



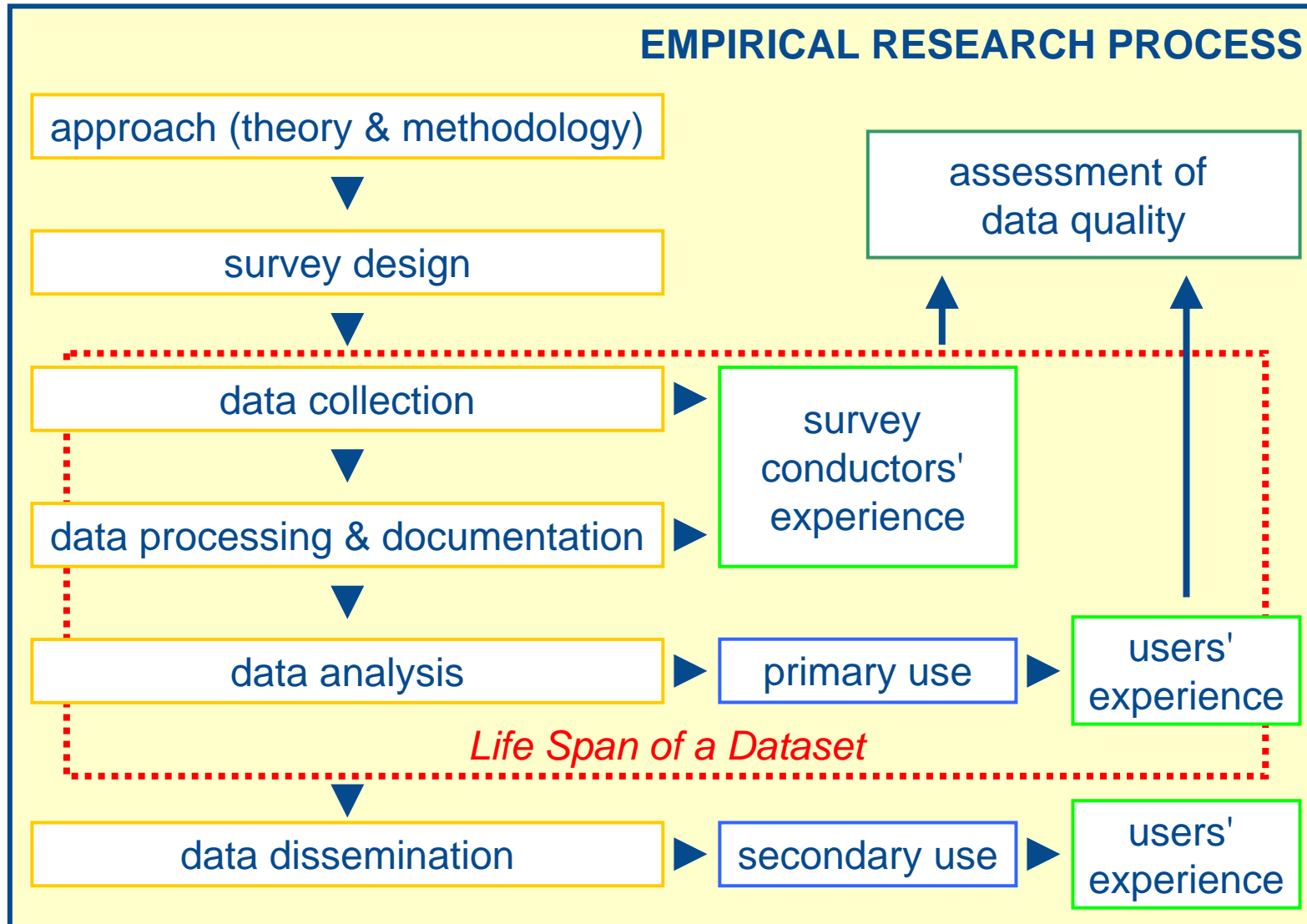
Deutsches Zentrum
für Luft- und Raumfahrt e.V.
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Improving the Usability of a Complex Household Travel Survey – Evaluation of User Requirements –

