MARKETING RESEARCH WORKBOOK

Version 1.1

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1 RESEARCH OBJECTIVES

1.1 WHAT IS THE BUSINESS PROBLEM?

Marketing research is an activity directed at solving a problem or at least providing insight into the business situation. As such, all research designs must start with understanding the business problem. Not all information that is necessary to solve the business problem will be obtainable through survey research. However, in many cases, it will. Identify the business problem as it is viewed, first, from the perspective of the business and organization. It is then useful to restructure the problem in a number of ways to see different perspectives such as that from the marketplace and from the competitors' position.

1.2 WHAT ACTIONS DOES THE CLIENT CONTEMPLATE?

Merely to have a problem is insufficient for information to be of value. The information must be used to help choose actions. What are the possible actions that the client is contemplating? Include only feasible actions, those things that can be done. While this represents some degree of creativity in that the range of concepts need to be explored, the emphasis is on feasibility. Understanding the range of possibilities helps structure the types of information that is needed.

1.3 WHAT ARE THE LIKELY OUTCOMES OF THOSE ACTIONS?

For every action, there is a reaction. What are the probable results from the various actions? What kind of market changes and possible competitive reactions are likely to take place? How are they going to know or measure those changes?

1.4 WHAT INFORMATION DOES THE CLIENT WANT FROM THE MARKET?

Clients often have a preconceived idea of the information that they want. That is often due to a general idea of the processes involved or to previous studies that had been conducted in this business. It may also be due to preconceived methods of analysis that they wish to see followed. Identify both the information wanted and why.

1.5 WHAT INFORMATION DOES THE CLIENT NEED TO CHOOSE ACTIONS?

However, there is often a difference between what the client wishes and what is needed. Identify what information the client needs and why. Furthermore, identify the difference between the information needed and that wanted. Indicate what information desired but not needed may not be collected in this study.

1.6 WHO ARE THE MARKET INFLUENCERS OF THAT REACTION?

Who are the "players" in these actions? Who will determine the market reaction? In a purchase situation, there are usually a number of influencers in the process. Who will influence the market reactions to these decisions?

1.7 WHO SHOULD BE THE RESPONDENTS OF THE STUDY? IS THERE A RELIABLE LIST?

Typically, not all possible influencers will be surveyed in a market research study. Most studies focus on only one group of respondents, typically, the "most important" market decision-makers. This may differ in markets and situations. However, we need to identify who will be the respondents for the study.

Furthermore, we need to know if there is a reliable respondent list. If existing customers will only be used, then company data usually is sufficient. However, if representative sample of the market is to be used, a more general list is needed.

1.8 HOW MUCH WILL THE RESULTS OF THE STUDY BE INFLUENCED BY THE RESPONDENTS KNOWING WHO THE CLIENT IS?

How anonymous must this study be? What types of bias will be introduced if the respondents know who sponsors it? This can be critical both in design and during execution of the study. In some cases, it is impossible not to reveal the source. In testing new offerings, for example, the brand name of the product can be a critical feature. The name normally reveals the product source. However, in other cases, such as in pricing, it can be critical that the sponsors are not known to the respondents.

1.9 WHAT MARKET DATA DOES THE CLIENT ALREADY HAVE?

Market data can be vital for use in standardizing results and allowing for comparison between opinions and actual market results. The market data is typically used as the "reality" for management. It is often useful and necessary to scale marketing research to be comparable to that reality. Identify what information is currently available and what might be available when the results of the survey is completed.

1.10 WHAT PREVIOUS MARKETING (SURVEY) RESEARCH HAS BE DONE?

Before designing a new study, it is usually very useful to examine previous marketing research studies. There are two types of studies that are useful and should be found: (1) those that are focused on the same respondents and (2) those done for a similar purpose. These studies give background, provide historical base lines, and provide a window to the client's expectations. Try to obtain, (1) the final report, (2) the questionnaire used, and (3) if feasible, the actual resulting data.

