



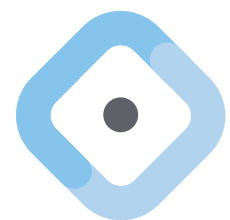
# Why not wait for GOOGLE

Relevance of Data Infrastructures

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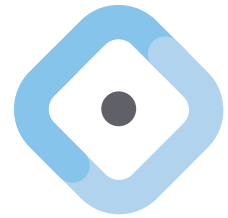
*Ron Dekker | CESSDA*





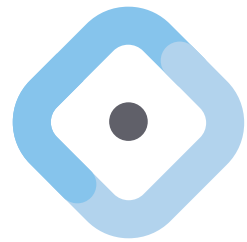
# Relevance of data infrastructures

- ◆ INTERNATIONAL
- ◆ European Cooperation in EOSC
- ◆ SOCIAL SCIENCES & HUMANITIES
- ◆ SSH Cooperation in SSHOC
- ◆ CESSDA



# International

- ◆ Open Science - also on DATA
  - ◆ Need to share knowledge faster & more efficient
- ◆ What do these organisations have in common?
  - ◆ Social Sciences Research Network
  - ◆ Research Data Alliance
  - ◆ NIH Commons
  - ◆ Google Public Data
  - ◆ European Open Science Cloud



# Platforms

Repositories

Access Levels

## Data Producers

- \* *Design, Sampling, Collection*
- \* Data Curation
  - \* Data Management
  - \* (Self) Deposit of Data
  - \* Secured Storage
- \* Training

Single Sign On

## Service Providers

- \* Components
- \* Tools & Services

## Platform Owner

- \* Rules
- \* Architecture

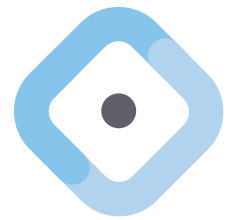
Licenses

Access i.s.o. Downloads

## Data Users

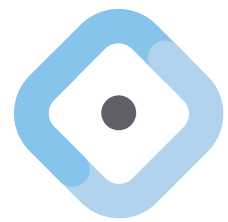
- \* FAIR
  - \* Find relevant Data
  - \* Access data easily
  - \* Interoperability
  - \* Re-use, incl. secure
- \* Training





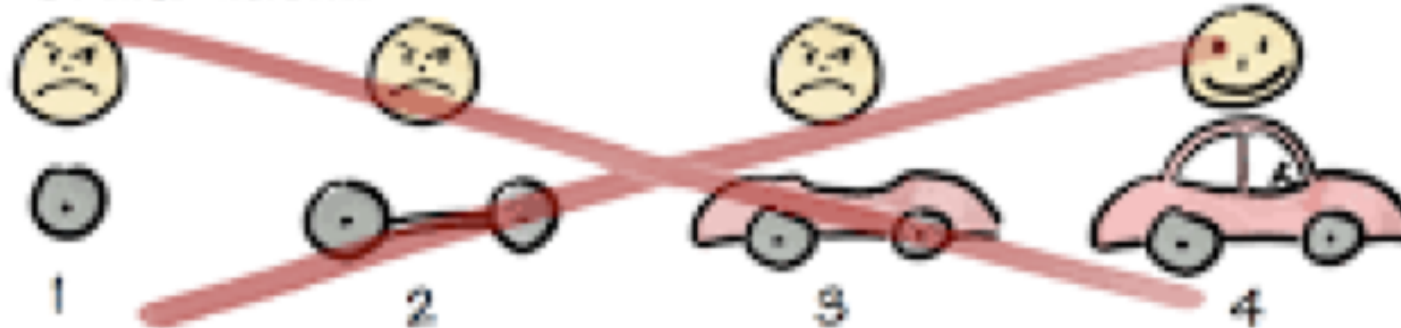
# Google Data

- ◇ Search Engine
  - ◇ Find data
  - ◇ Analyse data
- ◇ Platform
  - ◇ Harvesting from Research Data Catalogues
  - ◇ What about secured data?
  - ◇ What about connecting data?



# Minimum Viable Ecosystem

Not like this....



Like this!