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Motivation



Users are not Equal – Primary vs. Secondary Use

■ primary user

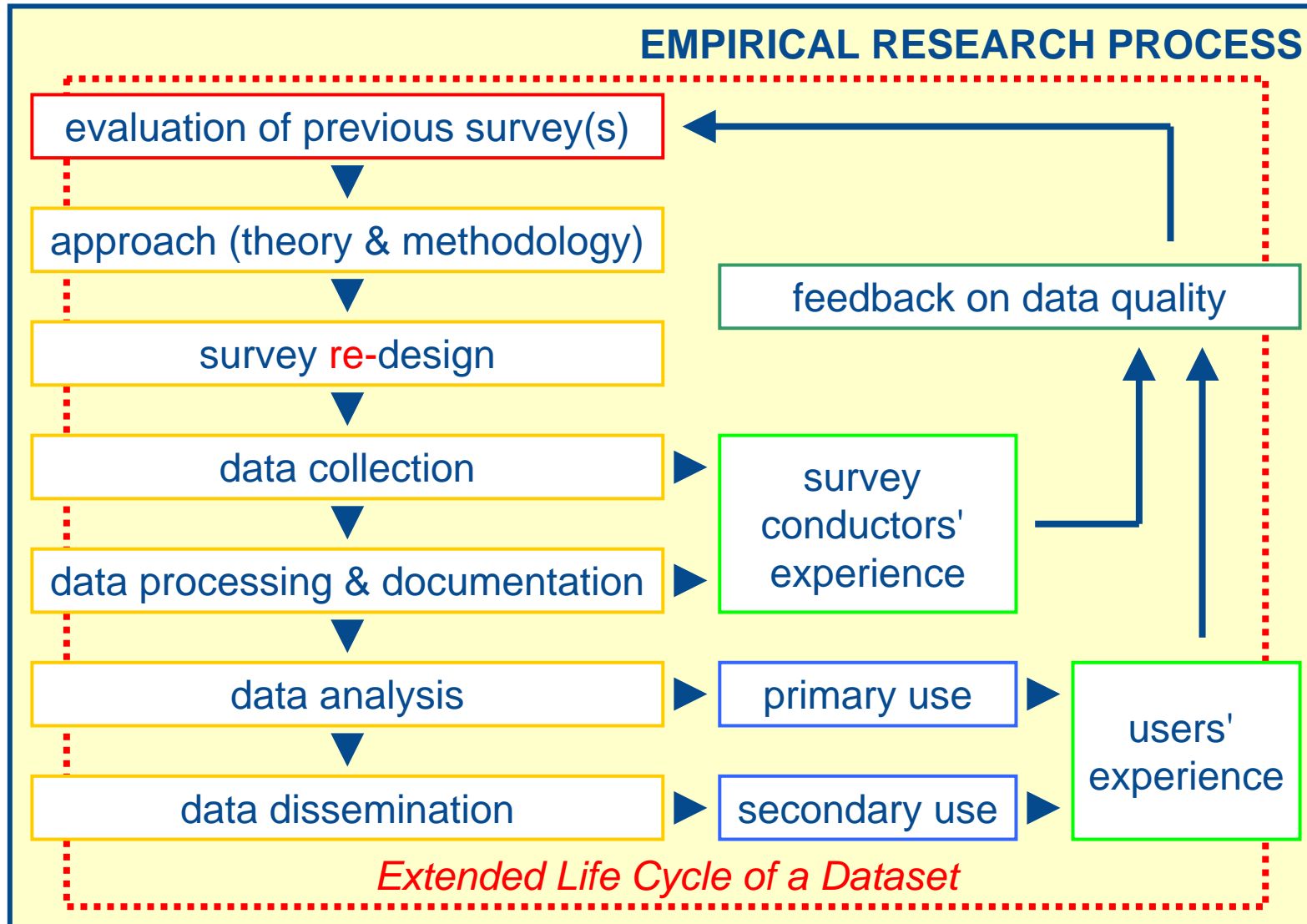
- survey is designed for specific purpose
- sample, content, concepts, method of data collection, data cleaning procedures, final data format etc. perfectly meet initial requirements

