The Annual Structural Business Survey: Developing and Testing an Electronic Form

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Abstract

Statistics Netherlands strives for reduction of response burden, by making data reporting for individual businesses efficient and easy. One way to do that is providing electronic forms via the internet. This is also what businesses ask for. In 2004 we started developing the electronic form of the Dutch Structural Business Survey. This was done in a number of pre-tests. An important research issue was whether the paper and the electronic form had to have the same visual design. These pre-tests resulted in the identification of navigational issues, edit rules and visual design issues that make an e-form different from a paper form. Next, a new, downloadable e-form based on these pre-tests was developed. In the spring of 2006 a pilot with 7200 business was conducted. At the beginning of 2007, this e-questionnaire was used for the whole sample.

Keywords: Web questionnaire, pre-testing, usability

1. Introduction

A major issue in Dutch governmental policy concerning data reporting in general is reducing the response burden. As a consequence, the policy of Statistics Netherlands (SN) is reduction of data reporting for individual businesses, as well as making data reporting as efficient and easy as possible (Göttgens, Snijkers et al., 2005). One way to do that is providing electronic questionnaires via the internet (Haraldsen, 2004; Hedlin et al., 2005; Dowling, 2005).

In 2004, a project was started to redesign the paper questionnaire for the Dutch Annual Structural Business Survey. This redesign project created the opportunity to develop an electronic version of this complex questionnaire. In the fall of 2004, this project was started. Both paper and electronic questionnaire were to be used in a mixed-mode survey. Furthermore, the e-questionnaire should be developed in such a way that it would support the completion process.

The electronic form was developed and tested in a number of steps (Snijkers, 2002). Firstly, functional issues of the form were investigated in a usability and pre-test, using a draft version that was similar to the original paper form (Snijkers, Tonglet & Onat, 2005).

This test resulted in the identification of navigational issues, edit rules and visual design issues that make an e-form different from a paper form. This test was completed in January 2005. Bearing all recommendations of this first test in mind, a prototype of the e-form was developed by September 2005. In a second step (completed by December 2005) this prototype was tested, in order to find out how the new form works in practice (Onat & Vis-Visschers, 2005). The last step before the e-form was implemented, was a field pilot conducted in the spring of 2006, in which the usability and data collection process as a whole was tested. In this paper the focus is on the two pre-tests.

2. The Annual Structural Business Survey

For the Dutch Annual Structural Business Survey (SBS) businesses are requested to provide information on benefits and losses, i.e. their complete business accounts. In 2005 a sample of about 70,000 businesses in the Netherlands received a paper form for the 2004 survey, and an advance letter, saying that – among other things – this survey is mandatory. About 45% of the sample receives the questionnaire every year (self-selecting sample part). This concerns the larger establishments with 50 or more employees.

The SBS questionnaire is presented in a booklet of A4 pages with the items on the right page and the instructions and explanations on the left page. The items are grouped into sections (of sometimes more than 4 pages), concerning issues like employees, benefits, costs, and business results. The questionnaire is characterised by many and voluminous instructions and explanations, because SN uses very specific definitions, which often do not correspond to the businesses' definitions. The longest questionnaire for large establishments consists of as many as 40 pages.

The questionnaire is complicated and hard to complete. There are a number of reasons for this (Giesen, 2004, 2005). Firstly the sheer amount of detailed information that is requested. Secondly, a broad range of business information has to be collected, which often means that several departments and also several respondents are involved in filling in the questionnaire. Thirdly, because of the specific SN definitions many *seemingly similar* items in the questionnaire and business

accounts do not match. This means that businesses need to make calculations and alterations to fit their accounts into the questionnaire. And finally, the layout of the paper questionnaire caused misinterpretations and calculation errors. These aspects make the completion process of the form very cumbersome and time-consuming, which results in measurement errors.

With these results in mind the structure and the layout of the paper questionnaire was redesigned, with the help of a professional designer[1]. This came down to:

- breaking the questionnaire down into smaller sections of no more than one page, resulting in a better overview for each section, and less calculation errors;
- using a three-column layout, with a strict order of [item label] - [short instruction] - [answer space], thus connecting items and answer spaces in reading order;
- locating additional instructions and explanations at the bottom of each page, like footnotes, in stead of on the left page;
- restricting instructions and explanations to the most essential information, resulting in short and readable notes.

