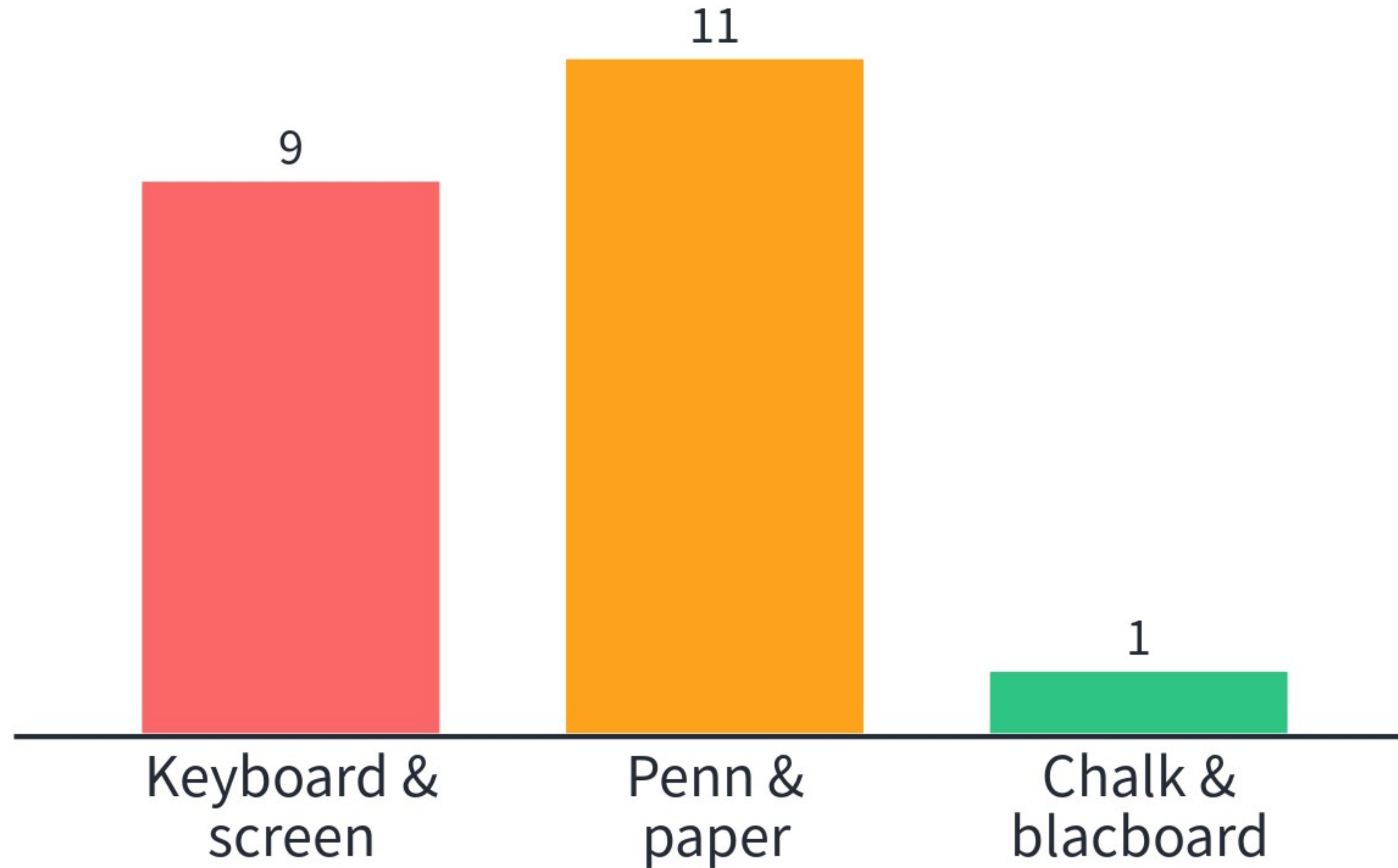


Research data management

Scientificness in Mathematics

What are your proffered tools?