Increasing agreement among

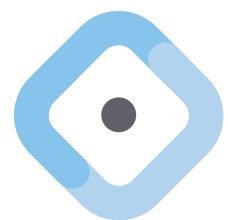
- ◆ Member States and major research infrastructures and e-infrastructures

Integrated approach to research data infrastructures is needed

- ◆ going beyond layers (computing, data storage, use)
- ◆ national & disciplinary silos

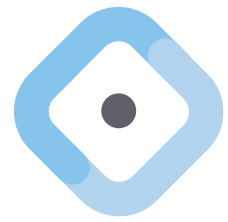




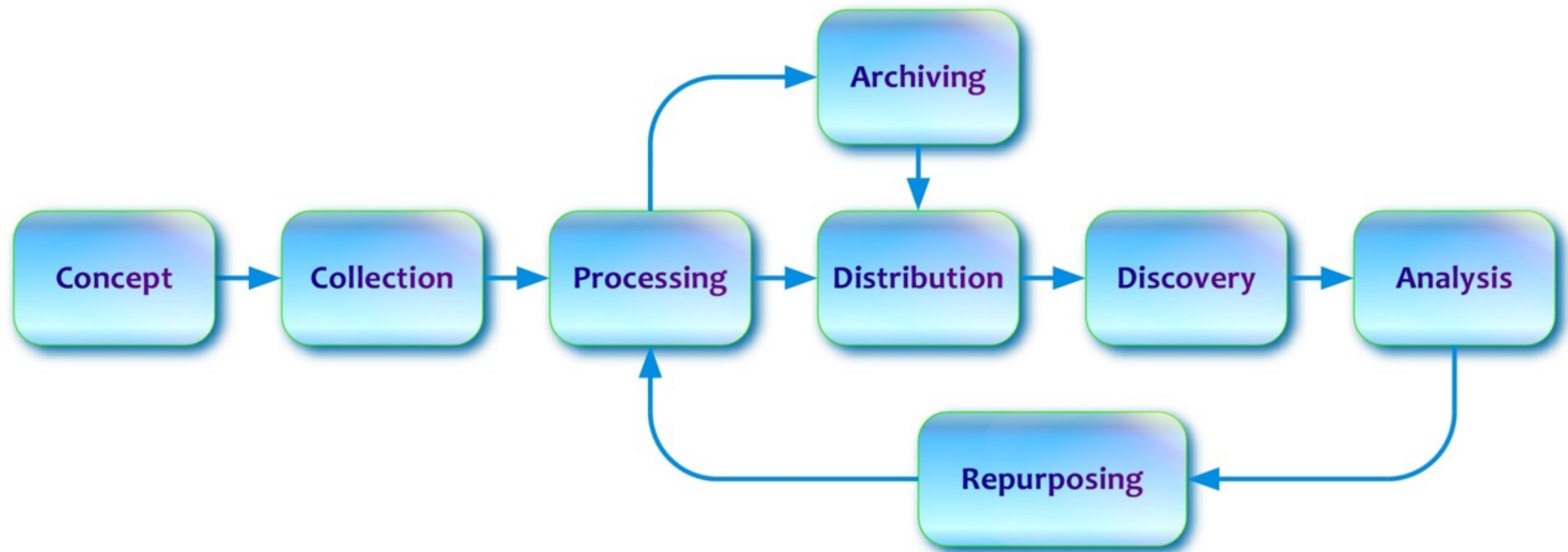


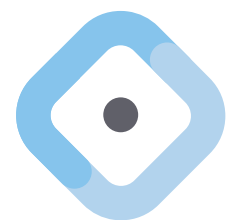
# EOSC - Mission

- ◆ To provide members of Europe's research community with a virtual environment
  - ◆ with free at the point of use, open and seamless services for storage, management, analysis and reuse of research data
    - ◆ across borders and scientific disciplines
- ◆ To federate existing initiatives and structures within a single, consolidated and seamless platform