3. The First Pre-test

The results of the evaluation of the paper form helped in thinking about the visual design of the electronic questionnaire. This study gave a clear view on the response process of this questionnaire (Giesen, 2004, 2005; see also Willimack et al., 2004). However, there were still some research issues to be answered. We had to find out how the e-form would work in practice, and what features had to be included in the e-form in order to make it easy to use. Another important issue was whether the paper and the electronic forms had to have the same visual design. To learn more about these research issues a usability and pre-test study was carried out.

The first electronic version of the form (figure 1) was based on the original paper form and programmed in Blaise[2]. The use of Blaise predetermined the layout conditions. The different sections of the paper form were translated into tab sheets in the electronic version. The tabs were located at the top of the screen and were labelled A, B, C, etc., corresponding to the sections of the paper form. Most tab sheets needed scrolling because they contained so many questions. The

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[1] Robert 't Hart (Metaform, Amsterdam).

[2] Blaise is a computer-assisted interviewing system and survey processing tool developed by SN.

electronic instrument allowed us to program features that would make it easier for the respondent to complete. Features like automatic calculations, checks and additional explanations for specific questions were added. An asterisk (*) before a question indicated that additional explanations were available. These could be accessed by the key combination [Ctrl]-[F1].

Figure 1. The e-form as tested in the first Pre-test

This form was tested in three waves. In the first wave an on-line version was tested by fifteen colleagues of Statistics Netherlands (i.e. Questionnaire lab testers, fieldwork officers, questionnaire developers, helpdesk employees). These colleagues were familiar with the paper questionnaire. The external designer who redesigned the paper form was involved in this project.

In the second wave, the layout of the form was not changed. The only difference was that the form was filled in off-line. The questionnaire was loaded from a CD-rom onto the laptop of the fieldwork officers and the data could be sent to SN in an encrypted e-mail via a Blaise-based program called EDR (Electronic Data Reporter). The form was tested in the field at 37 businesses by six fieldwork officers. The form was filled in by the fieldwork officers during the visit or interview. The businesses were selected in such a way that a variety of branches of industry were included in the study: software development, road transportation, accountancy bureaus, and cleaning agencies. They were medium- to large-sized businesses according to the number of employees, i.e. 50 and more persons.

In the third wave, the (unchanged) form was tested by business respondents themselves. A fieldwork officer and a Questionnaire lab tester visited six businesses and carried out concurrent in-depth interviews. The lab tester was concerned with the methodological issues of the test and the fieldwork officer with the content of the questionnaire. The interviews were video taped. Like in the second wave, a variety of branches of

industry was included: software development, road transportation, and cleaning agencies. The sizes of the businesses varied from 20 up to 100 employees. The questionnaire had to be downloaded from a secured server at SN (an https-address), onto the computer of the respondent. Next he had to log-in to the questionnaire with a username and a password, complete it off-line, and send the data back via a secured internet connection to the server at SN. This wave resulted in the most valuable information.

4. Results of the First Pre-test

The three test waves identified aspects of the response process as a whole: i) mode of the questionnaire, ii) starting up the questionnaire, iii) introduction to the questionnaire, iv) filling-in the questionnaire, and v) transmitting the data. The main results had to do with the mode and the completion of the questionnaire, especially the visual design.

4.1 Mode of the questionnaire

In the test, the questionnaire was presented in three different modes which each had their own benefits and drawbacks. The benefits of the online mode in the first wave are that the questionnaire does not have to be installed on the respondent's computer. The questionnaire is easily accessible; a respondent only needs to be able to use a browser. Transmitting the form is also easy; each time a page is loaded the previous page is stored on the server and is received by SN. The drawback here is, that the questionnaire is long and complex (with many edit rules and checks) which means that a lot of data has to be sent to and forth the respondent's computer and the server. This resulted in unacceptably long loading times (up to 5 or more seconds).

In the second wave the questionnaire was stored on a CD-rom. This made the questionnaire faster. Yet in order to open the questionnaire a program had to be installed in the respondent's computer. Another drawback is that distributing the form on CD-rom on a large scale is very expensive.

In the third wave the form could be downloaded from the internet. Here, the questionnaire was fast as well, because it could be filled in off-line. The drawbacks here are again that a program had to be installed on a respondent's computer. And more specifically, in order to get to the questionnaire the respondents had to type in a long and unusual URL-address, which caused many typing errors. Moreover, the 'S' of the secured server in 'httpS' was often overlooked. After several attempts, respondents needed help from the

interviewers to continue. The installation procedures did not cause major problems. One respondent could not download the questionnaire because of a firewall; here the questionnaire was installed from a CD-rom.