WHAT ARE YOUR RESEARCH DATA?

big data
simulations
code
data from simulations
maple files
data from experiments
articles
tex files
numerical results
reference material
sheets of paper
numerical experiments

Research data management - 1. Storing research data

Watch later Share

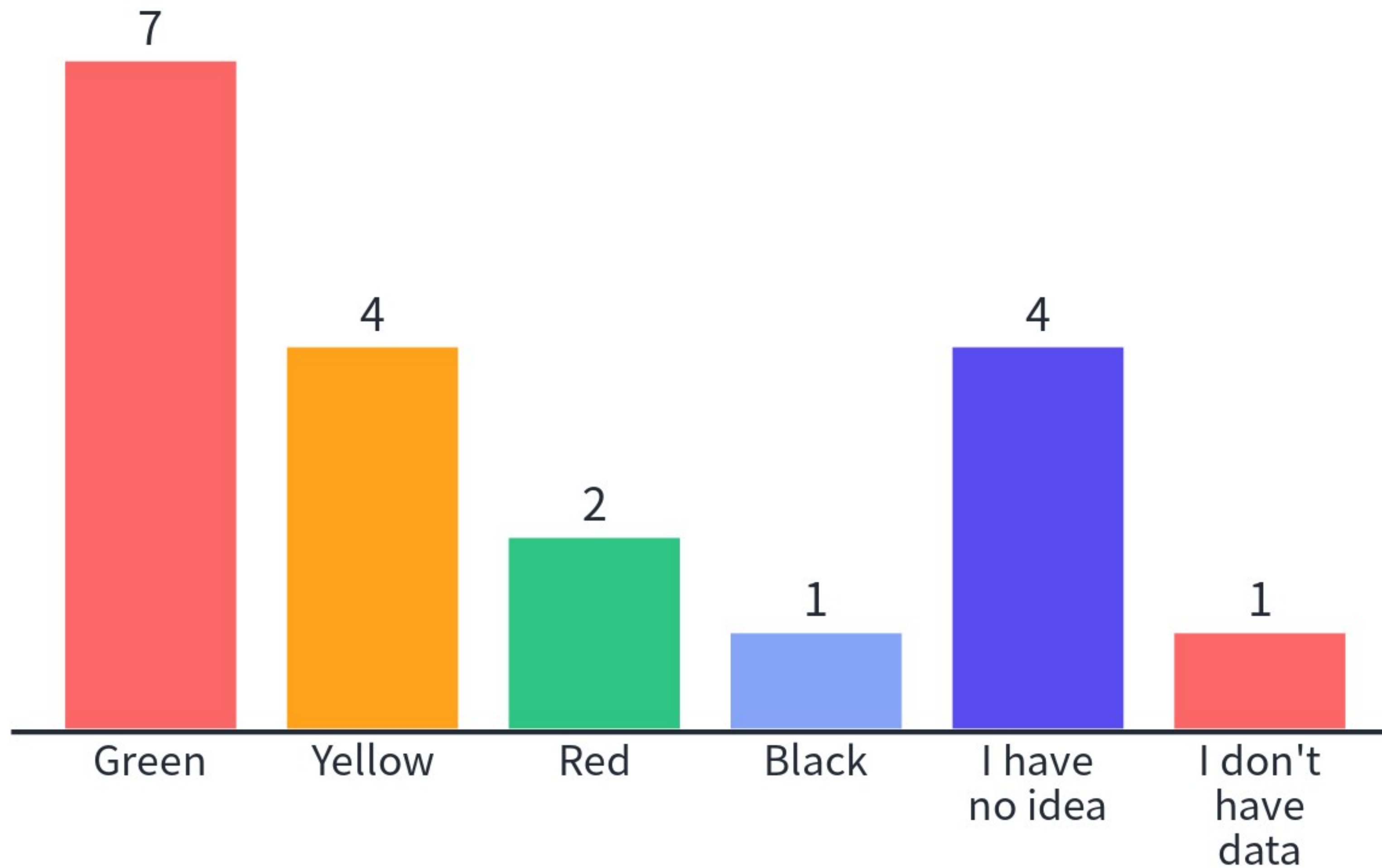
Classification of data

			
Green	Yellow	Red	Black
Open	Restricted	In confidence	Strictly in confidence