■ secondary users

- different research questions based on different theoretical approaches
- need for other variables, classification schemes, file formats, more recent data

 data processing and documentation should reflect that

Extended Life Cycle of a Dataset



Reasons for the *MiD* Survey Evaluation

- continuation of time series
 - long-lasting tradition of former *KONTIV/ MiD* surveys
 - update to be conducted in 2008/ 2009

- primary concerns
 - ensuring comparability with *MiD 2002*
 - identification of obstacles and barriers that hinder an appropriate and effective use of the existing and future dataset
 - suggestions for adjustments and enhancements



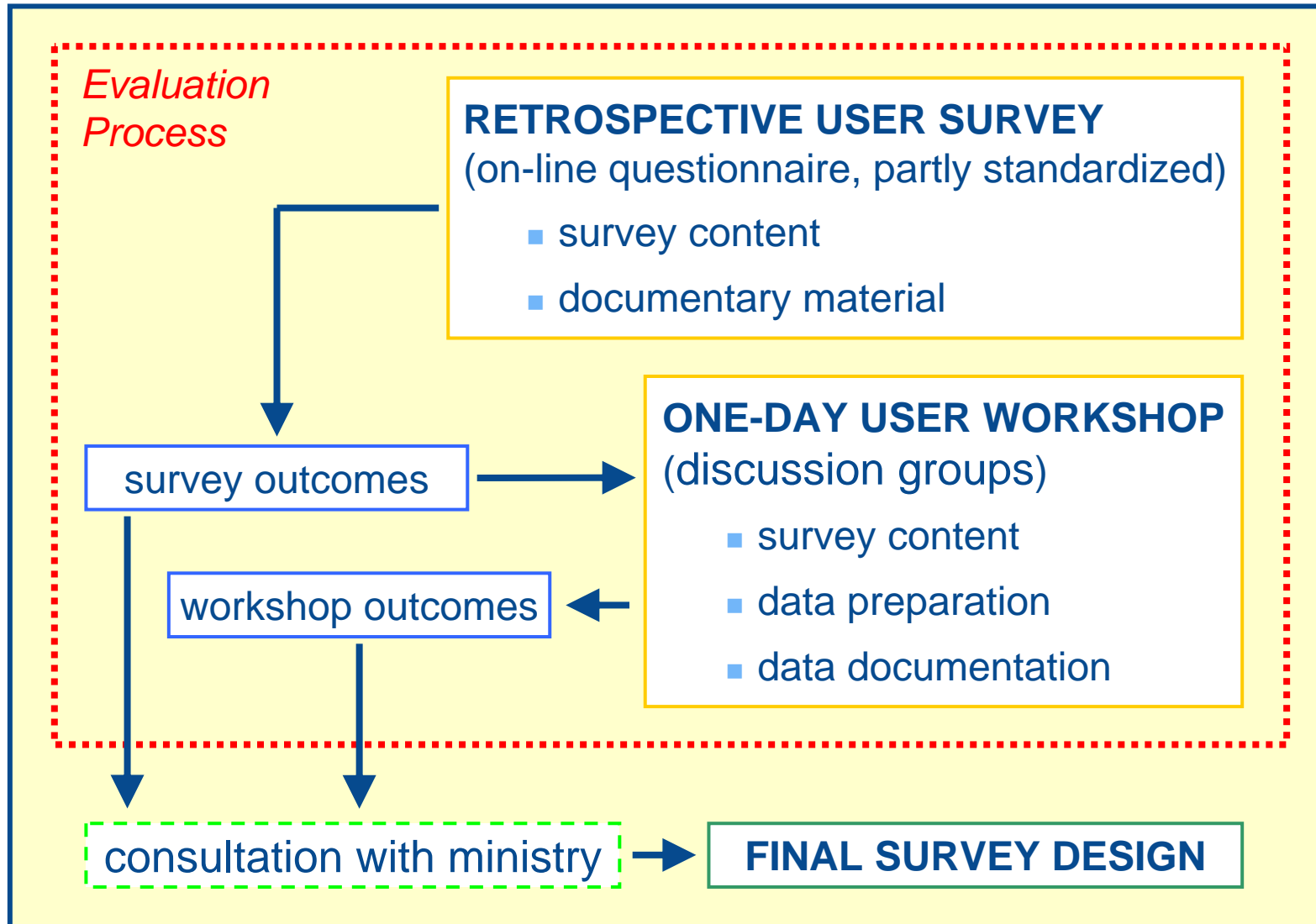
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Advantageous Conditions