4.2 Filling in the questionnaire

Completing a SBS questionnaire is a very complex and laborious process, which puts a heavy burden on the respondent (Giesen, 2004, 2005). We also have to take into consideration that for businesses there are no benefits in participating. As Willimack et al. point out (2002, p. 225): "Survey participation is considered a non-productive activity, resulting in a cost to the business that does not generate profit." This means that business respondents will not be highly motivated to complete the questionnaire. The usability and the user friendliness of the e-form are of great importance in order to make the completion process less disagreeable for them (Hedlin et al., 2005). Our assumption is that when an already disagreeable task is made difficult through lack of user friendliness, a respondent will get irritated. They could stop or if they would continue they would take the easy way out (satisficing), i.e. complete the questionnaire as quickly as possible e.g. by estimating answers (very likely resulting in measurement errors; Krosnick, 1991). Jansen and Steehouder (see d'Haens & Steehouder, 2000) call this kick-and-rush behaviour, meaning that respondents go straight for the tasks; they read as little as possible, scan for keywords, and seek an efficient response strategy.

Even during the test interviews, with highly motivated respondents, we noticed that they had difficulty filling in the questionnaire. Imagine a respondent sitting in front of the computer, surrounded by piles of accounting papers, document files, notebooks, a calculator and maybe even last years' questionnaire. The respondent reads a question on the PC-screen, turns to the accounting papers on the desk, searches for a pen to make notes, returns to the computer to consult the explanations, returns to the papers, makes some calculations on the calculator, maybe checks the amount with the amount on last years' questionnaire and finally fills in the amount on the computer. Add some possible disturbances like phones or colleagues, and the confusion is complete. It is hardly surprising that, during such a process, respondents become easily confused and get lost when completing the form.

The focus of the test was on the usability and the user friendliness of the questionnaire. Aspects concerned with usability are the visual layout and navigation. Some ideas to improve usability were mentioned by the respondents during the interviews. These ideas

concerned printing, searching, calculating, carrying-over, explanations, and progress indication.

In the test interviews of wave 3, we found that the tabs in the top of the screen were not identified as tabs, and as such they did not help respondents to navigate through the questionnaire. Respondents did not realize that they could skip from one section to the next by clicking the tabs.

Because respondents did not identify the separate sections of the questionnaire, they had no overview of the questionnaire. After completing all items in one tab, and pressing <enter> after the last item was filled in, the cursor jumped automatically to the next tab. To the respondents it seemed that all of a sudden a screen with empty answer boxes appeared. Confused they wondered where all the answers had gone. The interviewer had to instruct the respondent on the use of the tabs. Furthermore, some tabs contained so many questions that scrolling was necessary to find them.

An e-form should be clear and user friendly, like every questionnaire (Dillman, 2000; Fowler, 1995). The layout should help the respondent in finding his way through the questionnaire and indicate their progress. The visual layout of the tested e-form did not meet these needs. During the test, respondents got lost in the questionnaire, were confused and sometimes even did not know how to continue or where to go next. One respondent remarked that a structure like the Windows Explorer would be more logical, with all sections listed in an index on the left side of the screen.

5. Recommendations after the First Pre-test

5.1 Mode of the questionnaire

• As to this long and complex questionnaire, we recommended a *downloadable questionnaire* that will be installed on the computer, and completed off-line. A rule of thumb (as used by the Dutch Tax Office) is that questionnaires of over 25 items should be filled in off-line. It should be possible to complete the questionnaire in several sessions, and by several people from different departments. A downloadable form makes it possible to stop and start again at any given moment. Also, all information concerning the questionnaire and entered data is available, making it possible to browse through the questionnaire while keeping an overview. Furthermore, the time to be on-line is relatively short, in comparison to an on-line version.
A drawback of the off-line version is that it has to be possible for the respondents to download .exe-files. This is not the case for all companies. We expected,

however, that in practice this may not be a big problem. This was based on experiences with the Dutch Tax Office. Since the beginning of 2005, businesses are compelled to use electronic tax forms that have to be downloaded via the internet. This issue was tested in the field pilot (see section 9).
• *Downloading and installing* should be clear and simple. This could be done by putting the questionnaire on an internet site with a simple http-address (like e.g. www.mycbs.nl). The download and install procedures should preferably be in accordance with known conventions as used by MS-Windows.