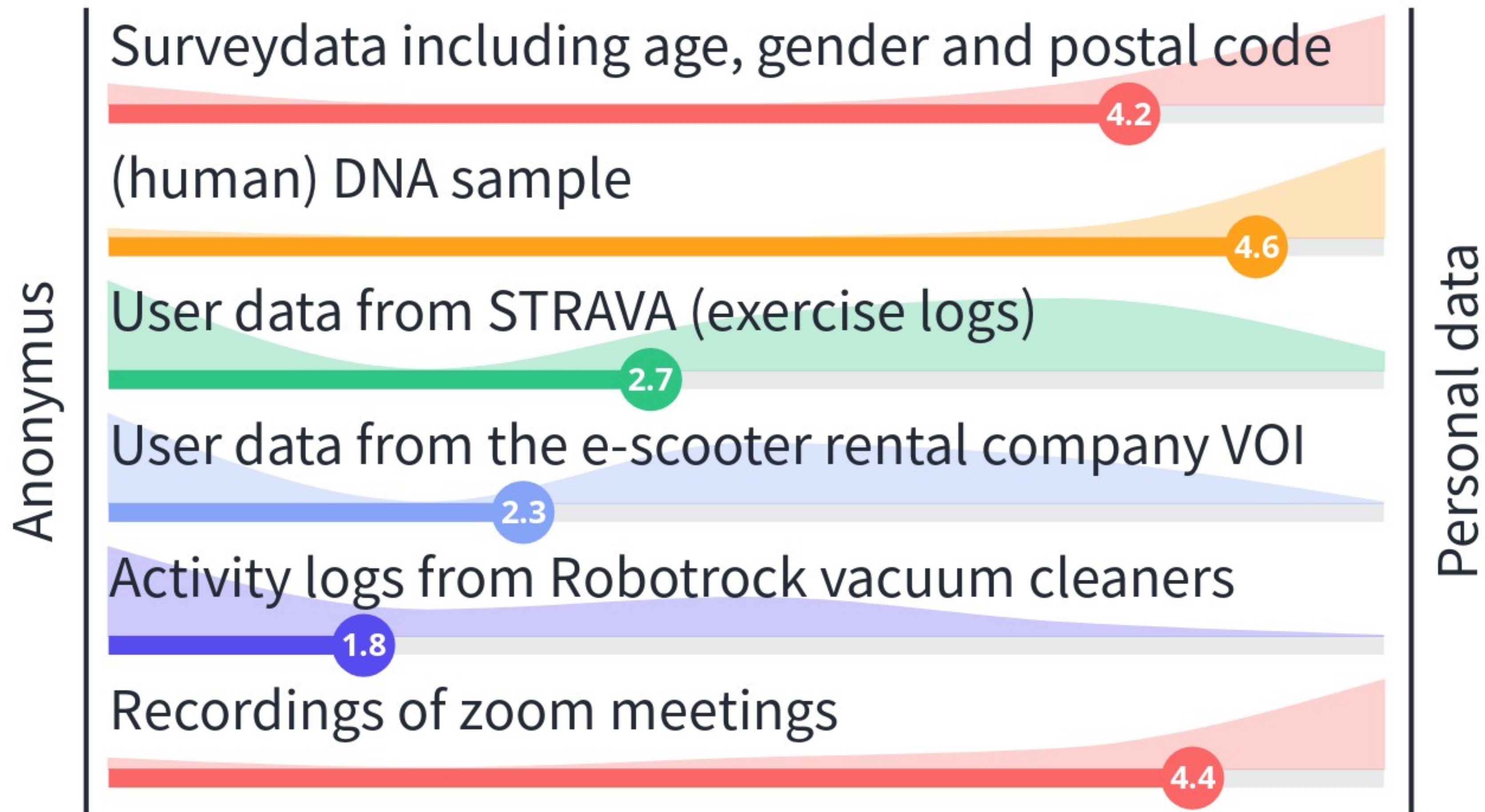
Watch on  YouTube

Research data management – Part 1: Store

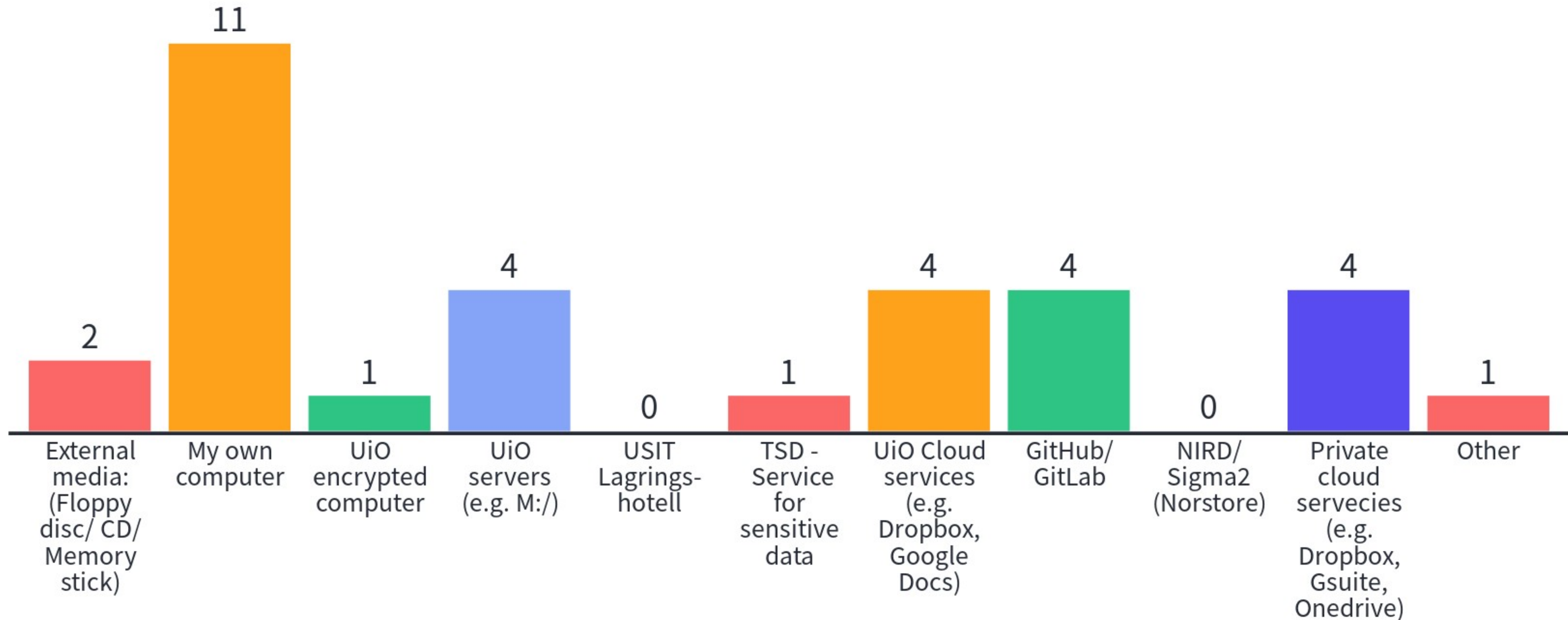
What colour are your data?