- *MiD 2002* has been used intensively for 4 years
 - more than 200 registered users
- competence of institutions in charge of *MiD 2008*
 - *infas* (social and market research)
 - detailed experience with *MiD 2002* (*survey design, data collection, data processing*)
 - *DLR – Clearing House of Transport Data*
 - data dissemination, user workshops
 - close contact with *MiD* users (individual support)
 - detailed insight in user requirements
- strong (financial) encouragement provided by the Federal Ministry of Transport



Evaluation Approach - Outline



Evaluated Issues

- **user's profile**
research, consulting engineer, transit operator, public authority
- **data usage**
character of use, used files and respective importance, necessary effort, difficulties
- **survey content**
missed or dispensable items
- **information/ documentation**
used items, assessment of scope and volume, missed issues
- **data preparation**
file composition, software format, coding, further processing
- **users' satisfaction**
intended re-use, willingness to recommend the dataset



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Resulting Implications for *MiD 2008*

– Content Issues –

Evaluation revealed many – sometimes contradictory – requests:

- additional questions to cover more issues
 - qualitative spatial information (accessibility of selected destinations, options for mode choice)
 - public transit issues (consideration of local fare systems)
 - socio-demographic and gender issues (e.g. allocation of responsibilities)

-
- interesting and reasonable, but:

- unavoidable exceedance of interview length and budget
- risk of impaired comparability



therefore: only a few modifications

Resulting Implications for *MiD 2008*

– Processing and Documentation Issues –

- differing requirements regarding data processing, preparation and documentation
 - provision of public and scientific use files
 - additional trip chain file
 - provision of multiple file formats
 - extended report on methodology (weighting, projection)
 - comprehensive user manual
 - extension of project website

 to be accomplished with reasonable effort

Overall Findings

- data quality goes way beyond statistical characteristics
- besides content: practical usability of a dataset plays key role
 - complete and understandable coding
 - different file and variable formats
- documentation is most important for proper data analysis
- user communities of dedicated multi-purpose datasets are extremely heterogeneous
 - proficient data analysts and inexperienced newcomers
 - various disciplines and research approaches
 - community has to be taken into account during the whole life cycle of a dataset



General Recommendations (1)

- Data are collected to be used – always keep the users in mind!
- Users should be known or anticipated as precisely as possible!
- If preceding surveys are available:
Explicitly include a work package "evaluation of previous utilization" as integral part of the new survey process!
- Do not focus on data collection only – documentation and information are equally important!



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General Recommendations (2)

- Provide dataset versions of different complexity and format to meet different user needs!
- Use established coding schemes (e.g. NACE for economic activities) to facilitate correspondance to other data sources!
- Provide linkage variables such as spatial references (e.g. NUTS) for subsequent enrichment of the dataset!
- Benefit from the users' knowledge – they are valuable experts and user workshops or discussion groups are easy to organize!



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Conclusion

- two-stage evaluation scheme proved to be very useful with respect to the survey's re-design
- active involvement of relevant stakeholders provided valuable insights in a dataset's utilization
- user-centred approach contributes to widespread utilization of valuable data sources
 - various requirements will be met
 - double research effort will be avoided
 - costs will be saved



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Contact & Further Information



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MiD 2008

Mobilität in Deutschland



For further information on MiD 2008, please go to the project web site:

www.mobilitaet-in-deutschland.de

