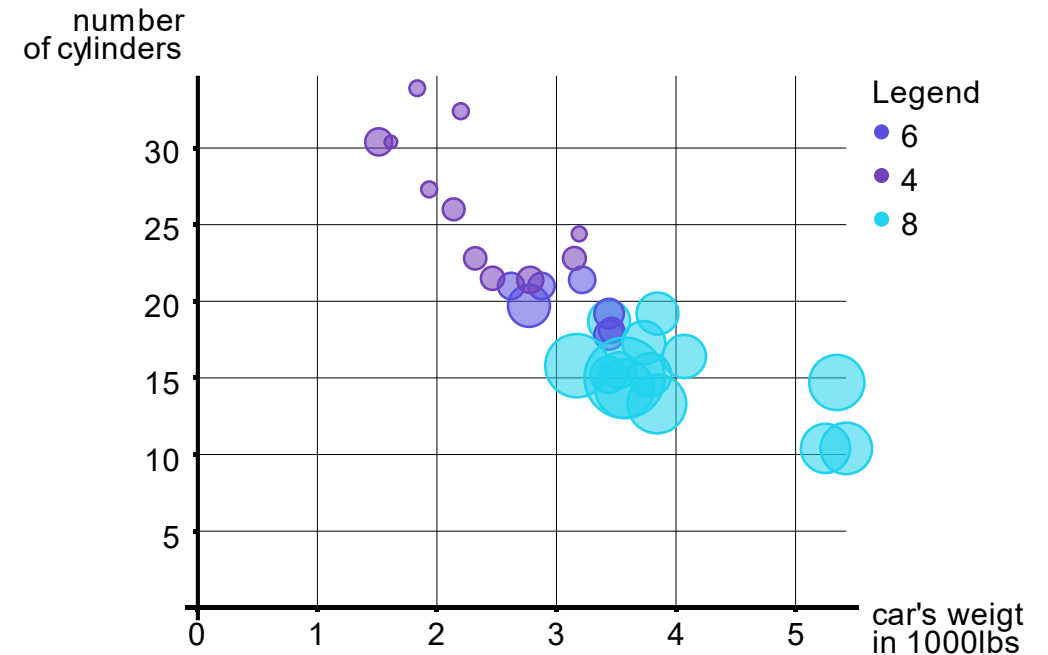
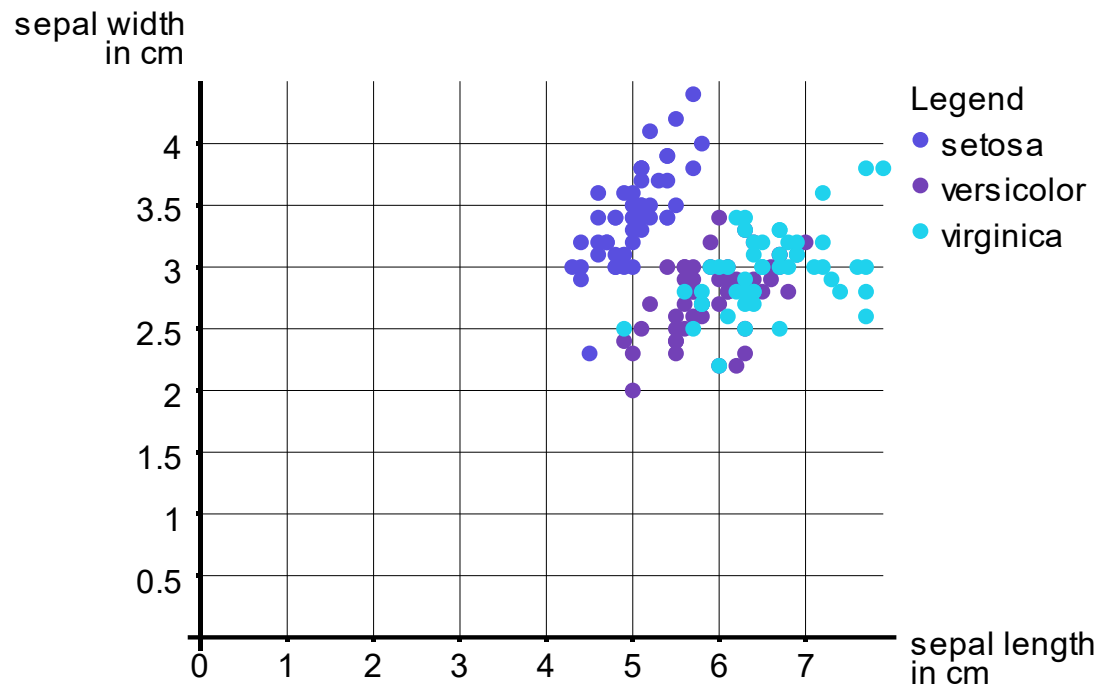
# Linecharts

- No value axis but integrated labels
- Category width indicates axis interval
- Imaginary y-axis starts at 0



# Scatterplots

- Not yet standardized, but examples in *IBCS 1.1 (2017)*
- Implemented using patterns from other plots



~~Thank you for your attention :)~~



GitHub Repository