Anonymous or personal data

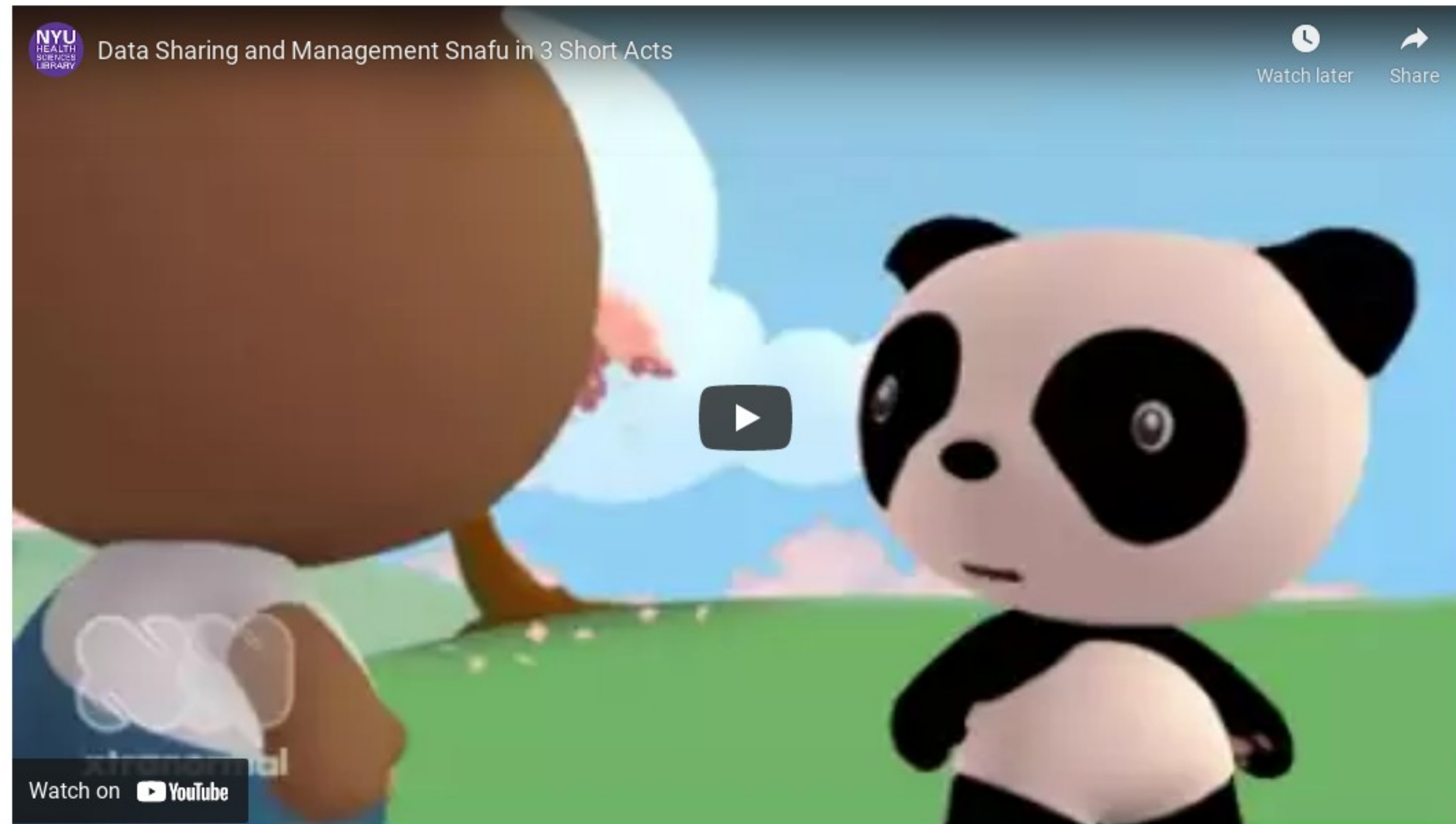


Where will you store your research data?



