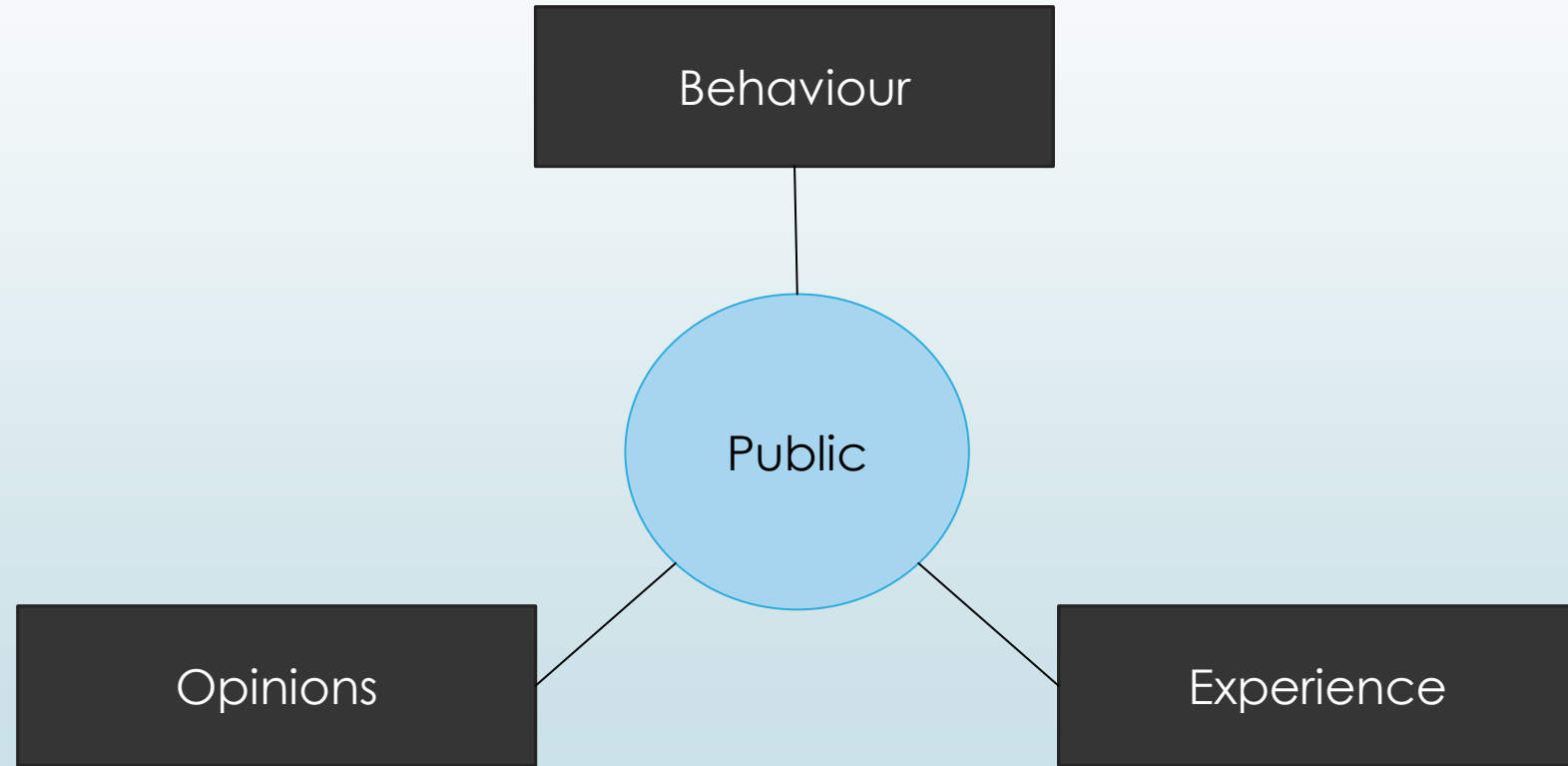




Questionnaire design methods and concerns

-YESODA BHARGAVA

Why do we need Questionnaire?