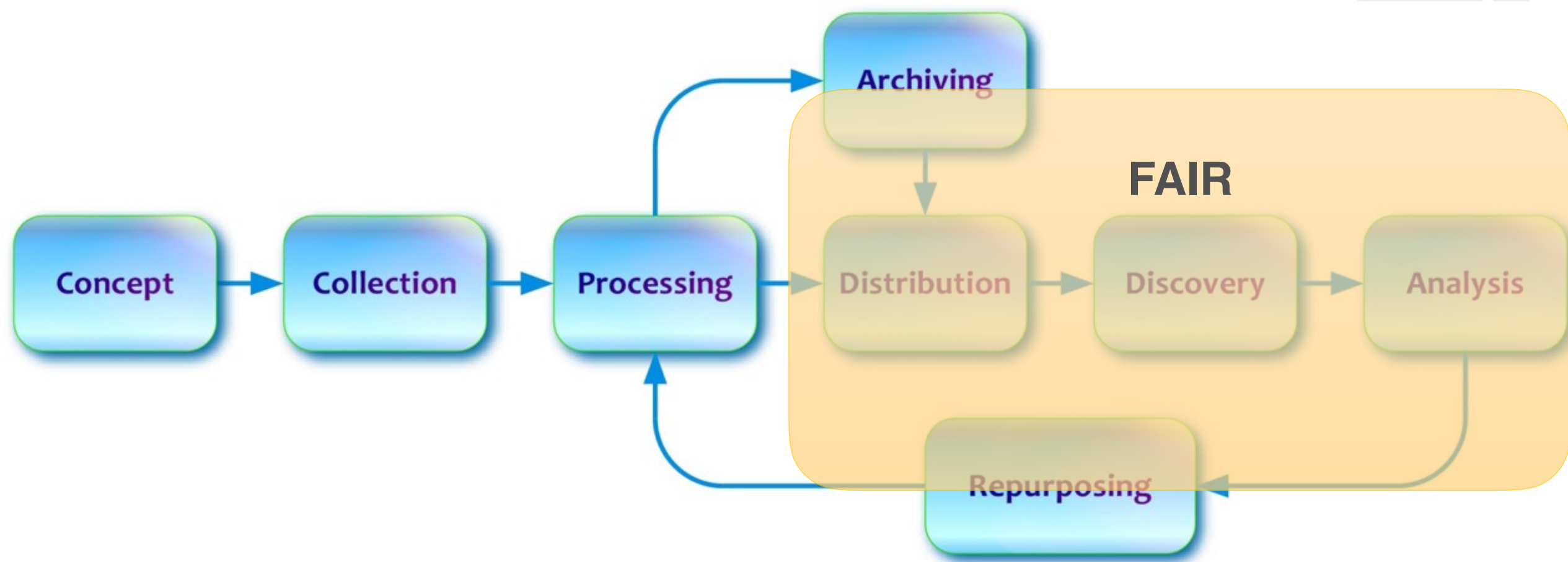


# Data life cycle

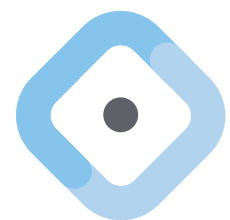




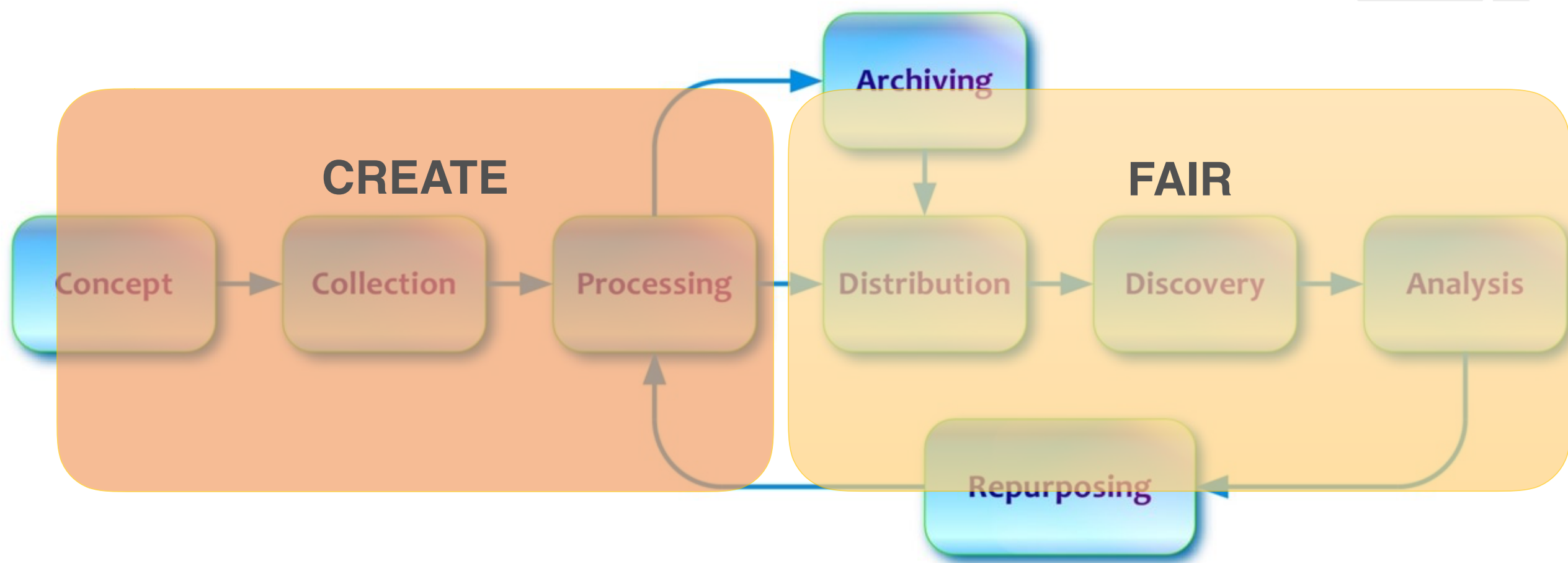
# Data life cycle



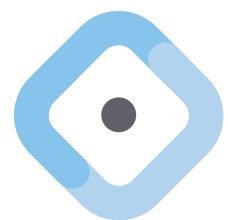




# Data life cycle







# Venice Time Machine







# European Social Survey

**Since 2002, every two