Why are storage, documentation and formats important?

data validity
to stay organized save the work
security reproducibility
safety
backup easier to read
ease of access recreate data
interpretability privacy laws
safe easier to understand



Panda video

 Research data management - 2. Organising research data

Some preferred file formats

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Share

Databases: XML, CSV

Geospatial: SHP, DBF, GeoTIFF, NetCDF

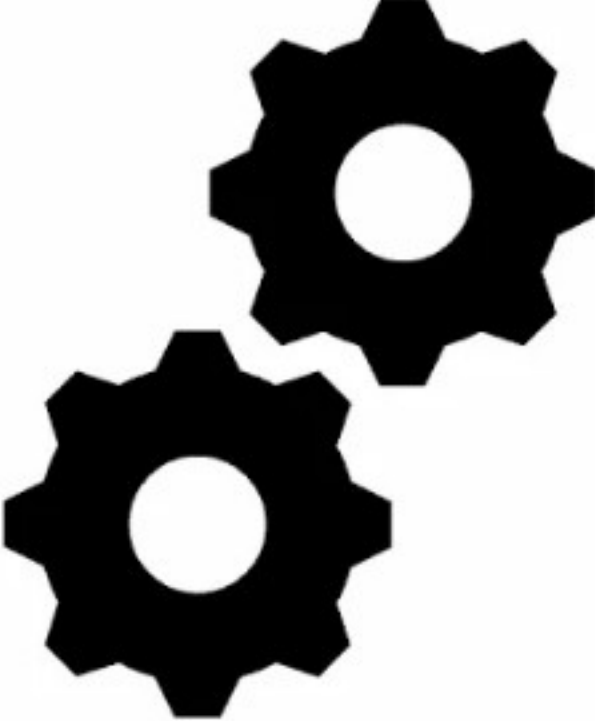
Moving images: MPEG, AVI, MXF

Still images: TIFF, JPEG 2000, PDF, PNG, GIF, BMP

Tabular data: CSV

Text: XML, PDF/A, HTML, ASCII, UTF-8





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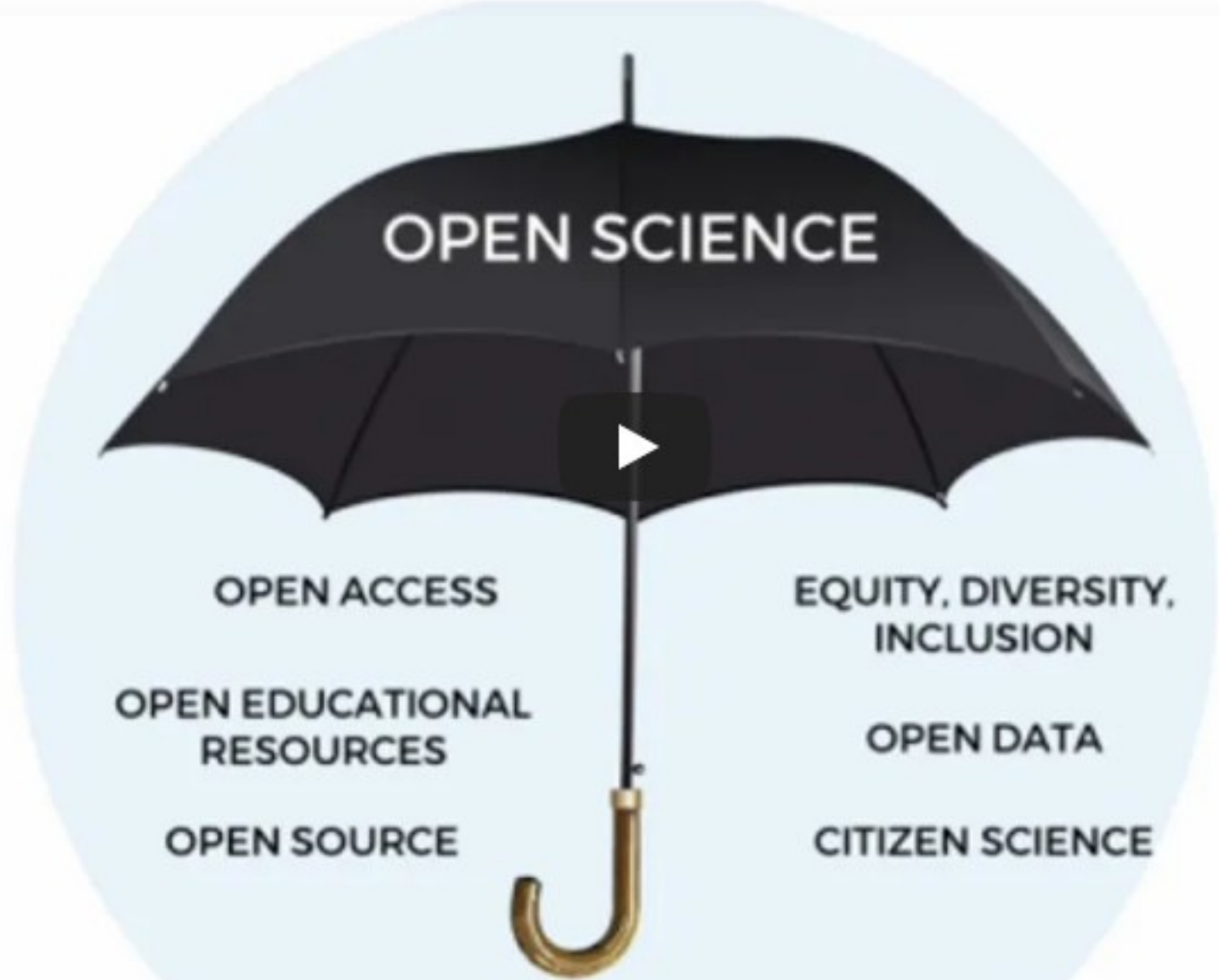
Research data management – Part 2: Organize

What information should the readme file for your data contain?

Open Data

Research data management - 3. Archiving research data