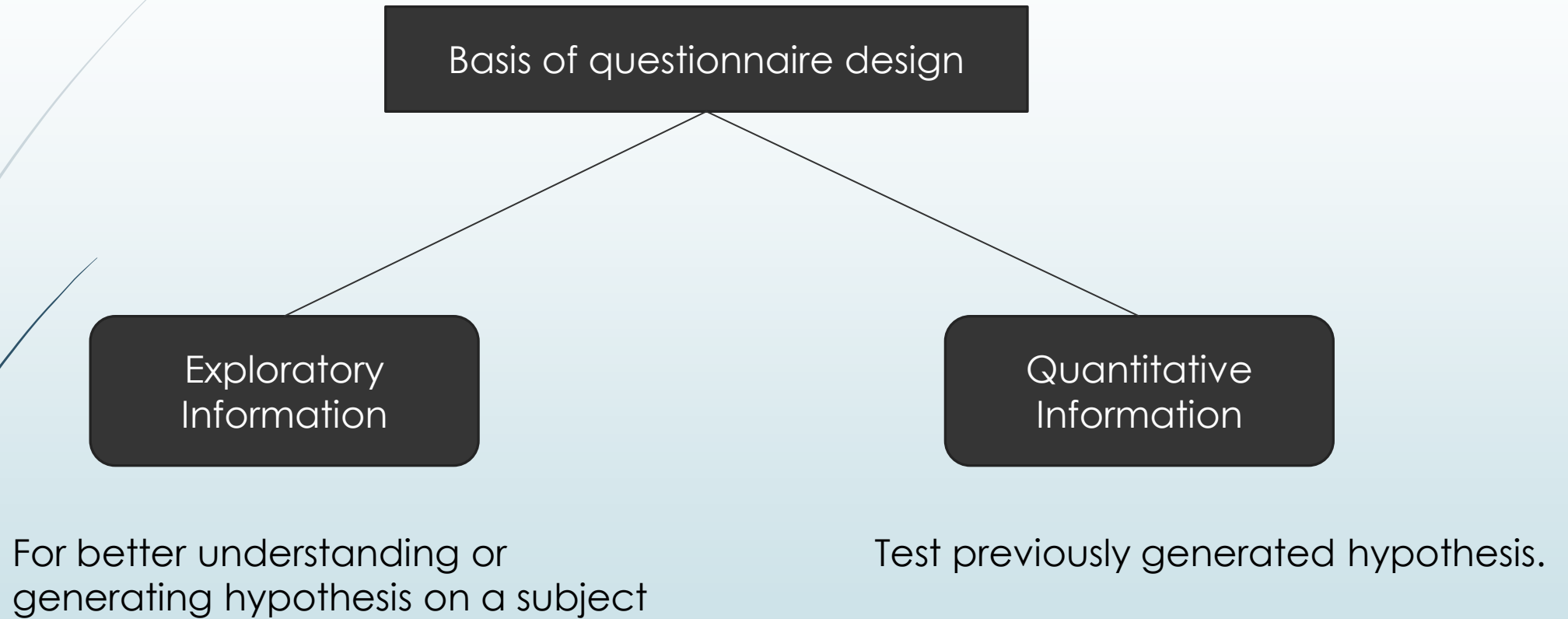
What's the biggest mistake?

- Accurate random sampling and high response rates will be wasted if the information gathered is built on a shaky foundation of ambiguous or biased questions.