5.2 Starting-up the questionnaire

• Since the respondent may feel that the questionnaire contains confidential data, the questionnaire may start with a *log-in procedure* so that unauthorised personnel cannot open it.

5.3 Introduction to the questionnaire

• The pre-test study showed that respondents need a clear *introduction to the questionnaire*. After having logged-in, the questionnaire should open with this page, listing information on the structure of the questionnaire, how to proceed, navigate, obtain explanations, fill-in and transmit the data. This page should, preferably, not exceed one screen.

5.4 Filling in the questionnaire

• The visual design should be functional in the sense that it should help the respondent find his way through the questionnaire, and provide information on what has been completed already and what remains to be done. Furthermore, as the evaluation of the paper form showed (Giesen, 2004, 2005), the questionnaire should be composed in a consistent way; each layout element that is not consistent may confuse respondents. In the literature on Web questionnaires, a lot of attention is given to the *visual design and navigation* (see e.g. Best & Krueger, 2004; Dillman, 2000; Dillman et al., 2005; Haraldsen, 2004; Schonlau et al., 2002; Van der Geest, 2001). This indicates that these issues are very important.
• Since this questionnaire only comes once a year, it should be immediately clear how to use it. There is *no learning process on how the questionnaire works*, and if the questionnaire has to be filled in again the next year the respondent probably will not remember in detail how everything worked. This should also be true for navigation. The tabs and the long pages (making scrolling necessary) did not provide a good overview of the questionnaire. A set-up with an index on the left

side of the screen, as is shown in figure 2, is one that looks familiar to computer users.

• *Scrolling* should be avoided as much as possible. Each section should be made to fit on a computer screen, i.e. paging instead of scrolling. The questionnaire should be composed out of small, clear sections.

• The questionnaire should have a *printing* function. This may be a function which asks what section of the questionnaire should be printed, e.g. this section (empty), this section (including answers), the whole form (including answers), or an empty form.

• A *help window for calculations and an entry-search facility* would help in obtaining a better match between accounting papers and the questionnaire items. This facility would help in making completion easier as well as reducing measurement errors (e.g. entering accounting items on the wrong item).

• *Edit rules* for calculations and carry-overs (imputations) should be implemented in the form. Respondents expect the computer to be more than a passive receiver of data: "They expect the computer to perform calculations for them and to help them keep their data consistent by running edit checks for valid data.", as Murphy points out (2005, p. 10). However, these rules should be clear and logical to the respondents. Although not tested in this study, we assume that the same is true for consistency and range checks. Dowling (2005) reports that respondents like edit checks because they want to get it right. Also, they feel that it is efficient in the sense that it "stops me getting a phone call later on", when the Statistical Institute calls back for data cleaning.

However, experiences with computer-assisted data collection (Haraldsen, 2004; Couper et al., 1998) show that edit checks should be implemented with care and tested carefully. Too many interruptions and error messages may frustrate the response process, and irritate respondents. Error messages should give a good description of the problem and it should be clear to the respondent how to solve the problem. Murhphy (2005) found in usability studies of e-questionnaires that error mes-sages are "showstoppers". Even if respondents were free to go on, "they would not continue to the next question unless they could resolve the edit message."

• *Instructions and explanations* should be easily accessible. It should be immediately clear to respondents that explanations to items are present, and that they can be viewed simply by clicking a button. This button should be presented in such a way that they will attract attention. Respondents only look for assistance when they feel they need help. And since respondents are not likely to read long texts, especially not on the screen, and since they scan in stead of read, the explanations themselves should be clear and short.

• While completing an electronic questionnaire, respondents need feedback on their progress. A clear *progress indicator* should be implemented.

5.5 Returning the questionnaire

• Before transmitting the data, the respondent should *confirm* that the form is filled in completely and accurately.

• Technical problems with regard to *the transmission process* should be avoided. This process should be tested carefully.

• The transmission of the data should be confirmed with *a "thank you" message*, indicating that the data have been received. After this message has appeared on the respondent's screen, the send-button should not be presented anymore.

