Research Data Centre (FDZ)
of the German Federal
Employment Agency (BA)
at the Institute for
Employment Research (IAB)

Harmonizing Between Different Agencies Using DDI Profiles

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Outline

- When developing software for data documentation one has to think about how to incorporate the DDI standard
- DDI-L 3.1 is a powerful standard that can support sophisticated data models and data production modes
- At the same time software needs to be manageable and adjusted to the given institution

DDI-L - considerations

- DDI Lifecycle 3.1 / 3.2
- XML Schema
  - DDI 3.1 – about 900 main elements
  - DDI 3.2 – about 1150 main elements
  - Each element might contain a number of sub-elements
  - Some elements are quite domain specific
- High degree of complexity
- Number of mandatory element quite low due to the demands of different organizations or domains

Challenge when building tools

- Normally there is only a need for 50-60 main elements for a given survey or organisation
- But not always for the same 50-60 main elements

- Huge challenge when building software tools
- Especially when it is about DDI import and export functionalities
- The results are likely not interoperable solutions

Example from the IAB Metadata project

DDI Concept for IAB Tools Project

Datei Bearbeiten Ansicht Einfügen Format Daten Tools Hilfe Lesezugriff

DDI Element

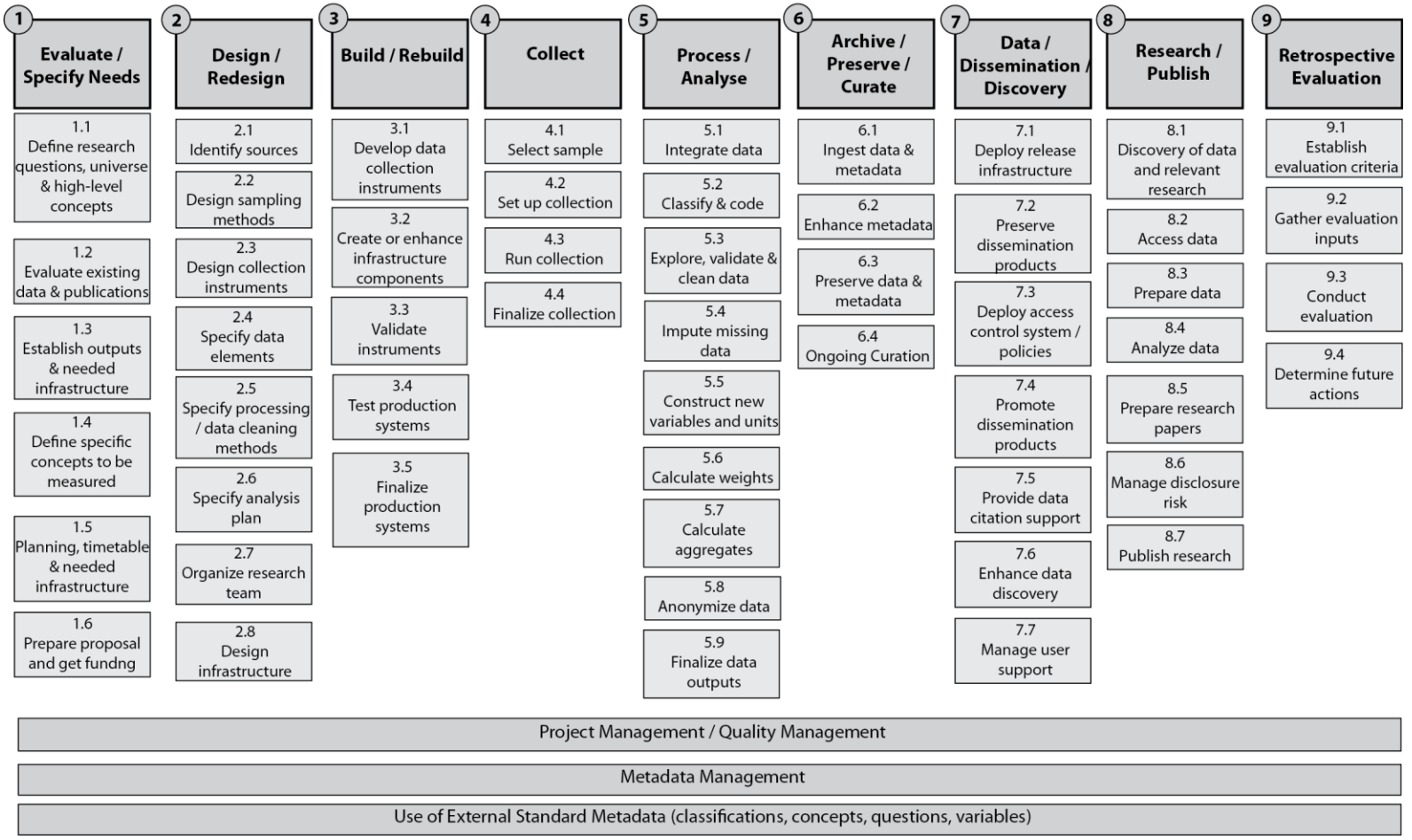
	A	B	C	D	E	F
1	DDI Element	IAB Term	Qbee 0.2	Colectica	Questasy	IAB
2	@time			y	y (*1)	
3	@captureInstrument			y	y (*1)	
4	@panel			y	y (*1)	
5	@geography			y	y (*1)	
6	@dataProduct			y	y (*1)	
7	@languageRelationship			y	y (*1)	
8	Citation			y	y	
9	Citation.Title	Name	Name	y		
10	Abstract	Abstract	Abstract	y	y	
11	AuthorizationSource		-	n	n	
12	UniverseReference	Data unit	-	y	y	
13	SeriesStatement			y	n	
14	ExPostEvaluation		-	n	n	
15	FundingInformation		Funding Funding From Funding To	y	y	
16	ProjectBudget		-	n	n	
17	Purpose		-	y	y	
18	KindOfData	Data type	-	y	n	
19	Coverage		-	y	y	
20	Coverage.TopicalCoverage		-	y		
21	Coverage.TopicalCoverage.Subjects	Topics	-	y		
22	Coverage.TemporalCoverage.ReferenceDate.StartDate	Period Covered from	-	y		
23	Coverage.TemporalCoverage.ReferenceDate.EndDate	Period Covered to	-	y		
24	OtherMaterial		Bibliography	y	y	
25	Embargo		-	y	n	
26	StudyUnitReference		Survey waves	y	n	
27	SubGroupReference		-	n	n	