Shaky Foundation

Design of a questionnaire





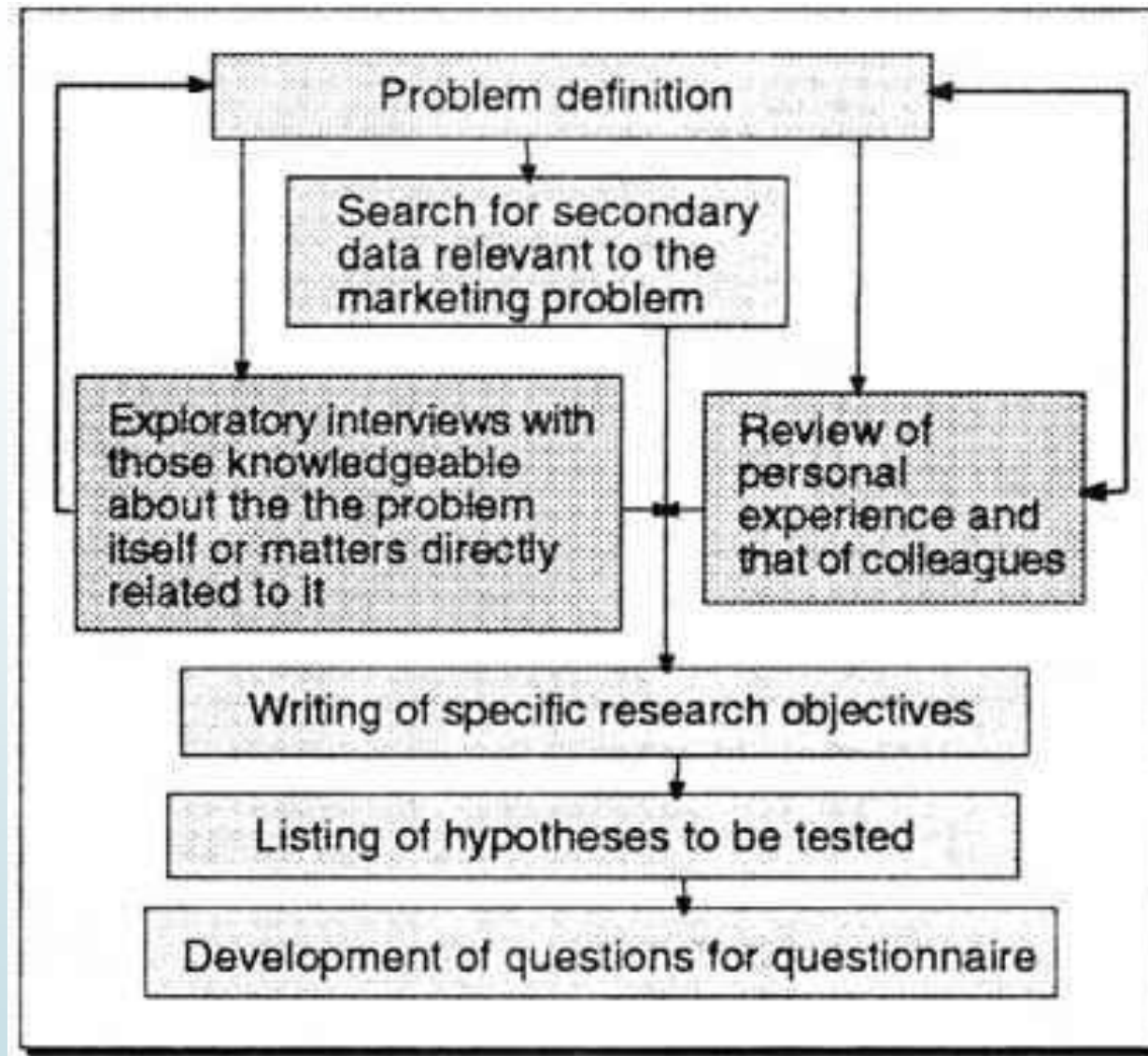
Exploratory Questionnaires

- Data collected for qualitative purpose or not statistically evaluated.
- No formal questionnaire may be needed.
- Eg. Interviewing the female head of a household to understand family decision making process.
- A formal questionnaire may restrict the discussion and full exploration of the woman's view and processes.
- A brief guide with open-ended questions could be useful.
- Important : **What is the goal for your questionnaire?**. This bit is important.