2 PRE-ANALYSIS & DISCUSSION OUTLINE

2.1 DO WE NEED A QUALITATIVE RESEARCH PROGRAM?

We need to understand the potential respondents sufficiently enough to prepare a meaningful quantitative survey instrument. In general, qualitative research focuses on the "what" of the market, while quantitative survey, focuses on the "how much". As such, before starting to prepare a quantitative study, we need extensive understanding of the market and the issues surrounding it.

Often the clients and the professional researchers have sufficient background not to need additional qualitative research. This is often due to long term experience with their markets and to previous qualitative research studies. However, to go forward with an expensive program without checking underlying assumptions is always dangerous.

Indicate the qualitative research that has been done previously in this market. Describe the qualitative research program that should be undertaken to obtain sufficient information to proceed with this survey design.

2.2 WHO ARE THE RESPONDENTS FOR THIS STUDY?

Who are the key decision-makers? What differentiates the decision- makers from the other influencers? Are these the respondents for the study? How do we know? How should we ask respondents for this information?

2.3 WHAT ARE THE RESPONDENTS LIKE?

What are these respondents like? What drives them? What is important to them? How will they be characterized? How do we know? How should we ask respondents for this information?

2.4 WHAT IS THE PURCHASE OR DECISION PROCESS?

What is the decision process going on? What is the range of inputs into the decision? What influences the decision? How do we know? How should we ask respondents for this information?

2.5 WHAT ARE THE KEY ISSUES TO BE RESEARCHED?

It is insufficient to examine general attitudes and conditions; we need to know what the specific matter that needs to be explored. Similarly, to explore the past behavior, we need to understand the scope of that inquiry. What are the essential issues that effect the outcome of the business decision? How do we know? How should we ask respondents for this information?

2.6 ARE THEY MEANINGFUL TO THE RESPONDENTS?

Words are important. It is critical that we understand in depth the descriptions of issues to develop meaningful and clear questions and statements. We need to understand how the issues should be described from the perspective of the potential respondents. How do we know? How should we ask respondents for this information?

2.7 WHAT OTHER DECISION FACTORS COULD CONFOUND THE RESULTS?

The decision process is not clean. There are always factors that confound the situation. Identify these factors and indicate their relative importance. How do we know? How should we ask respondents for this information?

2.8 HOW DO WE KNOW THAT WE ARE TALKING TO RIGHT PERSON?

What criteria should be used to screen respondents? Are there any tell-tale indications that we are dealing with the wrong individuals? How do we know? How should we ask respondents for this information?

2.9 ARE THE ASSUMPTIONS REGARDING THE DECISION PROCESS CORRECT?

All research is based on underlying assumptions. Those assumptions that are the basis for this research should be examined. What are the key assumptions and are they correct? How do we know? How should we ask respondents for this information?

2.10 WILL THE DESCRIPTIONS AND "STIMULI" BE UNDERSTOOD?

Much of marketing research focuses on the testing of communications tools and product concepts. These are usually presented to the respondent for a reaction or the intent to purchase. How should the stimuli be presented? Will those descriptions be understood by the respondents? How do we know? How should we ask respondents for this information?

3 RESPONDENTS AND MODALITY

3.1 HOW MUST BE DIVIDE THE POPULATION?

Often we need to examine the characteristics of subgroups of the population. While some of these groups may not be sampled at all, since they are not expected to be critical, other may need to be heavily sampled. Identify if any group of respondents will need to be sampled separately. These may be prior segments or small important groups of respondents.

3.2 WHAT IS PERCENTAGE OF THE POPULATION THAT EACH SUB-GROUP REPRESENTS?

If separate samples of sub-groups will be used, it is often necessary to weigh the results to construct a representative statistics. This process is referred to as a "stratified sample." In order to reconstruct population, the actual fraction of the total population that each sub-group represents needs to be identified. If such information is not available, it may be better to use a general random sample and reanalyze for the sub-group statistics.