6. The Second Pre-test

Following the above mentioned recommendations and the guidelines presented in the literature on internet surveys, a new SBS e-questionnaire was developed in an iterative process. In this redesign process many experts were involved, like content experts, fieldwork officers, Questionnaire lab testers, methodologists and the professional designer.

The visual design of the new form is similar to the electronic forms of the Dutch Tax Office, and as such respondents are familiar with this design. In the frame on the left the different sections of the questionnaire are presented in an index. This index can be used to browse through the questionnaire. At the bottom of the screen there is a menu bar, with buttons for sending, saving, quitting and printing the questionnaire, as well as a button for the calculator, the help window for calculations and a help-button. Above the menu bar the navigation buttons are located. Additionally there is a yellow affirmation button, with which each screen must be "closed" before the questionnaire can be returned to SN. When a screen has been "closed" a green check mark appears before the section in the index. These check marks also functions as a progress indicator. A respondent can see which sections he has completed and which sections still have to be filled in. Finally there is the content frame in which the questions are presented. Figure 2 gives an example of one screen of the questionnaire.

The questionnaire can be returned to SN in two ways, via the internet or via an e-mail. When a respondent clicks on the send button in the menu bar, several checks are carried out. Firstly, it is checked whether all screens have been "closed" with the affirmation button. Next, it is checked whether a couple of

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essential items have been answered (i.e. some profit and some cost items have to be filled). Then the respondent is presented with the choice whether he wants to send the questionnaire via the internet or in an e-mail. It is indicated that the internet option is preferred. After the data had been sent, a "thank you" message was presented on the screen.

The recommended design was rather difficult to program. The informatics department of SN developed a new computer program, based on Blaise and called Basil, that could build such an advanced visual design.

Figure 2. The e-form as tested in the second pre-test

This questionnaire was tested with ten businesses. An SN fieldwork officer and a Questionnaire lab tester carried out the interviews. First, the aim of the interview (i.e. testing the questionnaire) was explained to the respondent. Next, a letter with the internet address of the questionnaire was handed to the respondent. The two interviewers then observed how the respondent filled in the questionnaire. Afterwards they evaluated the task and the respondent could give his opinion and recommendations.

7. Results of the Second Pre-test

This second test showed that the user friendliness of the SBS e-questionnaire had been greatly improved. We noticed that the respondents enjoyed working with the questionnaire, even though the task had not changed compared to the paper questionnaire. Yet the "fun factor" of the task was greater. The major results we found were the following:

- *Installing the questionnaire* caused no real problems. Though for one respondent it was not possible to download an '.exe-file' on his computer. He had to ask a system manager to download and install the questionnaire on his desktop for him.

- As was said, there were two ways to *navigate* through the questionnaire, the index in the left frame and the navigation buttons. The respondents used both ways, though the buttons were used to browse chronologically and the index was used to skip quickly to a specific screen. The ways to navigate through the questionnaire were clear and needed no explanation. The only thing that might be mentioned was that respondents initially did not understand the function of the *affirmation button*, and used it to browse through the screens and erroneously affirmed incomplete screens. Still, they found out quickly how to use this button correctly.
- The respondents were pleased with the *print option.*
- In this second test it was clearer to the respondents that there were *automatic calculations and carry-overs*. It was also more obvious that these answer boxes were blocked. Several checks were programmed to prevent the respondent making calculation errors. For example, the number of persons employed should always be more than the number of full time equivalents.
- For many questions there are additional *explanations* available. In these explanatory notes for example precise definitions are given, or instructions on how to calculate a certain item. Again, the way to access the explanations is similar to the electronic forms of the Tax Office: a button with a question mark before the question: . During the test we saw that the respondents did not know how to access the explanations. They did not "see" the button. Later the colouring of the button was changed , and this had a positive effect. Now, the respondents noticed the buttons and accessed the explanations more often.
- After the *data were sent* to SN, and the "thank you" message was closed, respondents returned to the send-screen, which was confusing. They wondered whether the data really had been sent.

The experiences in this test showed that the respondents could handle the questionnaire and liked to work with it. Therefore, no major changes were made to the questionnaire. Although, they still loathed the complicated task of filling in the SBS questionnaire

8. Overall Conclusions of the Pre-tests

Completing the SBS questionnaire is a very laborious and complex process (Giesen, 2004, 2005). Business respondents are poorly motivated to complete such questionnaires: they see no benefits, only costs (Willimack, 2002). This results in kick-and-rush (or click-and-rush) behaviour (d'Haens & Steehouder, 2000) and satisficing (Krosnick, 1991): respondents

rush through the questionnaire, misread it, and provide the answers that are easiest for them. When the questionnaire is badly designed, this behaviour will be even stronger, resulting in bad data. Ultimately, respondents will stop responding.