Formal standard questionnaire

- If data is to be analysed statistically.
- No questionnaire is perfect, but problems can be 'minimized'.
 - Inadequate preparatory work.
 - Poor understanding of the particular issue.
- **A well-designed questionnaire should meet the research objectives.**
- Ensure that the respondent understands your question.
- Use words which encourage respondents to provide accurate, unbiased, and complete information.



Steps preceding questionnaire design.



Questionnaire development steps

- Decide the information required.
- Define the target respondents.
- Choose the method(s) to reach your target respondents.
- Decide on question content.
- Develop the question wording.
- Put the questions into meaningful order and format.
- Check the length of the questionnaire.
- Pre-test the questionnaire.
- Develop the final survey form.

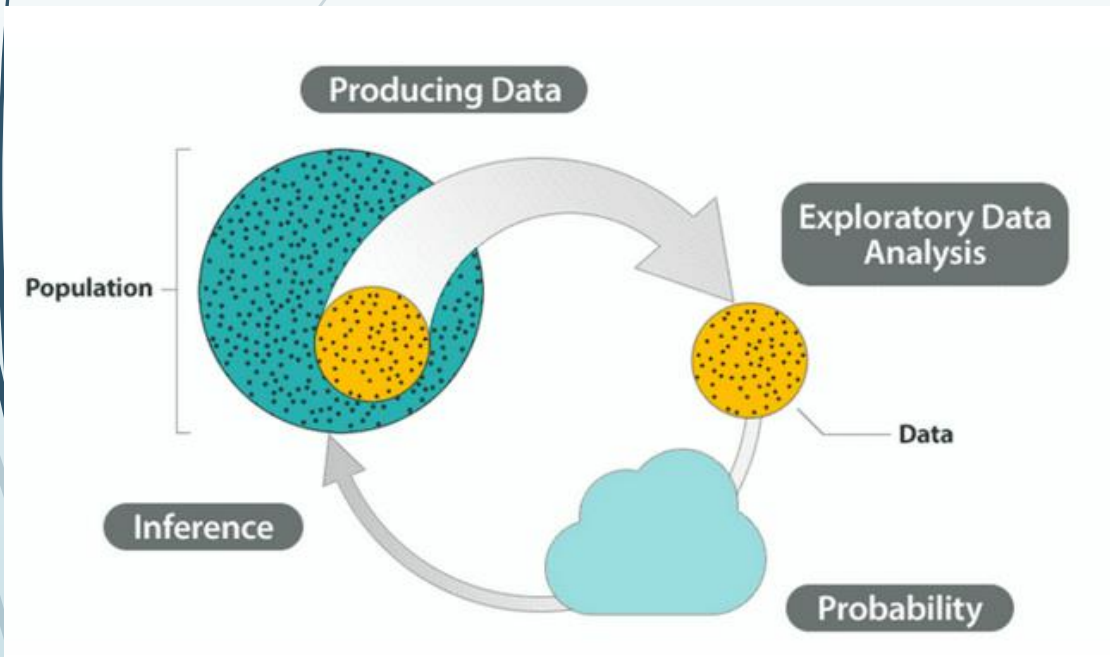
Decide on the information required

- Don't start by writing questions.
- Gain awareness on the previous work done on the same or similar problems in the past.
- What factors have not been examined in the past?
- Small number of preliminary interviews with target respondents vital to formal understanding of information required.

What do I need to know from the respondents for survey objective?



Identify/Define target respondents



- Researcher (Market/Scientific) must define the population about which information will be generalized from the sample.
- In marketing research, decide:
 - Whether to cover only existing users.
 - Or also non-users
- Take into account the age, education etc. of the respondents.