3.3 HOW MANY RESPONDENTS SHOULD BE IN EACH SAMPLE?

Sampling involves both determining how many individuals you need and how to select them. Allowing respondents to self-select their participation results in non-representative samples. This is the basic problem with attempts at obtaining a census where the distinction of participation is the willingness of the respondents to complete the survey. Those who actually participate are often either strong supporters or strong critics of the subject being studied and do not represent the total population. In order to obtain a representative group of respondents, some form of "random" sampling is used. This typically represents only a small group of the total population.

The level of sampling determines the "precision" of the average estimates. In general, the acceptable error around a measure is equal to:

$$\textbf{Acceptable Error} = s = \sqrt{\textbf{P} \cdot \textbf{(1-P)/N}}$$

Where **P** is the percent of sample responding and **N** is the size of the sample.

$$\textbf{N} = \textbf{P} \cdot \textbf{(1-P)/} s^2$$

Estimate the sample size of each group based on assumed average response rates and the acceptable error. It should be noted that the acceptable error relates back to the assurance needed to determine an acceptable action for the business problem.

3.4 HOW CAN WE BE ASSURED THAT WE GET TO THE TARGETED RESPONDENT?

What are the questions that should be used to determine the eligibility of contacts to be targeted respondents? These are the screening questions that need to be identified. They should include both those needed to qualify respondents and to classify them into the various subgroups that are being sampled.

3.5 WHAT IS THE SOURCE OF THE RESPONDENT LIST?

The quality of the study often hinges on the quality of the respondent list. Poor lists make the recruitment phase of the process very expensive where in some cases less than 10% are acceptable. Beyond expense, however, poor lists also produce non-representative samples. This raises questions as to the validity of the study itself. The quality of the list reflects both the accuracy and the timeliness of the information. Identify the source of the respondent list. If the list is to be purchased, indicate the expected cost.

It should be noted that the cost for the list, quality of the list and sample size may effect the choice of fielding methods. If the list is expensive, it is usually inadvisable to use mail surveys since these tend to have low response rates.

3.6 WHAT TYPES AND HOW MANY QUESTIONS MUST BE CONSIDERED?

The type and number of questions that must be used influences the way by which the study should be executed. Very long and complex questionnaires are usually best executed in person to encourage completion. Open-ended questions tend to have greater completion if done over the telephone as are questionnaires with a great deal of branching and customizing. Questionnaire using stimuli usually are done either in person or by "phone-mail (fax)-phone." Internet surveys are best conducted with very short questionnaires.

3.7 HOW QUICKLY DOES THE STUDY NEED TO BE COMPLETED?

Obtaining information late can be useless. The speed by which the study must be completed will effect the choice of fielding method. Mail for example, typically takes several weeks even for small sample studies. Internet and simple phone studies have tended to allow very quick turn-around from concept to report.

3.8 IS THERE ARE REQUIRED METHOD OF EXECUTION?

Some surveys require the use of a specific method of execution. This is usually due to the need to follow a previous methodology. However, this is unusual. If this is the case, how must the survey be executed?

3.9 WHAT BIAS MIGHT BE IMPOSED BY USING VARIOUS MODALITIES?

Various execution methods can give specific bias to the results. Phone interviewers can effect the results of a study. Multiple interviewers produce problems of consistency. Mail surveys produce strong self-selection biases. There is inherent bias with Internet surveys due to the characteristics of Internet users. Indicate for this study, if such problem exist and for which methodologies?

3.10 WHAT IS THE PRICE/QUALITY TRADE-OFF FOR MODALITIES?

Not all execution methods are equally expensive. Mail and Internet execution are usually recognized as the least expensive. Personal interviews and phone-mail-phone are usually among the most expensive. However, each has quality advantages and disadvantage. In general, the more expensive procedures have tended to give better results. As such, there is often a trade-off between quality and price. For this study is this an issue with any of the acceptable methods?

3.11 WHICH METHOD OF EXECUTION IS BEST IN THIS CASE?

Indicate the acceptable methods of execution and those that have been selected for the study. This should be based on the characteristics of the study; the potential cost issues and the budget.