years**

**125 000 registered users August 2018**





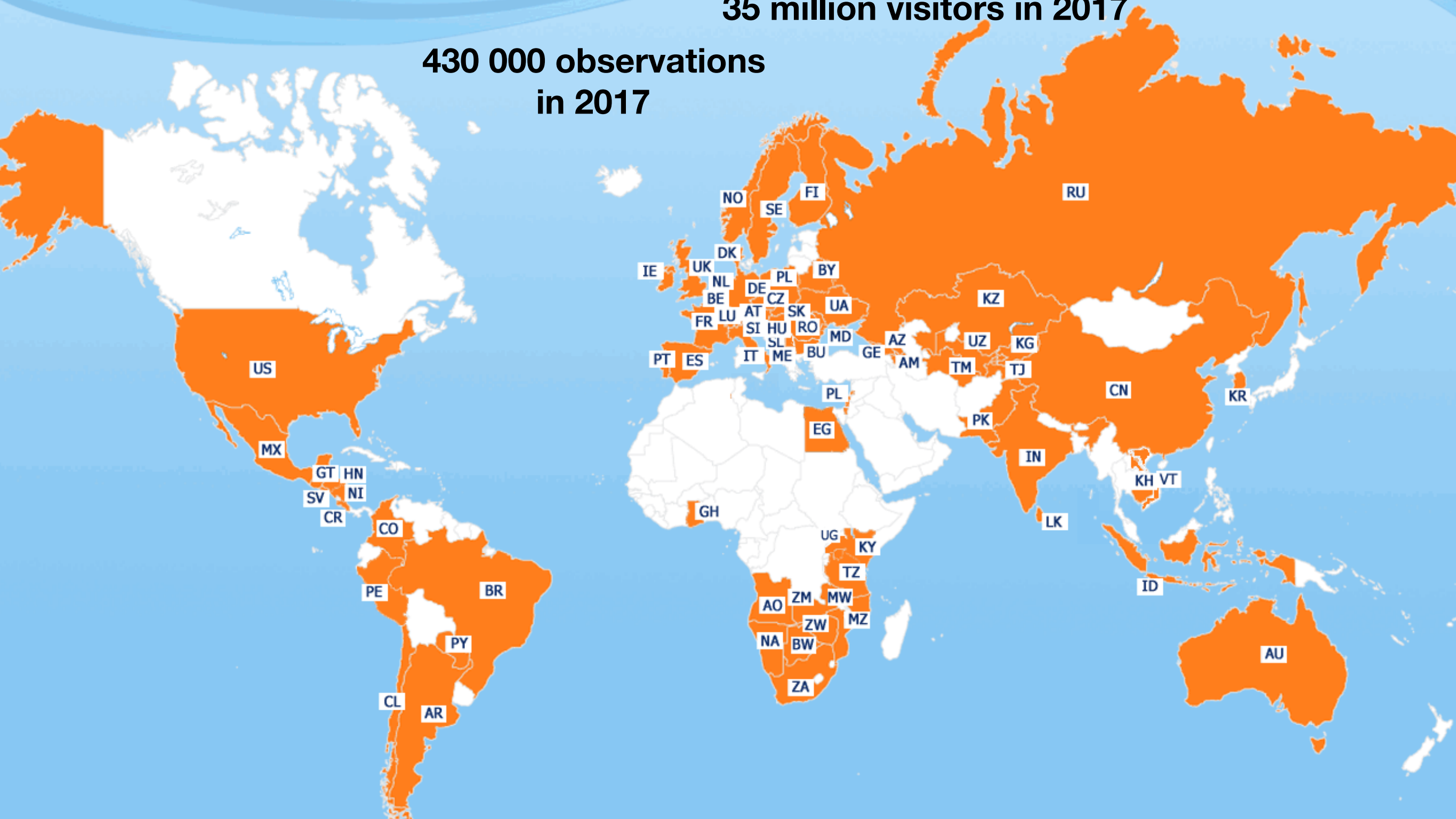
# Wage-Indicator

## Wage Indicator Operations 2012

60 countries —> 92 countries in 2017

35 million visitors in 2017

430 000 observations  
in 2017





**SSHOC**  
social sciences & humanities open cloud

# SSH Open Science Cloud

## ◇ All SSH ESFRI's

- ◇ 47 Partners, 40 Months, 14.5 M€
- ◇ CESSDA, CLARIN, DARIAH, ESS, E-RIHS, SHARE
- ◇ + EVS, Wage-Indicator, 2 research communities, LIBER, Trust-IT

## ◇ Realise the SSH Cloud

- ◇ Maximise re-use through Open Science and FAIR principles.
- ◇ Interconnect existing and new infrastructures.