Deciding Question Content

- Ask for every question, “Is this question really needed?”
- Critically evaluate the contribution of each question towards the achievement of the overall objective.
- No question should be included data it gives rise to is directly of use in testing one or more hypothesis you want to test.
- Build a rapport with your respondent, as they answer the questions.

Question wording

Survey Question Types

```
graph TD; A[Survey Question Types] --> B[Closed]; A --> C[Open-ended]; B --> D[• Easy method to respondent to indicate answers.]; B --> E[• Easy classification and analysis of responses.]; B --> F[• Respondents not allowed to give different response.]; C --> G[• Respondent asked to give a reply to question in his/her own words.]; C --> H[• No suggested answers.]; C --> I[• "What do you like most about Amazon services?"];
```

Closed

- Easy method to respondent to indicate answers.
- Easy classification and analysis of responses.
- Respondents not allowed to give different response.

Open-ended

- Respondent asked to give a reply to question in his/her own words.
- No suggested answers.
- "What do you like most about Amazon services?"



Examples of closed questions

- ▶ Do you use online e-commerce websites? (Yes/No)
- ▶ Are you younger than 25 years of age? (Yes/No)
- ▶ Are you diabetic? (Yes/No/Pre-diabetic/Gestational Diabetic)
- ▶ Do you like Vanilla ice-cream?
- ▶ On what day were you born ?

Open-ended questions

► Advantages

- Respondent can answer without any influence of suggested answers.
- Reveal issues that are most important to respondent. Unanticipated findings may be revealed.

► Disadvantages

- Respondents find it difficult to articulate their responses.
- May forget some important points, if not prompted (answer suggestions, as in closed questions)
- Unstructured data obtained, needs to be coded for analysis. Can be time consuming.
- Managing the different dimension of answers. Need further probing.
- Eg. When did you last purchase from Amazon?
 - A short while ago. Last month. Yesterday.

- Used where there are likely to be a **very large number of possible different responses** (e.g. what difficulty you face in ordering groceries online?), **where one is seeking a response described in the respondent's own words** (e.g. What is it like to be from a rural background in an urban school?), and **when one is unsure about the possible answer options** (e.g. What do you like best about online virtual learning classes?).



Question responses

- What features of this product do you like?
 - Performance
 - Quality
 - Price
 - Weight
- Requires the researcher to have a good prior knowledge of the subject in order to generate realistic/likely response.

Ambiguous Questions

- Inclusion of two items in a question:
 - Do you like the speed and reliability of your grocery delivery? (Yes/No)
 - The respondent may like speed and not reliability, answering Yes. Or if reliability matters more to him/her, answer might be No.
 - Difficult for the respondent to answer, and difficult for the researcher to interpret.
- Use of ambiguous words should also be avoided.
 - “Do you regularly order from Amazon”?
 - Respondents’ understanding of “regularly” will differ.
 - Once a month? Once a week? Once a year? Might change for respondents’ purchasing habits.
- Search for words or phrases which could be vague in your questionnaire.
- What is your income?
 - Respondents may interpret the question in different terms: hourly pay, weekly pay, monthly pay, annual pay? Income before/after tax? Income in kind as well as cash?
 - Specify the term in your question so that you and your respondents are on same page.
- Respondents should be asked only those for data, they are likely to remember. Eg. Four years ago, how often did you purchase from Amazon? ---> Avoid.

Question order

- Put questions into a meaningful order and format.
- **Opening Questions:** easy to answer and not threatening to the user.
 - First question is important: respondents' first exposure to the interview, sets the tone for the rest questions to follow.
 - First question is difficult to understand, or beyond their experience and knowledge -->> respondents' likely to break off immediately.
 - If its is pleasant and easy to understand, the respondents are encouraged to continue.
- **Question flow:** Psychological order in the question. Group questions relating a subject together.
- **Question variety:** Respondents' become bored quickly bored and stressed, when asked similar questions for a long time. Questions involving showing cards/pictures to respondents can help vary the pace and increase interest.
- **Closing Questions:** Respondents become indifferent to the questionnaire as it nears the end. Include important questions in the beginning. Sensitive questions to the end to avoid respondent cutting off the interview.