4 QUESTIONS DEVELOPMENT

4.1 WHAT ARE THE KEY DECISION QUESTIONS?

There are generally six types of questions that are included in quantitative surveys. These include:

- Perceived facts such as indicators of actual behavior i.e. Purchasing a product;
- Opinions regarding the performance of products;
- Attitudes or agreement with statements;
- Importance of decision criteria;
- Intention to perform subsequent behavior and
- Characteristics of the respondents.

Identify the key questions in each of these categories for the study.

4.2 HOW SHOULD THE RESPONDENTS ANSWER THESE QUESTIONS?

Each of these types of questions tends to require different kinds of responses. For factual questions, specific closed end choices are usually provided. These are generally self-evident and many simply involve a yes or no response. Questions involving the intention to purchase, or consideration of an action, usually involve either an explicit measure of extent such as the number of purchases or a likelihood estimate.

4.2.1 How should performance and perception questions be scaled?

For opinion questions, however, a scale is usually used. These "ordinal" scales need to be anchored at least at the extremes. In the simplest form, such as with agreement or satisfaction scales, standard end-points are used such as strongly agree to strongly disagree[1].

There are two issues in considering the number of points on these rating scales: (1) the need or disadvantage of a mid-point, and (2) the flexibility to give intermediate values. A center point is useful if a neutral value has specific meaning. However, there is a tendency for uncertain respondents to disproportionately choose this option if it is available. In most cases, that option is avoid and an even numbered scale is used.

Longer scales, with more points, tend to results in a larger than expected dispersion of results. This is usually thought to be due to individual resistances against using particular values on the scale[2]. As such the smallest possible scale is usually preferred. Three and four point scales are often preferred. The major issue arises in the comparison between the performance of similar products. In these cases, longer scale may be needed.

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[1] A more general form of this is referred to as a Semantic Differential where different words are used at the extremes. However, these are fairly complex to design and are very fault intolerant. We therefore recommend using the more standard rating scales.

[2] This can be handled during analysis by standardizing the results. However, this can lose a great deal of information in terms of extreme options of the respondents. As such, it is not recommended.

4.2.2 What type of response will be used for preference and importance questions?

There are a number of ways importance can be evaluated. While rating scales have been used, they are not recommended since they do not provide a comparative response. Typically, constant sum or rank ordering is used. The constant sum scale requires the respondent to distribute a number of points (such as 100) among a number of options. Because of the complexity of the process, usually no more than 7 or 8 items are used. Long lists of items are usually broken into categories. Evaluations are then done both within categories and among them.

Rank ordering is easier to execute and can handle 15 to 20 items. However, the results are cruder than constant sum. In general, it is useful to introduce a number of anchor points in order to evaluate comparative worths[3].

[3] It should be noted that the analysis of rank order data usually requires imposing some time of distribution of value. The anchor points are used to translate the resulting "utilities" into meaningful values such as equivalent discount rates.

4.3 HOW IS THE RESPONDENTS' BEHAVIOR GOING TO BE CLASSIFIED?

The objective of most marketing research studies is to examine the influences on buyer behavior. As such, the key is understanding that behavior. For this study, what questions will capture that behavior? Here we are interested in a range of historical behaviors. A typical action classification is between customers and non-customers. However, this usually extends over a range of behavior characteristics.

4.4 WHAT ARE THE ESSENTIAL MEASURES OF DESIRED ACTION?

Usually, most marketing research studies focuses on a specific behavior or action. This might be the purchase of a specific product or a preference. Indicate which questions capture these actions[4].

[4] The response to these questions is used in key driver analysis and the dependent variables.

4.5 HOW ARE THE RESPONDENTS TO BE CLASSIFIED?

There are usually two ways by which respondents are classified: (1) prior or ad hoc classifiers and (2) commonality of attitudes or characteristics (clusters)[5]. Both methods are referred to as "segments" since they can be used as bases of marketing strategy. What classifiers will be used for these respondents in the analysis? Clustering is usually done with performance and attitude measures. Which of these will be used for classification?

[5] These classifications are used in for the tabulation of the data.

