

# How to use edit staff debriefings in questionnaire design

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## Abstract

In one sense, a questionnaire is never complete. Test results, process data and research findings constantly provide reasons to update and improve the questionnaire. At Statistics Sweden we are currently trying to shift the perspective on questionnaire design from a linear to a cyclic one. We are developing a cyclic model in which the questionnaire can be improved continuously in multiple rounds.

In this presentation, we will focus on one stage in this cyclic model. In particular, we will present how we work with editing staff debriefings, a novel approach to provide input to the questionnaire design process. The editing staff is doing a lot of data checking and they have many contacts with the respondents. As such, they have much information concerning problems in the questionnaire. We have tested applying results from edit staff debriefings to the questionnaire design, in a cyclic model, with very good results.

Key Words: Business surveys; Standardization; Editing staff debriefings; Cognitive methods;

## 1. Introduction

### 1.1 Business surveys at Statistics Sweden

Statistics Sweden conducts about 100 business surveys a year. Most of the surveys are recurrent, conducted yearly, quarterly or monthly. Today, we conduct both paper and web surveys but the proportion of web surveys is increasing.

The government has provided some challenges for and demands on Statistics Sweden's business surveys. One is to expand the economic statistics, another is to improve the quality. At the same time, we should reduce the cost for the respondents with 25% within a four-year period. Finally, we should reduce the amount of editing substantially. Today, statistics Sweden is applying selective editing. How should all this be accomplished?

### 1.2 What efforts are required?

One of our strategies to achieve the goals above is to standardize our questionnaires by using guidelines concerning the visual design and how to write questions. Another strategy is to apply a model which enables us to evaluate our ongoing surveys in a systematic way. The evaluations should not be based on mere opinions or suspicions but on qualitative and quantitative investigations.

Previously, we looked at our surveys in a linear fashion. Today we use a cyclic model (see Figure 3). The disadvantage with the linear view was the lack of feedback processes and improvements, which is the strength in the cyclic model. That the model is cyclic, rather than linear, allows us to continuously adjust our surveys according to the respondents' needs and possibilities to submit information. In addition, the model improves the conditions for effective evaluation.

#### Cyclic Model

- Define the Survey
- Questionnaire Design
- Testing
- Data Collection
- Evaluation
- A new round

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## 2. How to use edit staff debriefings in questionnaire design

### 2.1 Evaluation

Evaluation is an important step in the cycle. It needs to be done after every round. The quality policy at Statistics Sweden is that decisions should be made based on facts and information, not opinions. This is for all processes in the production. Facts and information can be quantitative or qualitative or a combination of the two. Quantitative information can be collected throughout the survey process (i.e. paradata). To get qualitative information, however, one often has to conduct separate tests. One such test method is editing staff debriefings.

### 2.2 Editing Staff Debriefings

In many ways, an editing staff debriefing is similar to a focus group. The editing staff that work with a particular survey meet and discuss their experiences, in presence of a moderator from the Unit for Cognitive Methods. The purpose is to find out which questions are problematic and what kind of error indicators that turns up in the editing process. As such, although edit staff debriefing is a qualitative technique in nature, it can provide ideas about how common certain problems are. In addition, the debriefing could also provide information about how the respondents understand the questions and why they are problematic.

Another strength of edit staff debriefings is that they give somewhat different results compared to many other qualitative test methods (such as cognitive interviews). Cognitive interviews include test persons that represent respondents. Edit staff debriefings include the editing staff, and they have other experiences and tend to highlight other types of problems than test persons. Therefore, the two methods complement each other well.

The debriefings are led by a moderator who should examine the questionnaire, letter of introduction and instructions in advance and make notes. The moderator should also interview the survey manager to get an introduction to the survey. To make sure that all aspects are covered in the debriefing, the moderator uses a topic guide (see below). The guide can vary in structure. If one wants a structured discussion, one should ask more specific questions to the participants. During the debriefing session the questionnaire is discussed. The sessions include two parts. During the first, the editing staff discuss their experiences freely and spontaneously. During the second part, the moderator asks more structured questions about all the different variables.

