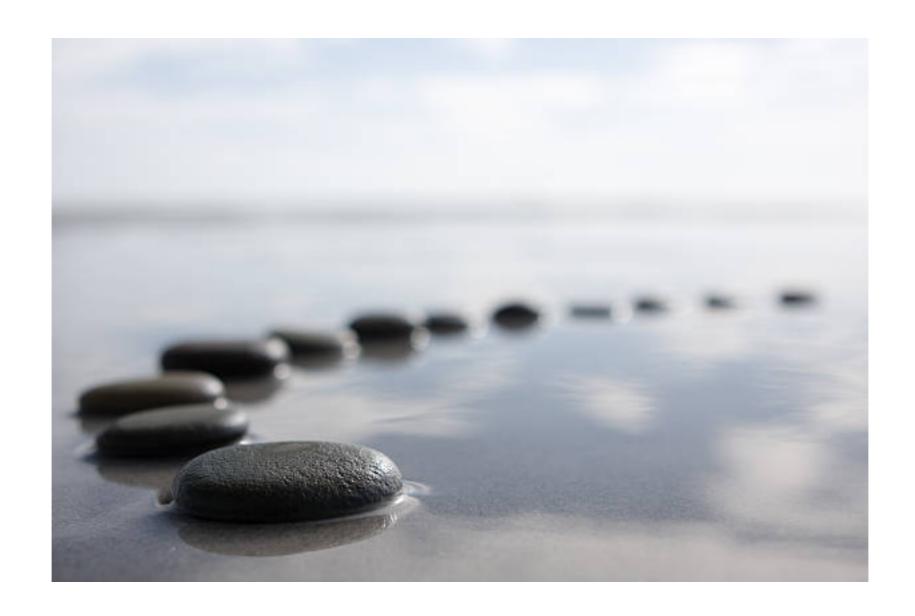
# The early bird gets the return: when to publish data



Data are an important component of the scientific process

### stepping stones



observation, theory, data, code

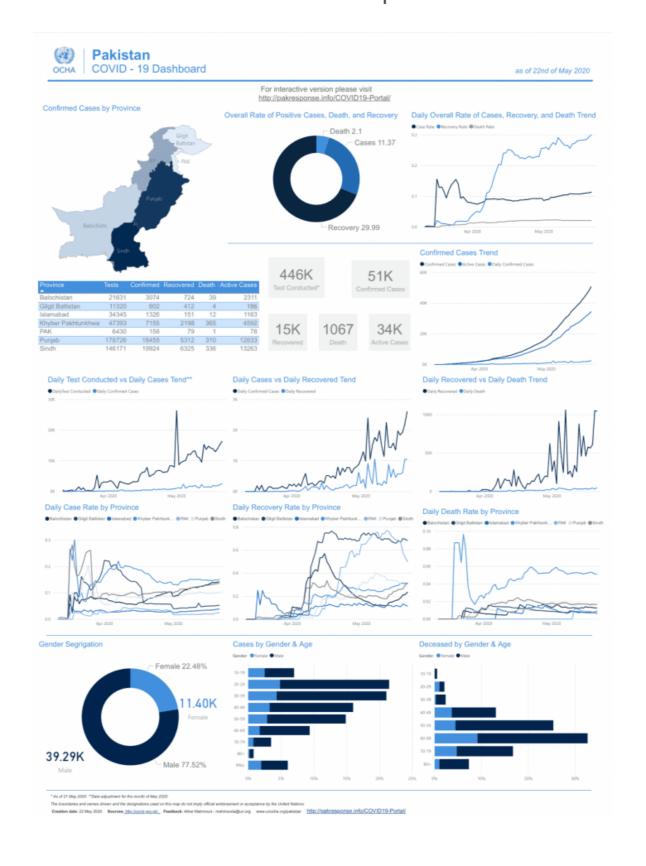


Open science can happen during the process not just at project completion culminating in only one scientific output such as a paper Publish your data when the collection/synthesis is complete



People can use data to inform decision making, discover new concepts, interact with authors