**SSHOC**  
social sciences & humanities open cloud

**EOSC**

**Research  
(data)  
communities**

**Training**

**Governance**

RESEARCH COMMUNITY  
SCIENTISTS, PROFESSIONALS CITIZENS

**HUMAN-CENTRIC SKILLS**

Fostering Communities,  
Empowering Users &  
Building Expertise

Data Communities



Governance,  
Coordination  
Rules of the  
Game

**TECHNICAL SKILLS**

Innovations in data  
access

Innovations in data production

Lifting Technologies and Services into  
the SSH Cloud



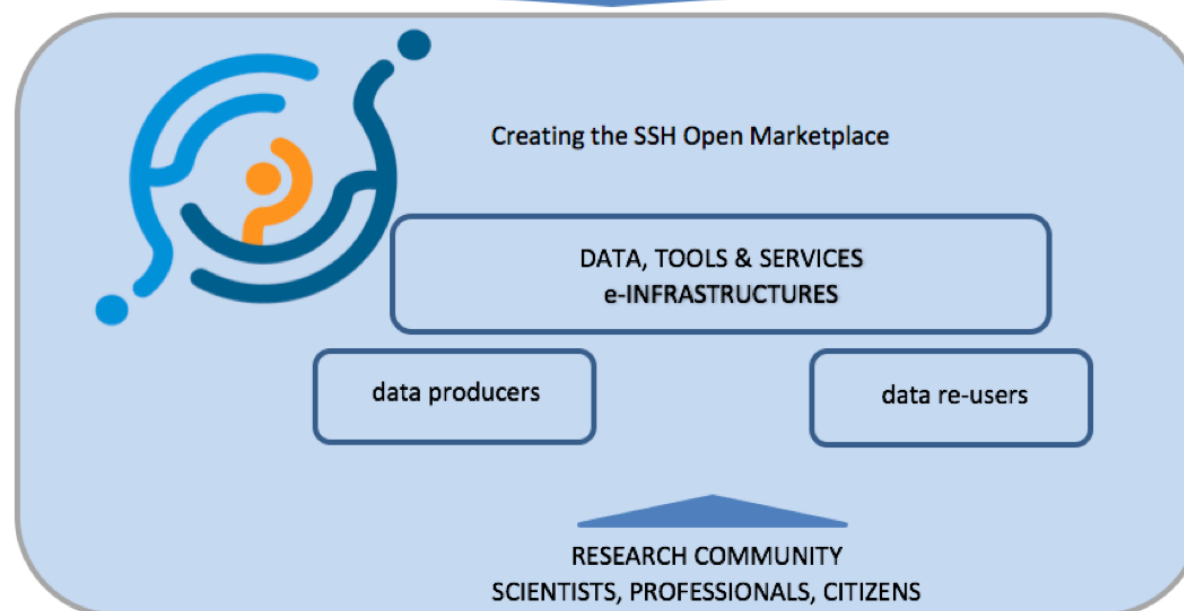
e-INFRASTRUCTURES

**e-Infrastructures**

**Innovation**

**Tools to  
the market**

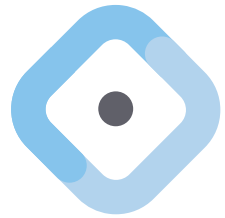
**Marketplace**





CESSDA





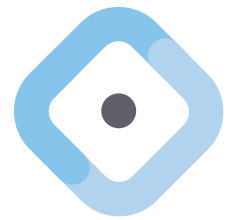
# CESSDA - History

- ◆ Started in the '70s as Data Archives Meetings
- ◆ Member countries
  - ◆ increase the scientific excellence and efficacy of European research
  - ◆ easy access to data and metadata regardless of any borders
- ◆ Decision to become European Research Infrastructure
  - ◆ Countries are the members
  - ◆ National Service Providers at the core
  - ◆ Main Office for coordination





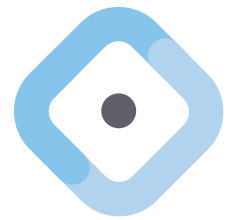




# CESSDA - Mission

- ◆ Provide a distributed and sustainable research infrastructure
- ◆ enabling the research community to conduct high-quality research in the social sciences
- ◆ contributing to the production of effective solutions to the major challenges facing society today
- ◆ Facilitate teaching and learning in the social sciences



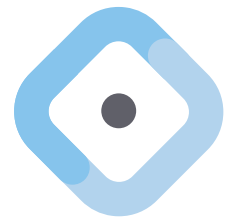


# CESSDA - Benefits

## MEMBERS (Countries)

- ◆ European Research Infrastructure
  - ◆ Trusted Repositories
- ◆ Cooperation & Coordination
  - ◆ Efficiency