#### Topic guide

Here are the basic contents of the guide:

We start with an overview of the survey. Then, we go on to the details, which mean the variables and the instructions.

- Start with the aims of the debriefing
- Ask the responsible person to describe the editing process from the point where they get the questionnaire back from the respondent to when the editing is finished
- In what ways may the respondent answer the questions (web, paper or a file)?
- What reactions do you have from the respondents?
- Are there any problems with the variables in the survey?
- What are the reasons for the problems?
- Do you think the respondent use the instructions?
- What kind of businesses has problems?

## 2.3 Editing staff debriefing in practice – one example

“International trade in services, compensation of employees and transfers” is one example of a survey in which we have changed the layout according to our standards and results from editing staff debriefings.

The debriefings provided lots of information about different problems. Some of these problems probably wouldn't have been identified with other qualitative methods. Here follows some problems that we identified with editing staff debriefings, how we solved them and some results from cognitive interviews on the re-designed version.

### **No transactions**

The debriefings found that respondents that don't have any transactions towards a counterpart in a foreign country don't send in the questionnaire. Therefore, we started the new questionnaire with a question: “Did the enterprise have any transactions towards a counterpart in a foreign country during period 1 2009?” (See number 1 in Figure 1 below) The respondents can choose between different answers.

### **Transactions and services**

The debriefings showed that transport businesses sometimes report services performed in other countries even though it is only transactions towards other countries that should be reported. To correct this, we added an instruction in the new questionnaire: “The location where a service is produced has no significance; what defines international trade is between which units the transaction has taken place” (see Figure 1:2).

In the cognitive interviews, the information in the new questionnaire helped one test person realize that they had reported incorrect information earlier.

### **Thousands kronor**

According to the debriefings, it's difficult for the respondent to understand the information about reporting data in thousands of Swedish kronor. Therefore, we used boxes for the figures, adjusted to the expected amount of digits and an abbreviation for ”thousands” in the new questionnaire (see Figure 1:3).

The respondents in the test thought this was much clearer.

### **Total and different services**

The questionnaire begins with a summary where the respondent should split a total into different services (see Figure 2:1). The debriefings showed that the respondents usually only fill in one or the other (the total or the different services). And if they only fill in the total it leads to a lot of missing data. Therefore, we started with the specific services instead of the total in the new questionnaire (see Figure 1:4).

The cognitive interviews included three test persons that had only filled in the total in the old questionnaire. In the test two of them filled in the different specific services instead. The third test person couldn't split the total into different services because they only had data for the total.

## 3. Summary

The advantages with editing staff debriefings are:

- You will get a lot of information for a minimal cost
- The editing staff can identify lots of problems
- The editing staff often have ideas concerning what causes the errors
- The results are usually quite different compared to findings from other qualitative methods.

Editing staff have very unique knowledge which can, for a small cost, contribute substantially to the questionnaire design process. Therefore we recommend using editing staff debriefings as a way of developing questionnaires. However, since the results from the debriefings overlap only to a degree with the results from other qualitative test methods (for example, expert reviews and cognitive interviewing) a combination of them will likely give the best results.

Figure 1 New questionnaire:

Här ska information om sekretess, uppgiftsskyldighet och samråd stå.

Utrikeshandel med tjänster, löner och transfereringar  
Kvartal 1 2009

Adress

DFO/IF

Användarid: Verdana 11  
Lösenord: Verdana 11

1. Har verksamheten haft transaktioner med utlandet under kvartal 1 (januari – mars) 2009?

1. Har verksamheten haft transaktioner med utlandet under kvartal 1 (januari – mars) 2009?

2. Vilka intäkter/kostnader har verksamheten haft med utlandet under kvartalet avseende ...

	SCB kod	Intäkter från utlandet	Kostnader till utlandet
... frakt av varor och övriga transporttjänster? Avser endast separat fakturerade godsfrakter mot företag i utlandet. Räkna inte med tullkostnader.			
Vägfrakter med egna fordon/egen personal	151		
Vägfrakter med lejad fordon/lejd personal	152		
Uthyrning/inhyrning av fordon utan förare	407		
Reparation av transportmedel	175		
Väg-, bro- och färjeavgifter	170		
Godsfrakter med fartyg	140		
Godsfrakter med flyg	141		
Godsfrakter med tåg	142		
Övriga transporttjänster och stödtjänster som lagrings-, speditiöns-, transiterings-, hamn- och terminaltjänster	174		