4.6 ARE ANY OF THESE SURROGATE QUESTIONS?

Surrogate questions involve finding a way to determine information in a round about fashion. These are often done, on the false belief that the respondents will be unable or unwilling to answer the more straightforward question. Unfortunately, the results are almost always uncertain, if not wrong, using this approach. It is always better to try to ask directly for the information needed. In most cases, when surrogate questions are used, the information is desired but not necessary. Review the questions and remove or alter all surrogate questions to get the information that is actually needed.

4.7 ARE DEMOGRAPHICS MERELY "BOILERPLATE"?

Demographic and "psychographic" questions are used to classify respondents. There is a tendency to use "boilerplate" lists of this type of question. However, unless the particular information is pertinent to this study it should be eliminated. There are two reasons to include demographic information: (1) for classify respondents for marketing action and (2) to check the representation of the sample.

4.8 WHAT DO YOU INTEND TO USE ALL THE DATA FOR?

All questionnaires tend to be too long. It is critical not to ask for information that will not be used. As such, it is a useful exercise to go over all of the questions and identify what they will be used for. Prepare mock cross tables indicating what should appear in the rows and columns. Indicate what each table is expected to show and why it is relevant to the study. If multiple questions are being used to verify information, indicate why it is needed.

5 QUESTIONNAIRE DESIGN

5.1 CHECKING QUESTION WORDING:

It is necessary to check the wording of all questions. This should be done by the developer, the client, and if feasible a number of other marketing research professionals.

5.1.1 Single question

Each question in the questionnaire must be single and unique. Compound questions only produce confusion and bias. Compound questions usually are associated with compound subjects and objects in the question.

5.1.2 Single meaning

Check that each question is singular in meaning. Avoid any leading issues or comments that can be inferred as producing uncertainty as to the meaning of the question. Wording is very critical here, for example "income" may take on any number of meanings. Be as specific as possible.

5.1.3 Understandable

Each question must be understandable to all of the respondents. This is particularly important where several languages or applications are involved. The terms used for the same condition may vary greatly and have very different inferences.

5.1.4 Non-biased and balanced biased

While it is normally desirable to present all questions in as a non-biased fashion as possible, sometimes it is useful to present questions with a "spin." However, it must be recognized that such spin will produce bias in adjacent questions. For an unbiased results in the adjacent questions, while using slanted questions, it usually necessary to balance the questions in the reverse fashion[6]. This should be as blatant as possible.

[6] While it is considered not acceptable practice for professional marketing researchers to engage in purposefully biased studies, it is done. The purposes of these studies are often to be used in favorable marketing information.

5.2 PREPARING CHOICES

It is necessary to check the choices for each question. This is particularly important with multiple choice items. These should be reviewed by the developer, the client, and if feasible a number of other marketing research professionals as with the question wording.

5.2.1 All Inclusive

The responses to all questions must be all inclusive. Often we use a "catch-all" item of "Other." Avoid this whenever possible since it reduces the range of analysis.

5.2.2 Mutually Exclusive

The choices must be mutually exclusive. If single responses are being sought, it is important to provide the potential combinations. For example, demographics on race can produce difficulty with a diverse population such as in the United States

5.2.3 Non-overlapping

Categories should not be overlapping. With quantitative values, this means that end points of interval should not be the same. For example, the series of "1 to 5" and "5 to 10" overlaps in that a value of 5 would fit into two categories. Similarly, subjective responses should be distinct.

5.3 STRUCTURE THE QUESTIONNAIRE

The order of the questions can effect completion rate and reduce bias. Typically, demographic questions, which historically have produced resistance and refusals, are placed at the end of the questionnaire. High energy and opinion questions are often asked up front to encourage completion. Indicate how the questionnaire is to be laid-out.

5.4 STRUCTURE EXPERIMENTAL DESIGNS

Special attention needs to be placed on experimental portions of the questionnaire. These involve testing of concepts and communications materials. The order and placement of these in the questionnaire can greatly effect the results. Typically, these exercises involve "training" of the respondents and the presentation of hypothetical cases. These may influence the questions regarding present practice. As such, these exercises are usually placed towards the end of the questionnaire but before the demographics.