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The diagram features a black umbrella with a gold handle, centered within a light blue circle. The words "OPEN SCIENCE" are written in white capital letters across the top of the umbrella's canopy. Below the canopy, the umbrella's shaft divides into two columns of text. The left column lists "OPEN ACCESS", "OPEN EDUCATIONAL RESOURCES", and "OPEN SOURCE". The right column lists "EQUITY, DIVERSITY, INCLUSION", "OPEN DATA", and "CITIZEN SCIENCE". A white play button icon is positioned in the center of the umbrella's shaft.

What do we mean when we talk about Open Science?

Image courtesy of Robin Champieux

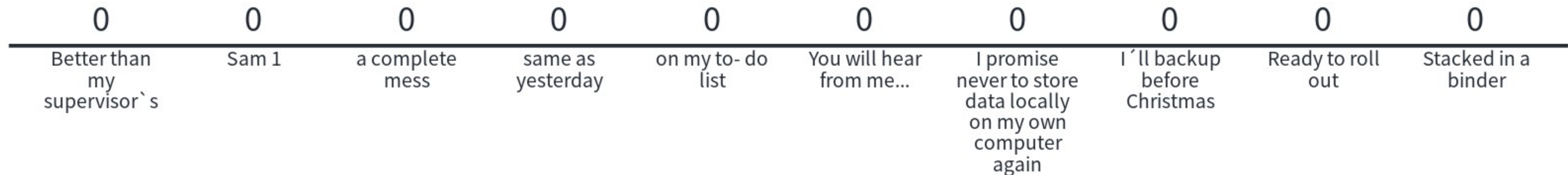
Watch on YouTube

Research data management – Part 3: Archive

Where do you plan to archive your research data?



My data management strategy is now:



Questions?

