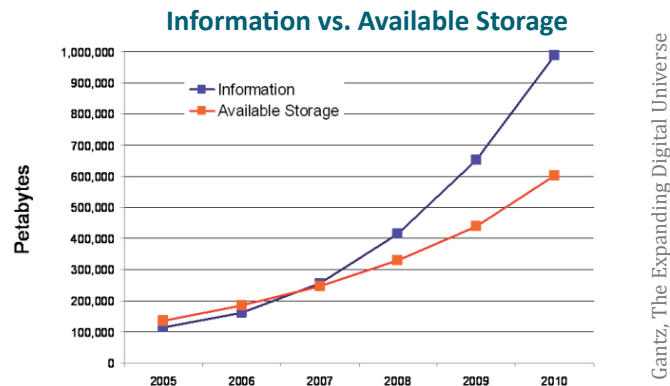


### The world of data around us

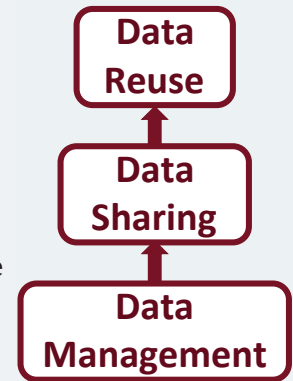
The data deluge has created a surge of information that needs to be well-managed, discoverable, and accessible.

The amount of available storage is not keeping pace with the amount of data being produced.



### Why manage data: the researcher perspective

- Keep yourself organized ⇒ find your own files!
- Track your processes for reproducibility
- Better version control of data
- More efficient data quality control
- More backups to avoid data loss
- Format your data for reuse by yourself & others
- Document your data for understandability and reuse
- Prepare it to share it & gain credibility and recognition for your scientific efforts



Data management facilitates sharing and reuse.

### Causes of data loss

- Natural disasters
- Facilities infrastructure failures
- Storage failure
- Server hardware or software failure
- Application software failure
- Human errors
- Malicious attack
- Format obsolescence
- Loss of competencies
- Loss of funding
- Loss of insitutional commitment

Costs of not doing data Storage management can be very high!

### Data Reuse Example

Researchers reused and aggregated data from several different sources to determine migration routes for specific bird species.



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### The Case for Data Management

#### If data are:

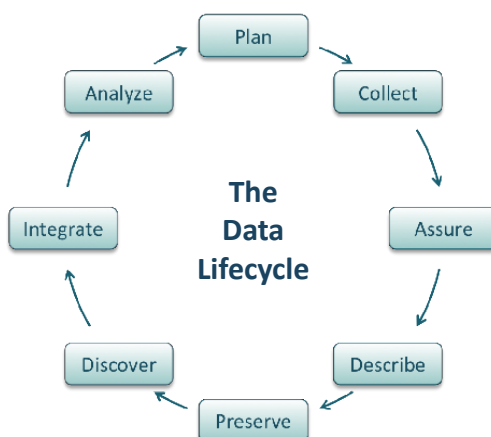
- Well-organized
- Documented
- Preserved
- Accessible
- Verified as to accuracy & validity

#### The results are:

- High quality data
- Data that is easy to share and reuse
- Citation & credibility to researcher
- Cost savings to further science

### The Data Lifecycle

The stages through which well-managed data passes from project inception to conclusion.



### Local contact information