#### Does not need be complex, even tabular



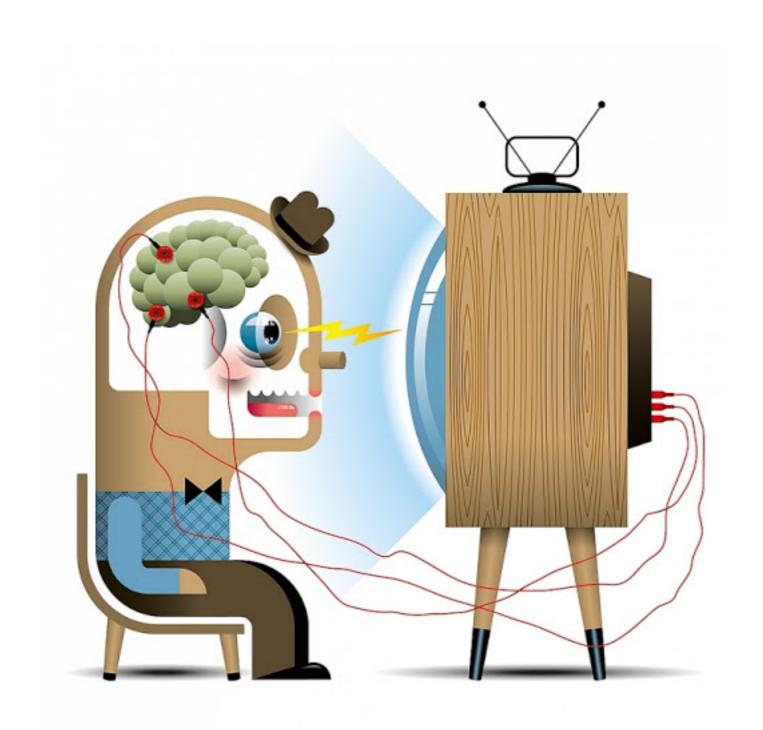
Benefits to science and societal good include open science, reproducibility, speed, and transparency



