Numbers

Numerical data consists of numbers, which can describe money, measurements, age and so forth.

You can use statistics or charts to describe a large set of numbers.

EXAMPLE
Numbers in tabular format are often a spreadsheet (e.g., Excel) with values.

Categories

Categories can come in various ways, describing something that could be selected from a list.

You can use color coding or icons to indicate categories.

EXAMPLE
Categories are typically limited in amount, such as "countries", "genres", etc.

Identify

Identifying interesting datapoints.

You can look for outliers, or a datapoint that matches a specific question.

EXAMPLE
Extreme values are interesting as they indicate outliers in the dataset, that are different than the average.

Text

If you look at text as data, you can count the occurances of certain words or word constructs (such as frequency of two or three words following each other).

EXAMPLE
Text as a data can lead to frequency of word usage or looking at which follow each other most frequently.

Geolocation (lat/lng)

Geolocation as a data defines a position in the physical space.

You can mark the datapoints as dots on a map.

EXAMPLE
Any physical location in the world can be defined with a GPS coordinate.

Classification

Based on a criteria, categorize the datapoint. Classification is like putting the datapoints into different buckets.
During classification, you mark the data as categories.

EXAMPLE
Cars can be classified based on the type of fuel (petrol, diesel, electric) they use.

"Unique values"

In data terms, a unique value is someone's name or similar.

Unique datapoints often have a relation with each other; relational maps could form a network graph or be put into a hierarchy.

EXAMPLE
Names (of person or a company) or phone numbers, email addresses are unique data values.

Timestamps

In data terms, a timestamp is a datapoint with a specific moment in time.

Timestamps can be put on a timeline to indicate a sequence of events.

EXAMPLE
A specific second on a specific date.

Compare

Comparing one data to another helps to comprehend something in context.
For example, visualize data to see the difference between sizes of elements, such as bar charts or bubbles.

EXAMPLE
Comparing two topics can help to understand the significance of change.

Data techniques   DT-01

Text analysis
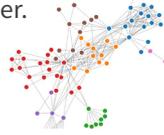
Basic text analysis can reveal common words and phrases.

INPUT
Longer texts, typically sentences. (paragraphs, lyrics, etc.)

OUTPUT
Word cloud, word count, bi-grams, tri-grams

Data techniques   DT-02

Network analysis

Networks can be formed when unique things (like people, companies) are connected to each other.

INPUT
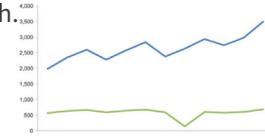Unique values, such as persons, companies, …

OUTPUT
Graphs, network centrality measures

Data techniques   DT-03

Comparison

Comparing two datasets and focusing on the parts that are unique in each, and shared in both.

INPUT
At least two longer texts

OUTPUT
Shared words, unique words of each input

Data techniques   DT-04

Map visualization

Plotting dots on a map. Dots can differ in size/shape based on another data.

INPUT
Geolocation, additional data (e.g. number, category, text, unique values)

OUTPUT
Map visualization

Data techniques   DT-05

Graph visualization

Relations between numerical data can be easily shown with common graphs, like bar charts.
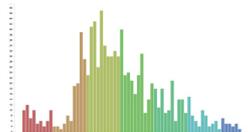
INPUT
Numbers
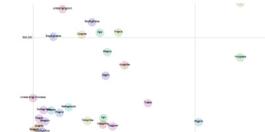
OUTPUT
Charts visualization

Data techniques   DT-06

Correlation

How two variables relate to each other?

INPUT
Multiple numbers

OUTPUT
Level of relation

Data techniques   DT-07

Basic stats

Mean, average, minimum, maximum, total, median, deviation: all basic descriptors of numerical data.
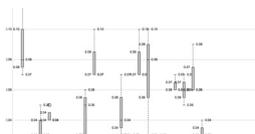
INPUT
Big bunch of numbers

OUTPUT
Numbers