Solution DDI Profiles by “topic”

- Creating of DDI Profiles is described in an article from 2010
- The idea is to not have individual profiles but standardized profiles by “topics”
- Examples of topics may include: “survey design”, “data collection” or more specific “administrative data”; what else?
- Institutions can than choose the needed profiles for their institution and be interoperable with others

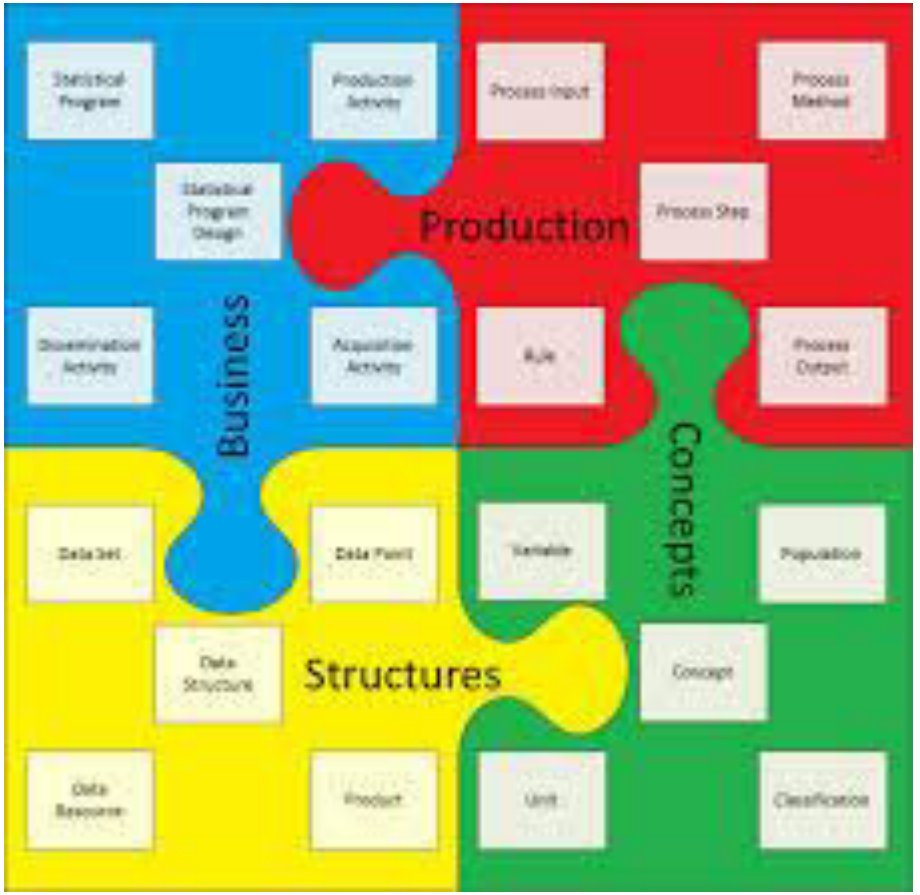
Creating profiles – GLBPM

Generic Longitudinal Business Process Model: Overview



Creating profiles – GSIM

- Create profiles related to the business objects in GSIM (ABS)



Creating profiles – product view

- Requirement for "product-specific" exchange formats
- Dataset description standard (like DDI-C, but with DDI-L elements)
- Questionnaire description standard
- Concept vocabulary standard

→ Potential to create those product-specific standards as DDI Profiles

Standard DDI profiles: Main goals

- Standard DDI profiles should cover the most used DDI elements by topics
- Agencies can choose from those profiles
- This will lead to an harmonized use of DDI
- And to easier exchange between tools and agencies

Summary

- Different approaches to create standard profiles
  - Institutional view (e.g. IAB needs), conceptual view (GLBPM, GSIM), product view (questionnaire, etc.)
- Goal is:
  - to make DDI-L manageable and
  - to ensure exchange possibilities between different software (harmonization between agencies)
  - to prepare shift to DDI-L 4.0
- Useful standard DDI-L profiles need to be discussed and agreed on

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Thank you for your attention

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