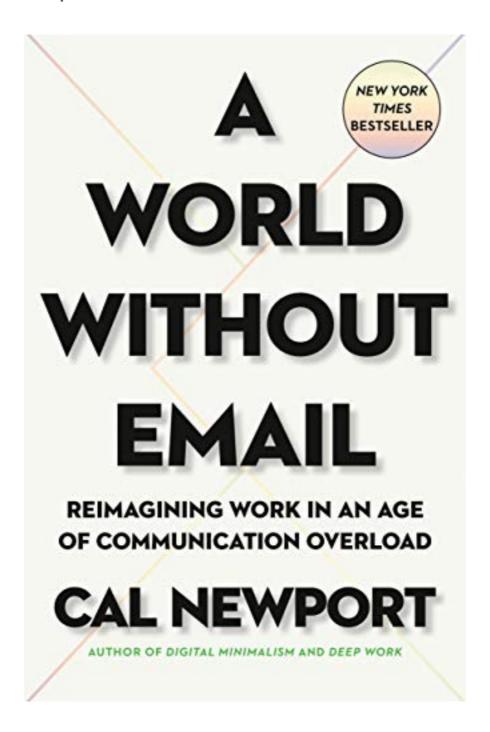
Benefits to you

Tidy data sooner, More readable data, Simplifies versioning and provenance

### Hawthorne effect



#### open data = less email

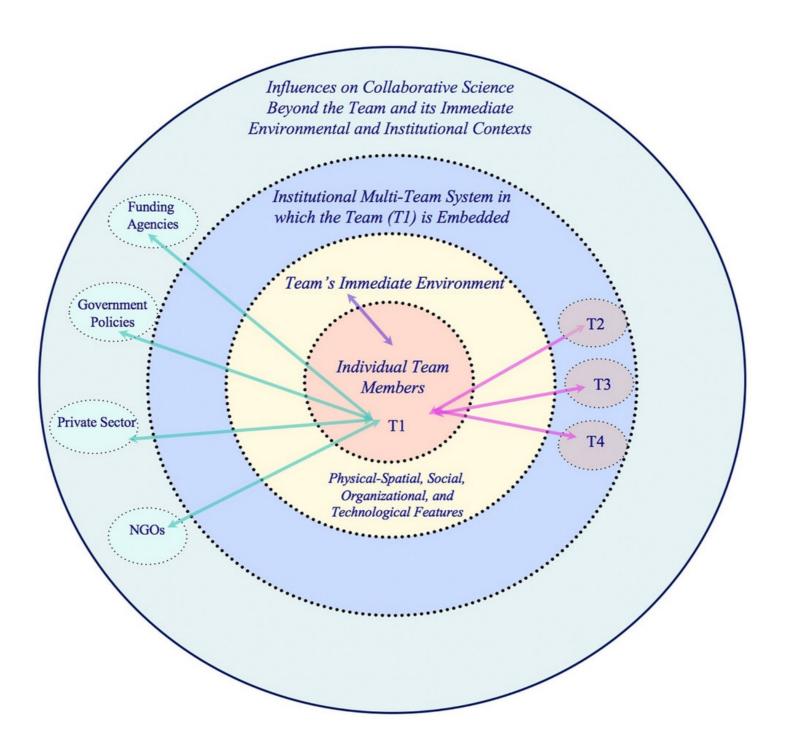


## Listing authors on data upfront promotes transparency and efficiency



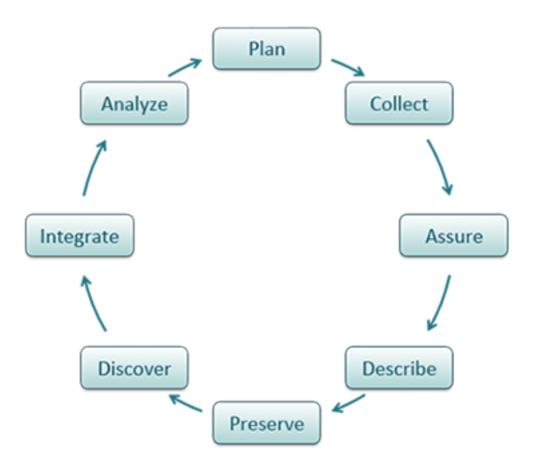
Meta-data written sooner to publish the data before a paper facilitates writing and error checking

#### Good will and team science

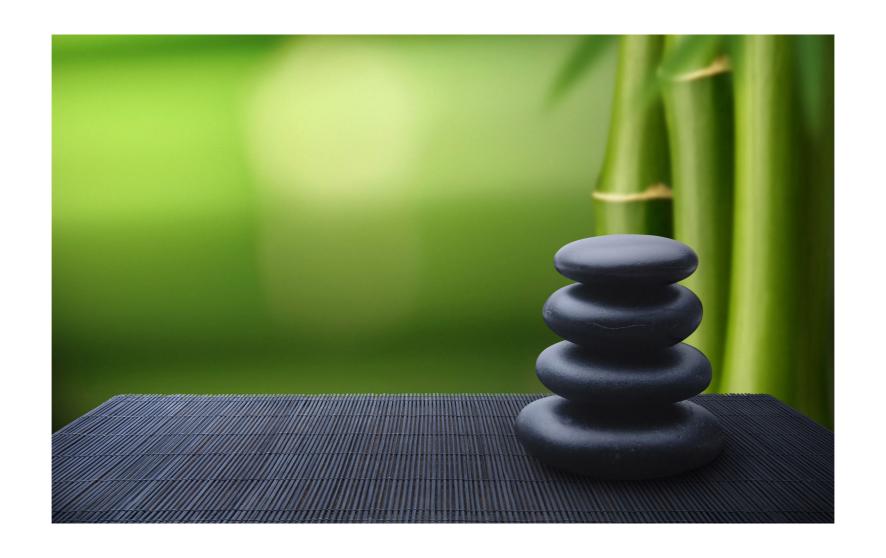


source: https://i2insights.org/2019/02/19/team-science-ecosystem/

Data are legitimate research objects,
Get credit,
Give credit,
Cite your data



Source: DataOne, Primer on Data Management: What you always wanted to know



Data, theory, and ideas build community through action