

Choosing survey software

How to decide and what to consider

(WebSM Guide No. 1)

Lars Kaczmirek *

November 2004

Contents

1. Why software and online surveys	2
2. What software does not solve	2
3. What you are aiming at	2
4. Practical considerations	3
5. Getting the questions online	3
6. Features to look for	4
7. Summing up	4
A. Checklists	5
A.1. Checklist: Your Survey	5
A.2. Checklist: Basic Features	5
A.3. Checklist: Intermediate Features	5
A.4. Checklist: Additional Features	6

*Center for Survey Research and Methodology (ZUMA), Mannheim, Germany.
E-mail: kaczmirek@zuma-mannheim.de
URL: <http://www.gesis.org/zuma/>
Personal Homepage: <http://kaczmirek.de>

1. Why software and online surveys

Using software to set up online surveys combines several advantages, the main reason often being cost issues. Software can speed up the implementation process of a survey, while allowing for various configurations, features and designs at the same time. There are great expectations: An online survey saves paperwork, instructors and participants do not need to be in one place. Extra hours for data entry are obsolete. Invitation and tracking of participants is far more easy than with traditional surveys. Combining e-mail with online surveys eases the organization and process of data gathering while maintaining an overview during all stages. Once the survey is online there is a great amount of possible time saving: It is easy to repeat the survey in several rounds and filter based surveys are easier to use for participants. With a thoroughly designed software product one benefits from automatic, standardized documentation of the survey process and the questionnaire and avoids common pitfalls in online survey design.

2. What software does not solve

Personalization and anonymity can be implemented but might also be a challenge for software programmers and software users. With online surveys more time and effort must be spend to set up the questionnaire. Where previously the written document is the last phase before going into the field, now the whole questionnaire need to be technically implemented. This means for example, checking possibilities for filters, defining valid answers, deciding about the type of questions and answers in terms of the software. The data set has to be defined together with variable names and the coding scheme. Soundly designed software helps to avoid fuziness during this stage which otherwise might lead to inconsistencies in the data set and thus to problems in the analysis which are difficult to tackle.

Challenges discussed in survey methodology also arise in online surveys. Sampling, especially coverage can be a problem, as not everybody is computer literate and has an internet connection. Nonresponse might even increase due to the perceived anonymity and problems with e-mail spam.

Summing up, for long, repeating, homogenous questionnaires with many participants online surveys can be a good alternative to traditional survey design. Furthermore, using good software to implement the survey allows you to concentrate your efforts on the survey itself, instead of puzzling about the technical details.

3. What you are aiming at

Before searching for appropriate software check your needs: Do you want to set up a quick, one shot survey with only a few, less than one hundred participants fast? Or are you planning a bigger project with 1000 or even 10000 participants? Do you want extensive filter techniques or a straight through questionnaire? How long will the survey be online for participation (time in the field) and will the survey be repeated some time

Kaczmarek, L. (2004). Choosing survey software: How to decide and what to consider (WebSM Guide No. 1). Web Survey Methodology Site. <http://websm.org/>

in the future? Try to figure out how many different types of questions you want to implement and what they are like. What kind of design do you need for your answers (the chapter "features to look for" might help you)? How much time are you willing to spend to get familiar with the program (1 hour or several days)?

Ask yourself: are you familiar with online surveys and the methodology of surveys? How much help and advice do you need, if at all? Do you have addresses or e-mail addresses of your sample? Are you planning a personalized or completely anonym survey? Will the participants have free or restricted access to your survey (e.g. allowing multiple participation)? Do you want to implement or use a panel?

4. Practical considerations

After having answered all the introductory questions you are ready to head for the software. Look for demos, freeware and trials. Check out the help pages or the manual to see whether you understand how the program works. Try to set up your easiest and your most complicated question and look at the result on at least two different webbrowsers and with different screen resolutions (800x600, 1024x768, 1280x1024). Are you satisfied with the time it took to get the questions online and the look and feel of the questionnaire? If not, now is a good time to try the possibilities for support (FAQs, Forum, e-mail or even telephone) or try other software.

Some software solutions are freeware or open source. Other software often use license models where the costs depend on the number of participants or the time you want to use the software. Sometimes the free or cheaper versions are limited either in the features (e.g. number of max. questions or pages) or the number of participants allowed.

