A metadata portal for complex research data in Germany: an application of DDI

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David Schiller, IAB
Dana Müller, IAB
Ingo Barkow, DIPF
Introduction

- The Research Data Centre (FDZ) of the German Federal Employment Agency (BA) at the Institute for Employment Research (IAB) is a member of the DDI Alliance.
- While supporting the standard DDI was not implemented in the internal structures of IAB.
- This is currently changed by a project that implements an metadata portal for IAB data.
- The project is carried out by a international consortium lead by DIPF/TBA21.
- IAB internal project lead is done by Dana Müller.
IAB data sources

Social security notifications

BA/IAB data

Employment History

Benefit Recipient History

Participation in labor market programmes

Jobseeker History

Integrated Employment Biographies

FDZ data

Establishment History Panel (BHP)

Sample of Integrated Labor Market Biographies (SIAB)

Linked Employer-Employee Data (LIAB)

IAB Establishment Panel (IABB)

Working and Learning in a Changing World (ALWA)

Panel Study 'Labor Market and Social Security' (PASS)

Surveys
Complicated data sources

- Different data generation processes (surveys and administrational processes with different sources)
- Combined data (surveys and process generated data)
- Spell data (e.g. income spell, biographical spell)
  - Time period with identical characteristic
- Episode data
  - Generated to put overlapping spells into a fixed time frame (e.g. calendar year)
Features of the new meta data portal

- Accessibility (e.g. for people poor eyesight).
- Use of sustainable interfaces (e.g. via using DDI 3.2).
- Linking to IAB labor market keyword list.

- And more… (see next slides).
Import of XML files from Stata
Import of questionnaires
Incorporation of multiple data sources
Import and support for multiple sources

- IAB cares about different data sources:
  - Existing data sets stored in Stata.
  - Data sets deriving from questionnaires.
  - Process generated data from multiple sources.

- All of them have to be incorporated in the data documentation system without running into issues of non-working interfaces.

- Solution: use of exchange standards to import information.
The future – even more data sources

- IAB offers a powerful source of research data.
  - Information about everybody how was employed from 1975 on a daily basis.
  - Additional information coming from surveys to enrich the process generated data.
- In the future linkage with surveys not generated by IAB and with other process generated data sources (including Big Data).
- Current exchange format of choice – DDI 3.2.
User roles management within IAB
Structure of IAB data creation process

- A number of departments are involved:
  - ITM – extracting research data out of the data warehouse of the German Federal Employment Agency
  - Different departments (like “education and employment over the life course”) – caring about survey belonging to their topic of interest
  - KEM – methods department responsible for data editing issues (weighting etc.)
  - FDZ – Research Data Centre giving access to external scientists

- Consequently: need for data documentation tool that supports the data creation process.
User roles within IAB

- Administrator (IT) – god father of software solution
- Administrator (FDZ) – responsible for issues related to final release of data documentation
- Administrator (Departments) – responsible for department related data documentation issues
- Editor – user responsible for creating data documentation
- Publisher – user responsible for final expectance of data documentation
- Reader – user only able to look at the documentation
Metadata editor and web portal

1. New
2. In process
3. Publish
4. Outdated
5. Archived

Web portal (public)

IAB data documentation
Outlook

- Software was developed at OPIT (software development company) in Budapest, Hungary.
- Complicated process of implementation into IT structures of the German Federal Employment Agency.
- Currently two equal versions in Hungary and Germany.
- Need for further testing and developing.
- Solution should go live in the 2nd half of 2015.
Thank you for your attention

david.schiller@iab.de
dana.mueller@iab.de
barkow@dipf.de

http://fdz.iab.de
http://www.dipf.de