FORSbase: Implementing the FAIR principles for social science data archives

Stefan Buerli

FORS
explore.understand.share.

FORS - Swiss Centre of Expertise in the Social Sciences

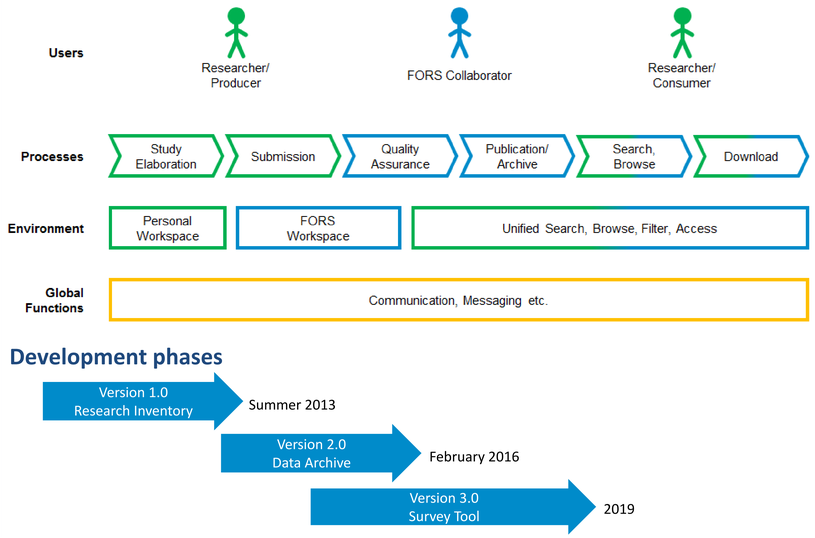
(Inter)national surveys | Data and research information services – DARIS | Methodological research

- The most complete social science research inventory in Switzerland.
- Large number of datasets that cover a variety of topics and are available for download for free:
  - Datasets are longitudinal and cross-sectional.
  - Have been collected by individual researchers and public institutions.

Why and how develop a web-based data archiving platform?

Needs

- Renewal of the infrastructure
- Services covering the entire life cycle of research data
- Simplified archiving, publishing and access
- Integrated workspace for collaborators and researchers
- Promotion of secondary analysis and data sharing



Development phases

- Version 1.0 Research Inventory — Summer 2013
- Version 2.0 Data Archive — February 2016
- Version 3.0 Survey Tool — 2019

FORSbase: FAIR principles

- FINDABLE:
  - Each dataset has its own DOI; Rich metadata freely available
- ACCESSIBLE:
  - Retrievable by DOI, study and dataset metadata freely accessible
  - Most data immediately accessible with an email address from an academic institution
- INTEROPERABLE:
  - OAIS compliant; DDI standard
- RE-USABLE:
  - clear usage license with possibility of customizing access conditions

On a technical note:

- Programming language: Python
- Framework: Django
- Database: MySQL
- File repository: Fedora Commons
- Front-end: HTML5, JQuery, Bootstrap

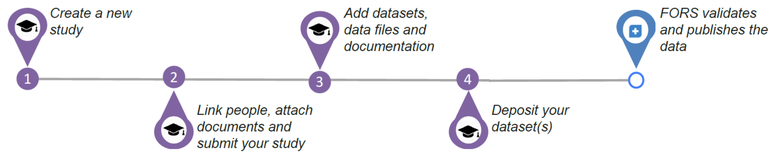
Contact us: dataservice@fors.unil.ch

FORSbase: Key features

1. Online data deposit
2. Online access to the catalogue and data
3. Personal messaging system
4. Single log in

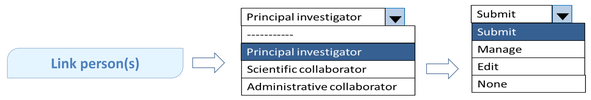
1. Online data deposit

The procedure



Advantages of depositing data in FORSbase

- FORSbase offers researchers a personal workspace to secure and preserve files.
- To facilitate working in research teams, FORSbase allows linking people with different roles and rights to a study.



- The online deposit allows researchers to deposit their data at their own rhythm.
- Data files and documentation can be uploaded.
- Conditions and special restrictions for access can be easily configured.
- The deposit contract and user contract can conveniently be accepted online.

- Data producers receive feedback about the usage of their deposited data.

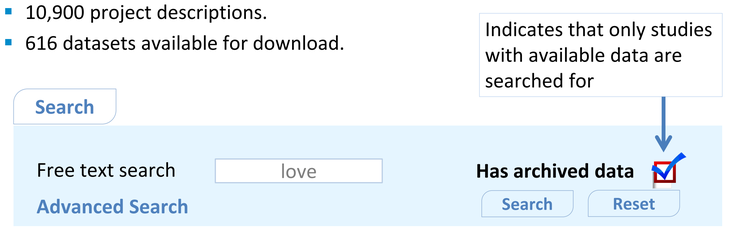
Why share data?

- Data sharing is the future and increasingly required by third parties.
- Deposited data will remain accessible over time and across new technologies.
- Sharing data increases the number of citations.
- By sharing their data researchers can make themselves better known and add visibility to their work.

2. Online access to the catalogue and data

The FORSbase catalogue

- 10,900 project descriptions.
- 616 datasets available for download.



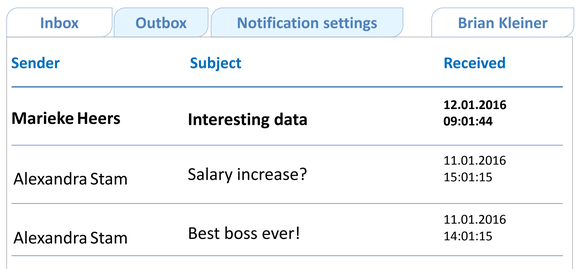
- One Stop Shop.
- Accessing datasets in the catalogue only takes a few mouse clicks.
- Data can be downloaded immediately.
- The workspace has a dedicated place to manage all data acquisitions.
- Metadata and documentation can be accessed without registration.

Why re-use data?

- Analytical potential
  Research data often remain largely un(der)exploited. Secondary data hold important analytical potential.
- Costs and time
  Data collection is an expensive process. With FORSbase, researchers can access data for free and start analyzing immediately.
- Learning and teaching
  Secondary data are a valuable resource for training with real data.

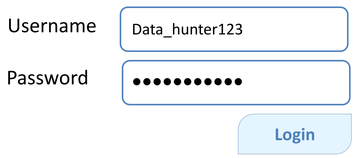
3. Personal messaging system

- Getting connected with other researchers is easy.
- Communication between FORS collaborators and FORSbase users is facilitated.
- Automated alerts/requests concerning downloads of datasets.



4. Single log in

- A single FORSbase account to access the different services.
- FORS Nesstar integration.
- Easier handling of all data users.
- Improved analytics of the FORS data user community.



Start exploring FORSbase yourself: http://forsbase.unil.ch/