Physical appearance of the questionnaire

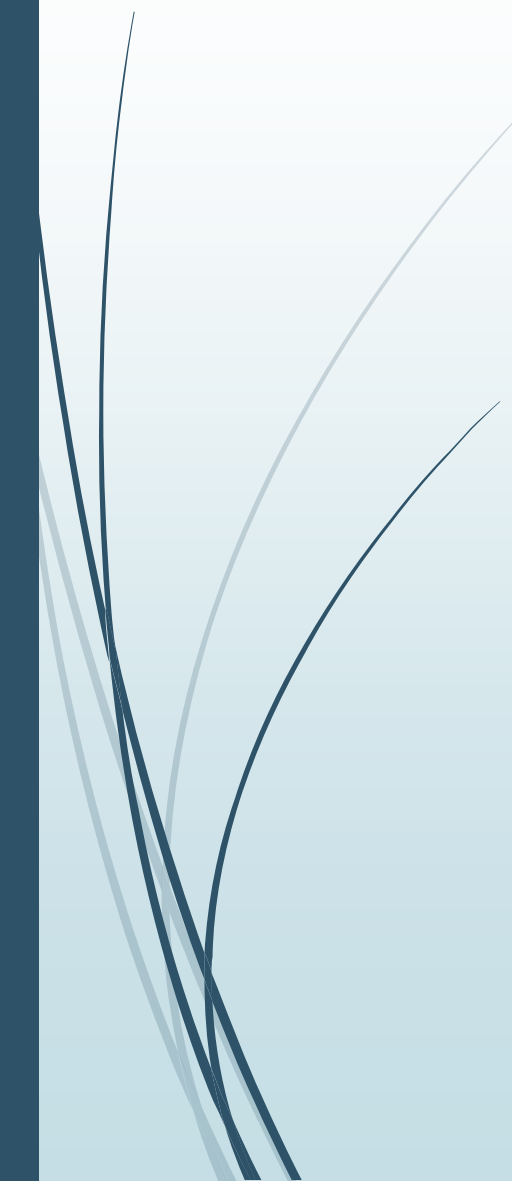
- Quality and quantity of marketing data is affected by the physical appearance of the questionnaire.
 - Simple and clear format.
 - Color coding section wise.
 - As short as possible.
- 

Piloting the questionnaire

- Pre-test a questionnaire on a small sample (5-10) to identify mistakes that need correcting.
- Pre-test sample should be representative of target respondents.
- Purpose:
 - whether the questions as they are worded will achieve the desired results.
 - whether the questions have been placed in the best order.
 - whether the questions are understood by all classes of respondent.
 - whether additional or specifying questions are needed or whether some questions should be eliminated.
- Final set of questions are more evolved.
- Question wording, Sequencing questions, deciding the layout, order gets more refined.



Summary

- A well-designed questionnaire is essential to successful survey.
 - But do follow your intuition and common sense.
- 

Task Assignment

- Go back to your Innovation assignments.
- Assume your product has been launched, and for a while it was successful, revenue was high. But your statistical department tells you that your sales/revenue have begun to show a downward trend. As a team who began the venture, you are now perplexed at what could have gone amiss. You want to identify the factors responsible for such a trend. Naturally, you want to get to know your customers and ask from them, what is it that could have led to such a consequence.
- You propose a survey to be launched to your existing customers in order to solve this mystery which is keeping you awake at nights!
- Develop a survey so that the answers/data from it could be used to identify the reasons behind the dwindling sale of your product/service.
- Specify your approach for developing the questionnaire. What prior knowledge do you use? On what basis do you identify the factors for which the information needs to be collected. Specify a detailed rationale for questionnaire development (inclusion of specific questions), and develop a questionnaire.