5. Getting the questions online

How do you get the questionnaire online? The easiest way is to use software which supports a browser interface. This means the whole survey is set up and configured with the use of a webbrowser. On the other hand, if you have a slow internet connection (e.g. modem) you might want to use software with the possibility to set up the questionnaire offline and then upload your work. If you have special demandings and a good budget or programming knowledge in php, html, javascript and mysql you might even want to consider using your own server with local software. But be warned that there are many good reasons to avoid your own software installation and/or development. Usually, only researchers who want to implement things like the following are advised to consider own programming: complex experimental designs, special needs for the presentation of items (timing issues; dynamic graphics), and the need to gather data other than the pure answers (e.g. reaction times; mouse movements; clicks). This might for example apply to researchers of online survey methodology. On the other hand, if your focus is in a topic or subject and otherwise you would conduct the survey for example with paper and pencil you might be well advised to select a software solution.

6. Features to look for

To distinguish between appropriate and inappropriate software according to the task the following list of features might help.

The first part can be considered as a must for useful software: Can the data set be directly exported to your favorite statistics program or at least to a format which can be imported by the statistics program? Is the design of your questions supported (open answer fields; multiple choice: radio buttons, checkboxes; semantic differential)? Do the web pages look nearly identical in the internet explorer, netscape and mozilla? Check the equidistance between the answer categories: Is the space between answer categories perceived as equal, so to avoid answer tendencies due to the layout?

The second part comprises features which make life with online surveys easier and which are a nice addon: Is the program able to import questionnaires from your favorite word processor or text editor (e.g. Word)? When using e-mail, are invitation letters, prenotice letters, automatic reminders supported? Are templates provided which can be personalized? Is it possible to import a list of e-mail addresses? Are statistics during the time in the field available: How many persons completed the survey, number of break offs, number of item nonresponses for each item separately.

The last part consists of features which are not always necessary depending on your survey but which you might want to consider: Are filter based surveys supported? Is there support for panels management? Can one choose between one question per screen design and multiple items/questions per screen design? Is the sequence of items or pages randomizable? Is the navigation which the participants are capable of configurable (e.g. navigation buttons: back, forward, end survey)? What personalization features are available? Are progress bars available? Is the use of pictures or audio, video supported?

7. Summing up

Be aware about the advantages you want to gain by using an online survey while remembering the possible shortcomings. Start with an analysis of your needs according to your survey before you choose a software solution. Check the features you like to be implemented and avoid common pitfalls during the set up of the online survey with a thorough coding scheme and precheck of the software according to your basic needs.

A. Checklists

A.1. Checklist: Your Survey

- ___ Number of times you want to use the survey
- ___ Time allocated for technical set up and getting the paper version online
- ___ Number of participants
- ___ Date range (time the survey should be online)
- ___ Contact method (e-mail, postal letter, telephone, etc.)
- ___ Personalized or anonym survey
- ___ Open survey or survey with restricted access
- ___ Types of questions (sentences, audio, pictures, etc.)
- ___ Types of answer design (check boxes vertical, multiple choice horizontal, open answer fields etc.)

A.2. Checklist: Basic Features

- Data export to favorite statistics program
- Support of the design of your questions
- Identical look and feel in different browsers
- Equidistance between answer categories

A.3. Checklist: Intermediate Features

- Import questionnaires from your text editor
- E-mail support, import list of e-mail addresses
- E-mail support, invitation letter
- E-mail support, prenotice letter
- E-mail support, automatic reminder
- Personalized invitation letters, e.g. with name of participant
- Statistics on-the-fly while the survey is online, completion rate
- Statistics, number of break offs per screen
- Statistics, nonresponse per item

Kaczmirek, L. (2004). *Choosing survey software: How to decide and what to consider* (WebSM Guide No. 1). *Web Survey Methodology Site*. <http://websm.org/>

A.4. Checklist: Additional Features

- Filters (none, overjump some questions, different survey paths)?
- Panel management
- One question per page
- Multiple questions per page
- Randomization of the sequence of questions
- Randomization of the sequence of answer categories
- Configuration of navigation buttons
- Progress bars
- Picture support
- Audio support
- Video support
- Measurement of time
- Measurement of mouse clicks
- Measurement of the use of browser buttons (back, forward, etc.)