In order to tailor the questionnaire to the click-and-rush behaviour (and preventing non-response and measurement errors from occurring), the first version of the e-questionnaire needed a lot of improvement. A new version of the e-questionnaire was developed in which most recommendations had been integrated.

In general, these recommendations involve making the e-questionnaire clear and logical in every way. This means that the questionnaire should be simple, intuitive and consistent with regard to the visual design and its features. Also the structure of the questionnaire should be logical to the respondent, and should help to maintain the overview. Breaking down the questionnaire into small parts and small tasks may assist in its step-by-step completion. Also a number of features should be built-in to assist the respondent in his task, like calculations, imputations, edit checks, a printing facility, a fill-in window, an entry-search facility, and a progress indicator. These built-in features however should be transparent: hidden rules and hidden features may confuse respondents and make them feel uncertain, even when they are familiar with the paper form. Instructions and explanations should be immediately clear.

At all times the questionnaire should provide instant answers to questions like (see Dillman et al., 2005):
- What am I supposed to do (next)?
- What will happen when I press this button?
- How is the questionnaire built up?
- Where am I? What did I do so far?
- Where can I put these data?
- Where can I get help?

To paraphrase Van der Geest (2001) we can conclude: Web questionnaire design is communication design.

These tests show that completing a questionnaire on the computer is very different from completing a paper questionnaire. These differences include the facts that an e-questionnaire is not just a passive measuring instrument, and respondents expect it to help them. Also reading from the PC-screen is very different than from paper, as is navigating and obtaining an overview. With a computer people are less patient than when reading from paper. This is also concluded by Haraldsen (2004) and Dillman (2000). In order to make the questionnaire work well, the visual design (including character fonts) and its features have to be adapted to the chosen medium. As a consequence, the

e-questionnaire should be designed differently than the paper form. However, we feel that to respondents both paper and electronic forms should have the same look-and-feel, since they are distributed by one and the same survey institute.

Businesses ask for web questionnaires. In 30 interviews with businesses on web data collection, Dowling (2005) found that the internet is considered an efficient and respondent friendly way of data reporting. But, to be an efficient alternative for data reporting, e-questionnaires should be respondent friendly and support the response process (see also Hedlin et al., 2005; Snijkers, 2002). Dowling concludes that when the web doesn't work properly, respondents will return to paper. Here, the web includes the whole process, from logging in to the internet, downloading the questionnaire, completing the questionnaire, to transmitting the data. Once respondents have returned to paper, it is our firm belief that it will be very hard to convince them to use the web again. That is the reason why we put a lot of effort in the development of this e-questionnaire.

In 2007, Dowling and Stettler presented the same conclusions, based on research in the UK and the US. Their conclusion: "It's in the detail."

9. Field pilot

Now that we had developed the e-questionnaire, the next step was putting it to the test in the field (Snijkers, 2002). In the spring of 2006 a field pilot was conducted. About 7800 businesses received the e-form as shown in figure 2. In the advance letter, website, username and password were listed; a paper form was not mentioned. A leaflet with additional information on the new web survey and SN was included.

The pilot did not reveal any major "showstoppers". A preliminary analysis showed that 4% of the respondents (who responded before a reminder was sent out) could not install the e-form and asked for a paper form, the response rates were about equal to the paper mode, and a mixed-mode analysis did not indicate major mode-effects. Also 25 respondents were contacted for an evaluation interview: 17 respondents were contacted by phone, 4 were visited for a concurrent in-depth interview and 4 retrospective in-depth interviews were conducted. These evaluation interviews did not reveal major recommendations with regard to the design: the form was considered very user friendly, e.g. because of its resemblance to the tax form. However, improvements are always to be made, e.g. the button with the question mark still appeared to be hard to find for respondents (Giesen & Vis, 2006).

As a result of the pre-tests and the field pilot, we were confident about this SBS e-questionnaire. In the fall of 2006, the SBS was transformed into a web survey, and in the spring of 2007 about 75,000 businesses received this e-form.

Acknowledgements

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