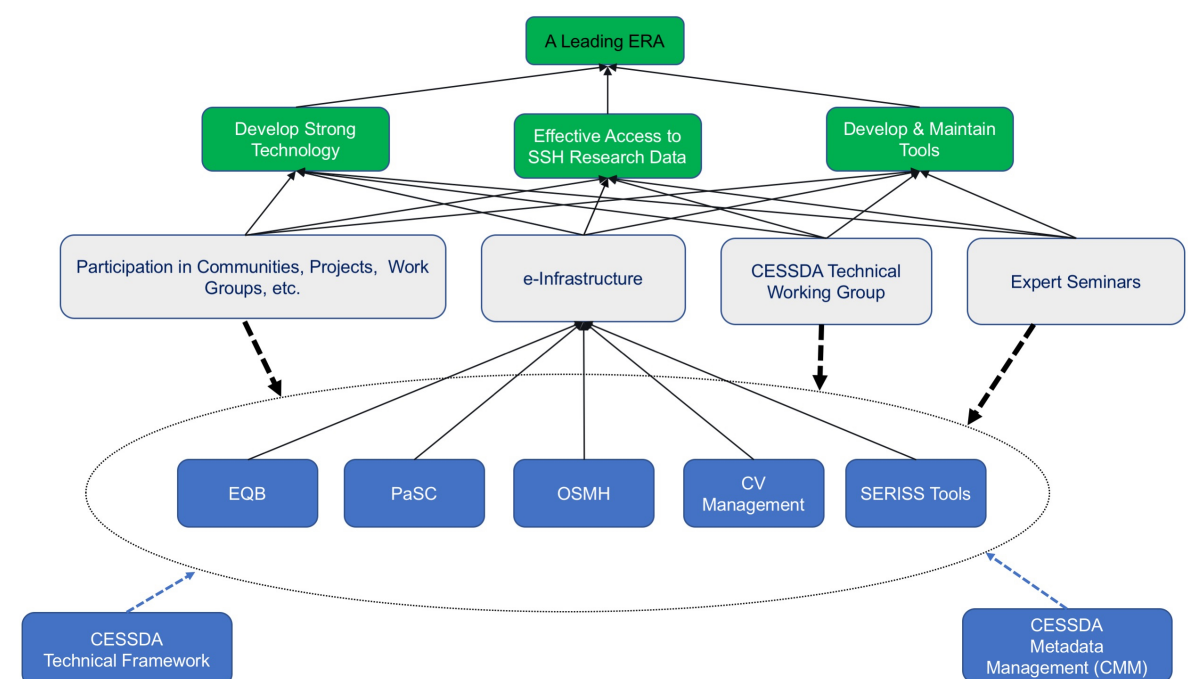


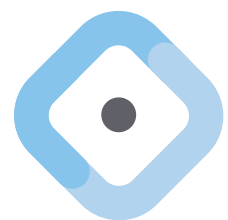
# CESSDA - Benefits

## SERVICE PROVIDERS

- Sharing Expertise
- Scale: Efficiency, Standards, EC funding
- Common Technology

Technical Vision, Goals, Actions





# CESSDA - Benefits

## DATA PRODUCERS

◆ Easy & Safe Deposit of Data

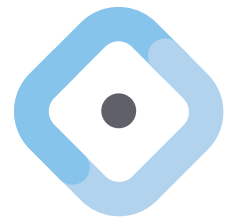
◆ Visibility & Credits - Data Citation

<http://dx.doi.org/10.5255/UKDA-SN-6969-1>

Prefix [allocated]		Suffix [chosen by institution]	
URL of DOI Foundation server for directing users to the DOI	DOI registry	Registrant (UK Data Archive)	Object: British Social Attitudes Survey, 2010

◆ Compliance with Funder Requirements

◆ Training - e.g. Research Data Management



# CESSDA - Benefits

## DATA USERS

- Find & Access Relevant Data, Use Interoperable Data
- Training & Sharing Expertise - e.g. Data Discovery
- Secured Access to Sensitive Data

### Remote Access





# Strategy

## TRUST



## TRAINING



## TECHNOLOGY



## TOOLS



	TOOLS & SERVICES	Data Users	Data Producer	Service Providers	Members
Available	CESSDA Data Catalogue	X			
	CESSDA Metadata Harvester			X	
	CESSDA Metadata Profile			X	
	CESSDA Data Management Expert Guide		X		
	CESSDA Knowledge Exchange (Intranet)			X	
2018	Social Sciences Common Vocabulary Manager			X	
	Social Sciences Multilingual Thesaurus			X	
	Social Sciences Multilingual Question Bank	X	X		
2019	CESSDA Quality Assurance				X
	CESSDA Self-Archiving		X		
	Single Sign On	X	X	X	
	CESSDA Access to Sensitive Data	X			
2020	Social Sciences Data Discovery Tools	X			
	Social Sciences Research Data Management		X		
	CESSDA Data Tags		X	X	



# Data Catalogue

Beta

Language: English ▾

cessda eric

Products and Services Catalogue

Find Social and Economic Research Data

107010 results found in 43ms

Advanced search

Reset filters

Clear search

► Topic



► Collection years



► Availability



► Country



► Publisher



► Language of data files



Results per page

30 ▾

Sort by

Title (ascending) ▾



1

2

3

4

...



["Arma sunt necessaria" \(Arms are necessary\) Guns, Gun Culture and Cultural Origins of the Second Amendment to the U.S. Constitution](#)

Lenz, Michael

Availability

Open



Language:

EN



Go to study

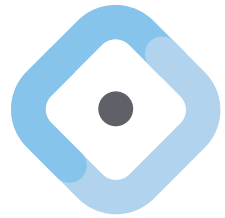
["Being mischievous" and "The man and his wife"](#)

Petzell, Malin

Availability

Open

The study comprises five stories told in the Bantu language Kagulu of Tanzania. The stories are available as sound recordings as well as glossed transcriptions. However, the transcriptions do not closely follow the sound recordings but have been normalised in cooperation with a native speaker.