Statistiska centralbyrån  
Statistics Sweden

Figure 2 Old questionnaire:

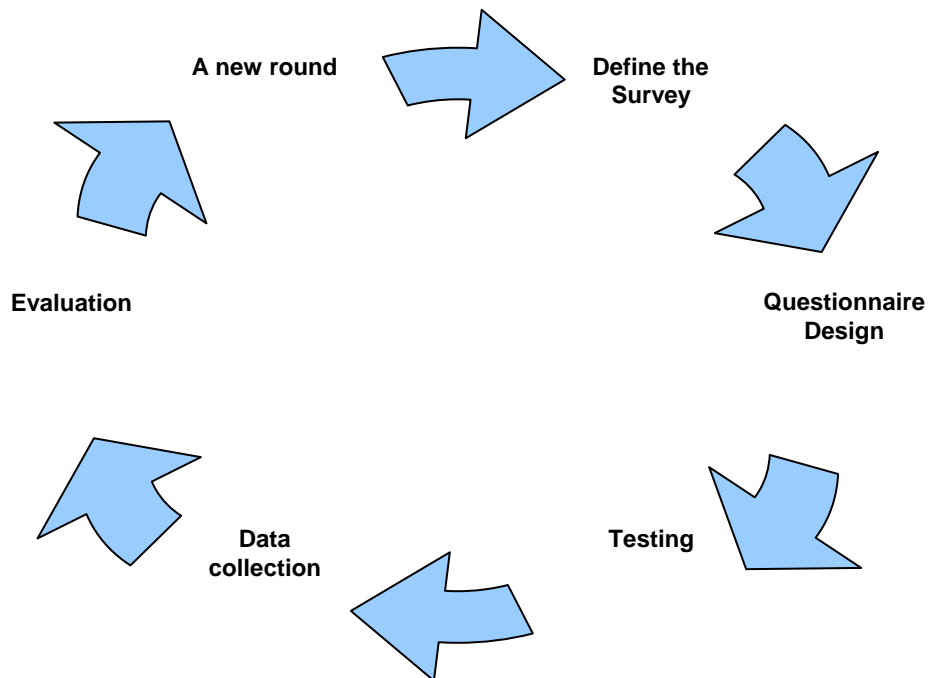
A. Totala intäkter från utlandet och totala kostnader till utlandet

	SCB-kod	Intäkter från utlandet	Kostnader till utlandet
Periodens totala intäkter från utlandet / Periodens totala kostnader till utlandet	010		
fördelas på:			
Varor (exklusive varuanknutna tjänster)	050		
därav i samband med transporter i utlandet:			
- Inköp av drivmedel	167	X	
- Inköp av reservdelar, tillbehör m.m.	168	X	
Tjänster (inklusive varuanknutna tjänster)	090		

B. Intäkter och kostnader från/till utlandet avseende tjänster

	SCB-kod	Intäkter från utlandet	Kostnader till utlandet
Varuanknutna tjänster			
Varor som inte passerar svenska gräns (merchandising)	153		
Provisioner (vid varuförmedling m.m.)	473		
Reparationer			
Reparationer av varor(exkl datorer,byggnader samt transportmedel)	105		
Frakter / tjänster i samband med frakter			
Vägfrakter med egna fordon / egen personal	151		
Vägfrakter med lejad fordon / lejd personal	152		
Uthyrning/inhyrning av fordon (utan förare)	407		
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Övriga transporttjänster (inkl. lagrings-, speditiöns- och terminaltjänster)	174		

**Figure 3**  
**Cyclic model**



## **References**

### An unpublished Paper

SCB (2007), "Riktlinjer för design av frågor och instruktioner och mallar för layout i företagsundersökningar", unpublished report, Örebro, Sweden: Statistics Sweden.