

Designing Web Surveys

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1. Introduction

The request for electronic data collection is increasing both in Sweden and internationally. More and more countries have decided to offer an electronic alternative, not only for surveys to businesses, but also for surveys to households. To keep up with the development, Statistics Sweden needs to be able to offer clients and respondents data collection by Internet as an alternative to the paper questionnaire.

In our organization, work with implementing new systems in electronic data collection is in progress in several directions. In most cases there are several people involved in the construction of a web questionnaire. This is why the questionnaires have different layouts and different techniques lying behind.

A project has during 2003-2004 aimed at making general guidelines to get a uniform layout of the web surveys which come from our organization. The name of the project is: "Layouts for web questionnaires at Statistics Sweden".

2. Working methods

In 2003 a number of persons working with web surveys at Statistics Sweden were interviewed. Some web surveys were tested with different qualitative methods. The results of this work were presented at the last QUEST-meeting.

During 2004 around 40 different web surveys were collected at Statistics Sweden, both business and household surveys. These surveys are spread between different departments and locations (Örebro and Stockholm). The questionnaires have been reviewed and a specification of similarities and dissimilarities in the layout has been put together.

We have been studying recent literature on how to design the questionnaires. We have also participated in international work via personal contacts, courses, conferences, workshops etc.

A "reading-group" consisting of representatives from different departments has read the report and given their comments on the first draft.

In March we had two seminars at Statistics Sweden, where we presented the outline of the project and what guidelines we had reached.

2.1. Restrictions

The concept "web questionnaire" can refer to various types of questionnaires. In this project we have focused on *on-line questionnaires*. While filling in the answers, the respondents stay connected to Internet. The answers are stored immediately.

3. Guidelines and report

A four-page folder with guidelines has been produced, as well as a more detailed report “Comments on guidelines for web surveys”. The report describes the guidelines more thorough. It explains pros and cons with the different solutions and what argues for the chosen solution. There are also some examples of what the questionnaire should look like on the web when using a certain kind of solution.

4. Results

Below is a short description of what we have discussed. These things appear in the report as guidelines and recommendations.

We have had a close cooperation with a project which works with a new system for business surveys on the web, ELIS. In this project they have discussed what **start- and concluding pages** can be needed in different kinds of surveys. In our project we have then discussed what information and functions the different pages should contain.

The **background layout** that we recommend is very similar to the homepage of Statistics Sweden. This is done deliberately to make the respondents relate the web questionnaire to our organization. We have focused particularly on what **functions** always have to be displayed in the head of the page and what functions are optional.

Pros and cons with having **one or more pages** in a web questionnaire are explained. To divide the questions into different **sections**, with a **heading** for each section, is a good way to make the questionnaire clear and easy to follow. You should use a **dividing bar** between questions, including any instructions and response categories.

We have formed guidelines about **font size** and **font style** of questions, instructions, response categories, headings etc. One section describes how to **number headings, sections, questions, tables** etc.

Navigation is important in a web questionnaire. What **functions** are needed and when and where are they to be displayed? How should questions, instructions and response categories be arranged to make the questionnaire easy to follow?

There are several different kinds of **response boxes**. When to use what type depends on the question. There are, for example: radio-buttons, check boxes, blind menus etc.

What **colors** should be used in tables? Since the use of many different colors makes it hard to read and recognize what is what, you should not use too many different colors on the same page.

There are a few things to keep in mind when creating **tables** in a web questionnaire. We have, together with the ELIS project, decided how tables should be built up and designed to be clear. To make a distinction between the data the respondent fills in and the preprinted information, we recommend a certain color for preprinted data and automatic calculations.

It is possible to use different kinds of **functions** in different kinds of questionnaires. What the functions should look like and where they should appear on the page, we also have recommendations on in the report.

Instructions are a very important part of a web questionnaire. Some instructions should be visible at all the times, while others can be hidden until the respondent chooses to see them.

Data editing is an area which is not really part of the layout, but yet very important in a web questionnaire. One section is about the checking conditions: when and how to inform the respondent about an incorrect data entry.

To motivate the respondents, **feedback** can be used. The feedback could either be displayed on the screen to the respondent's right after the questionnaire has been filled in, or it could be distributed by email, post etc. on a later occasion.

5. Continuation of work

The guidelines in the folder and in the report are guidelines that we recommend will be used at Statistics Sweden. While the web technique is still relatively new, the guidelines will be updated along with further studies. Both the folder and the report are live documents and will be updated continuously.

During the project we have had a close cooperation with the ELIS-project which aim is to build up a completely new web system for data collection. The intention is that all business surveys will use this system. This cooperation will continue since the system still is under construction. They use our guidelines. By doing this the guidelines will be tested in one of the organization's system for electronic questionnaires. In the system there will be fixed rules for the layout of web questionnaires, for example the font size and the font style, colors etc. Consequently, the layout of web questionnaires at Statistics Sweden will be more homogenous than it is today.

Several surveys which earlier have been on paper are changing to web versions. Some of these surveys use our guidelines and we are involved in the work. This results in feedback on how our guidelines work in other technical systems.