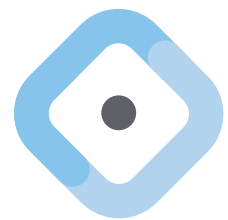


# Metadata Standard

1.	Study Number
2.	Title Study
3.	Principle Investigator Reference
4.	Publisher
5.	Publication Date
6.	Kind of Data
7.	Class Identifier
8.	Classification System Name
9.	Study Area Country
10.	Universe
11.	Type of Sampling Procedure
12.	Type of Mode Collection
13.	Data access
14.	Title of study documentation
15.	Producer of the study documentation

**+ PID for the data set**

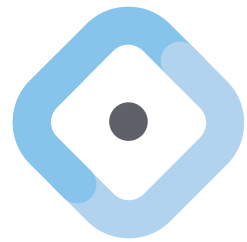




# Training



- ◆ Data Management
- ◆ Data Discovery
- ◆ Expert Seminars
- ◆ Nationally: summer schools, methodology, ...



# Remote Access

## Pilots & Projects

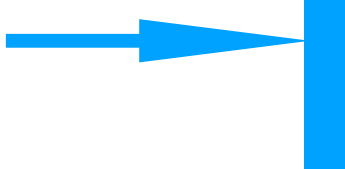
- RAIRD Remote Access Infrastructure for Register Data

- Norway: NSD & Statistics Norway

- ERAN: European Remote Access Network,

- led by Germany - GESIS

Original Data

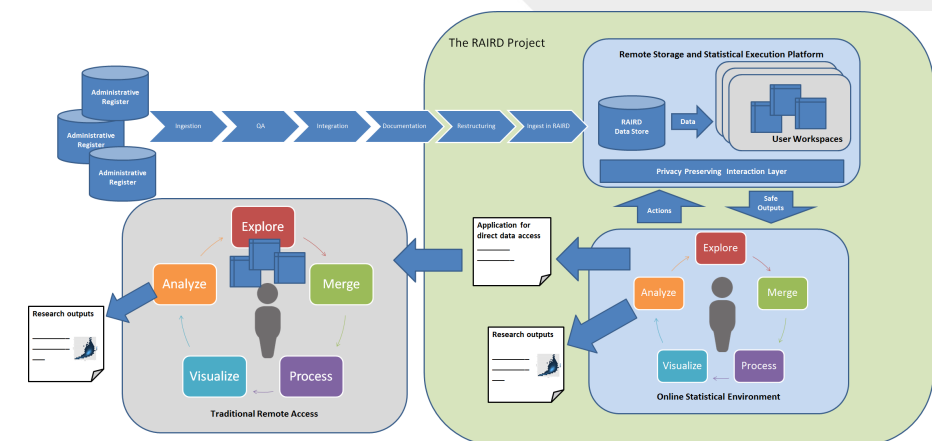


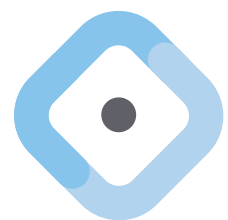
Relevant Subset

User Workspaces

Privacy Preserving Interaction Layers

Online  
Statistical  
Environment





# Forward look - KP9

- ◇ Missions
- ◇ BOHEMIA Foresight Report: transitions on the horizon



**INNOVATION - harnessing the forces of change**

## **SOCIAL NEEDS**

providing for the needs of people

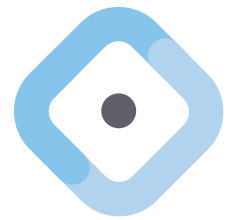


**GOVERNANCE**  
joining forces for  
a better world

**BIOSPHERE**  
safeguarding a hospitable planet







# Conclusions

- ◆ Relevance of Data Infrastructure
- ◆ Need for Coordination and Cooperation
  - ◆ International, National, Institutional
- ◆ Role of CESSDA, and its benefits

**We do all this to support researchers  
and make high quality research possible**



The background of the slide is a light blue gradient. On the left side, there is a dense cluster of small, semi-transparent blue spheres of various sizes, some of which are slightly out of focus, creating a sense of depth. A dark blue, semi-transparent rectangular box is positioned on the right side of the slide, containing the text "Thank you" in a white, sans-serif font. Below the text, there is a short white horizontal line.

Thank you

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