

# Internet Survey Software Tools

## Using a Survey Data Life Cycle Approach to Assess Features and Capabilities

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# Outline

1. The survey data life cycle model
2. Software features
3. High level software perspective
4. Framework for project planning

## Advantages of Using Survey Software

- Typical pitfalls are avoided with default options
- Quality standards are implemented
- Ready-to-use solutions for possible future problems
- Data integrity
- Ready-to-use datasets
- Extra features
- Security, stability, scalability, performance

# The survey data life cycle model

1. Proposal planning and writing  

2. Project start-up and data management  

3. Data collection and file creation  

4. Data analysis  

5. Preparing data for sharing with others  

6. Depositing data  

7. After deposit – archival activities

The model is adopted from the data life cycle model (ICPSR, 2005, p. vii) to match the specifics of online survey software on the following slides.

ICPSR. (2005). Guide to Social Science Data Preparation and Archiving. Best Practice Throughout the Data Life Cycle. Available at <http://www.icpsr.umich.edu/ICPSR/access/dataprep.pdf>

# Proposal planning and writing

1. Preparation, clarifying the study/survey design (metadata about the project and the survey, e.g. researchers, location, stakeholder, project description)

## Project start-up and data management

2. Determining the type of investigation, the main method
3. Construction, creating and designing the questionnaire (question types, process plan, look & feel, customization)
4. Technical set up, programming the questionnaire (GUI, equidistance, DK, NO, JavaScript, fallbacks, templates, syntax checker, system messages, RAID, documented information security management, load balancing, response latency monitoring, intrusion detection systems, short cuts for input)
5. Pretest, testing and revising the questionnaire and set up (user roles, tester, versioncontrol, comments, bugtracker, path analysis)

## Data collection and file creation

6. Sampling, recruiting participants  
(list management, e-mails, AAPOR definitions)
7. Data collection, fielding the survey  
(real-time validations, save & continue, SSL, device independency, break-offs)
8. Data processing  
(integration, download, laws)
9. Data cleaning and editing  
(inconsistencies, doubles, filterpaths)

# Data analysis

- 10. Data analysis  
(deskriptive und statistical tests)
- 11. Reporting  
(charts)
- 12. Distribution of results  
(at end of survey, automatic pdf-documents)

## Preparing data for sharing with others

13. Complete documentation  
(screenshots, all system messages, path information, codebook, process information, project information)
14. Data preparation for archive (e.g. translation) and later stages are not supported by current standard survey software solutions.

## High level software perspective

1. Type of product interface for the administration (**server-side** vs. client-side)
2. Type of product interface for the respondents (**server-side** vs. client-side)
3. Type of server set-up (**hosted** vs. in-house)
4. Server platform: programming language, server architecture
5. Language support: In what languages is the software interface?
6. Location and responsibility: Where, Who, Laws?
7. Type of license: free software (z.B. GNU), **non-free software** (proprietary)
8. Pricing strategy: What aspects are considered?
9. Demos and Tutorials: Are demonstrations, tutorials, the handbook or free trials available to allow for an assessment of the product?

# Framework for project planning

- number of questions (including all branches)
  - number of invitations
  - number of complete respondents
  - number of times this survey should be conducted
  - weeks time span the survey should be online
  - weeks time span of project
  - hrs time allocated for technical set up
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- contact method and mode
  - personalized or anonym survey
  - open survey or survey with restricted access
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- types of questions
  - types of answer design
  - necessary requirements (e.g. compliance to laws about accessibility)

## Future of Online Surveys

- Convergence of different modes into one survey suite  
Web, CATI, paper, mobile -> Mixed mode
- Integration of technologies, e.g. geotracking, medical appliances, eyetracking

## Summary

- Software companies focus their development on features to accelerate set-up and reporting.
- Quick-and-dirty surveys are very easy to conduct and doubtful in their quality. They compromise the reputation of public opinion research (cf. statements from AAPOR and German associations).
- Good documentation practice (e.g. DDI) is necessary and effective to maintain a high quality standard but still needs manual work.

# Thank you

Visit our webpage for more information and other resources:

<http://www.gesis.org/Methodenberatung/Datenerhebung/Online/software.htm>