Creating and using online surveys

Online surveys are a series of questions and their corresponding answers, delivered through online. The process of delivering an online survey consists of:

- Devising a set of questions and the options for responding to these questions (e.g. discrete options or a range of choices for closed questions; a text box for open questions)
- Delivering the questions in an online format
- Publicising and promoting the survey to achieve a suitable, balanced, representative sample of respondents from a target population
- Collecting the data
- Analysing the data

Most online survey software supports all of these processes, though it is often advisable to use additional means to publicise and distribute the survey and to analyse responses.

Advantages and risks

While online surveys originated in market research, they are now widely used in academic research. Online surveys offer several advantages over paper-and-pencil or telephone-administered surveys:

- administration speed – they reach the respondent in a few seconds;
- lower cost – no personnel or delivery costs;
- flexibility – compared to a paper questionnaire, an online one can be programmed to adapt to previous answers (e.g., only show this question to male respondents over 18 years of age);
- accuracy – minimising transcription/data entry errors
- anonymity – compared to face-to-face and telephone surveys, online surveys offer greater anonymity;
- easier access to specific respondents – those with limited mobility or those in a different geographical location
While there are great benefits to using online surveys, there are also caveats one has to be aware of.

- **Verifying identity.** Compared to face-to-face research, the researcher has less control over the identity of participants. It may be difficult, for instance, to ensure that the respondent is genuinely who they say they are. This may be very important when we have set very specific criteria for our respondents and we would not wish someone not meeting those criteria to respond.

- **Control.** For some studies, it may be important that respondents complete the study in one sitting, but they may get easily distracted when the study is not carried out face-to-face.

- **Sensitivity.** Some topics may be sensitive and respondents may be less likely to ‘open up’ to a computer-based survey than they would do in a face-to-face secure environment.

- **Follow-up.** It may be more difficult to follow-up on participants if they have not left any identifying details in online surveys. This may be an issue for the research design, if you require the same person to respond several times, but can also affect participant safety. If your questionnaire reveals that you respondent is at risk in any way, it may be very difficult to find their contact details in order to help. This is especially a problem for studies that may upset respondents (e.g. asking about upsetting or traumatic topics).

- **Data security.** When collecting identifying and especially sensitive information, the researcher should ensure data security. The researcher should ensure that no one other than the research team has access to this information and that it is stored on a secure server.

- **Data protection.** There are also legal problems concerning data storage. In the UK, data storage needs to comply with the Data Protection Act, however this becomes a problem when using online survey software stored in servers not complying with the Act (such as servers in the USA, where most online survey platforms are located). Therefore, when carrying out research which involves sensitive data, the researcher has to make sure that the platforms they use comply with UK and European legislation. The best solution would be to use a platform which stores data on your institution’s servers.

- **Bias.** Like all data collection methods, online collection can introduce bias – in this case the risk that people with better online access and more confidence will be more likely to complete the survey.

### What can online surveys be used for?

Researchers use online surveys for various types of activities:

1. **Qualitative research.** Online survey platforms may be used to gather qualitative data, such as respondents’ attitudes and opinions captured through open-ended questions.

2. **Quantitative research – Surveys.** Surveys usually present participants with closed questions on a topic.

3. **Online experiments.** Researchers may also wish to see the effect of manipulating a variable on subsequent answers to questions. For instance, within an online survey, they may present different videos to different participants and see the effect this has on participants’ responses.

4. **General use.** Academics may also use survey platforms to gather feedback from students, or create an internal poll to decide on an administrative matter.
Which tool is best?

Researchers use online surveys for various types of activities:

The choice of tool will probably depend on what your institution is using already, whether you have funding for software or prefer a free alternative, and also the nature of your data. As discussed above, if participants’ responses are anonymous you can pretty much use any tool (make sure you do not record participant IP), however if you gather identifying information and especially sensitive data, you may wish to ensure that the data is on your institution’s server.

The starting point for choosing a tool should be your research group or IT specialist, as they may be able to tell you about the tool currently used in your department. However, if you find that these are unsuitable for you, then you could try some of the resources presented below.

Some platforms are better suited for creating individual accounts, such as Survey Monkey, Survey Gizmo, or Google Docs. Other platforms, such as Lime Survey, BOS, and Qualtrics, are rather aimed at institutions, so you will have to discuss acquiring these tools with your institution.

Finally, most online survey tools offer features that aid the data analysis processes, such as the capacity to link questions, conduct basic statistical operations, generate graphs, and export data into statistical software packages such as Excel and SPSS. You will need to consider how you will be analysing your data before making a final choice.

Features of popular online survey tools

**Survey Monkey**
- Survey Monkey:
- Popular survey tool
- In the free version, 10 questions per survey are allowed and up to 100 responses
- There are several paid packages, with increased responses and functionality
- Exports to Excel; paid versions export to SPSS
- The data is stored externally, on the company’s servers

**Survey Gizmo**
- Paid software
- The standard account comes with unlimited surveys, questions, and respondents
- Students can get a free account (limited to 500 respondents/month)
- Export data to SPSS or Excel
- The data is stored externally, on the company’s servers

**Google Forms**
- Free unlimited questions and respondents
- Part of the Google Docs package
- You need to create a Google Account to access Google Docs
- The data is stored externally, in Google Spreadsheets

**Lime Survey**
- Free and open-source software
- Lime Survey does not host your survey, the software package needs to be installed on an institutional (or personal) server
- For those with some programming experience, they can customise the appearance using the CSS code
- HTML, PHP, and Javascript can be used to customise functions and appearance of questions
- If installed on your institution’s server, the data is stored internally
**Qualtrics**
- Paid institutional software
- Elegant surveys
- Very wide functionality in terms of question types, appearance, question logic

**Bristol Online Surveys**
- Paid institutional software
- Aimed mainly at higher education institutions

**Further information**

Wikipedia has a comprehensive review of survey software, though be aware that this is for business as well as academic research. Check with others in your department and find out what they prefer and what is most widely used in your subject area.