5.5 MONADIC OR MULTIPLE EXPOSURE

Experimental designs are particular susceptible to bias due to order. The exposure to a prior stimulus will effect the perception of those that follow. As such, it is desirable to limit the stimuli that a respondent will exposed to. The limiting case is a single stimulus, where the respondent will be asked to evaluate only a single item. This is referred to as a monadic test. While this procedure has psychometric advantages, it comes at a high cost. Typically, respondents are exposed a number of test items for evaluation. These items may be either real products or market place alternatives or designed to provide estimates of the impact of features.

If either monadic or split samples are to be used, the questionnaires need to be coded to identify the form.

5.6 ROTATION OF QUESTIONS

As previously noted, there can be an order effect where the response is effected by previous questions and information in the questionnaire. One method of control this effect is by rotating questions within sets. This is typically done both for experimental designs and for lists of opinion and importance questions.

The problem is to assure that results are not confounded by the rotation process. Automated phone survey systems (CATI) and on-line Internet Web survey packages usually provides this ability. However, with mail and personal surveys, each rotated set needs to be identified and procedures to correct the order put in place.

On which question sets do you plan to use rotation, if any?

5.7 SIMPLIFY BRANCHING STRUCTURE

In some cases, it is useful to question the respondent on a topic that only a subgroup is qualified to answer. This is referred to as a branch in that the standard flow of the questionnaire is broken to allow the respondent to answer these questions and then return to the rest of the questionnaire. This process creates multiple reasons for non-responding including that it may not be appropriate or that respondent may have simply refused.

5.7.1 Minimize Branching

In all cases, the branching structure should be minimized and simplified. Where feasible, all such branching should be concentrated at a few junction points. Furthermore, since they greatly limit analysis, an effort should be made to eliminate them entirely.

5.7.2 Collective Return Points

Similarly, it is critical to try to reduce the return points from branches. Here again, the fewer return points the better. This reduces error and the quantity of missing data.

5.8 AUTOCODE ALL QUESTIONS WITH ASSIGNED RESPONSES

Autocoding is the preparation of the questionnaire is such a way that the data can be directly entered into a database without the need of a separate coding step. This is usually done by identifying the question and each of the possible responses.

20a Have you purchased a TV within the last six months? (29)

Yes ☐[1] **No** ☐[2] **Do Not Know** ☐[3]

The line number and the superscripts on the response boxes are the autocoding for this question. The specific format depends on the modality of execution. Those executed either by personal interview or by mail are coded in this manner. However, telephone and Internet surveys are automated and the autocoding corresponds to the actual data entry structure.

5.9 PROVIDE MISSING DATA CODES

There are several ways by which a data point may be missing on a questionnaire. In branched questionnaires, blocks of questions are skipped as not being relevant to this respondent (skipped). The respondent may refuse to answer some questions (refused). The respondent may not have the answer to others (NA). Each of these carries a different meaning in the interpretation of the results. As such, it is important to have separate coding for each type of missing data.

5.10 STRUCTURE OPEN ENDED RESPONSES

In structured questionnaires, open-ended questions can be used for several purposes. They are often used to solicit additional information beyond the scope of the highly structured study. However, there are other cases where we use the open-ended structure to solicit "top of mind" information. For example, we might ask for the respondent to identify the most important brands in a category as an open ended question to solicit unaided awareness. Though it is an open-ended question, the responses are limited and known. As such, these potential responses are usually identified prior to execution. With telephone interviews, the interviewer is often given a list of likely responses.

It should be noted, however, that the responses of other questions, though also limited, are unknown until after the execution of the study. In these cases, the quantification of the results requires recoding of the responses after execution.

5.11 PREPARE EFFECTIVE FIELDING INSTRUMENTS

The form of the questionnaire depends on the mode of fielding of the study. However, there are general principles for preparing the documents. In all cases the objectives are to make the questionnaire appears a easy to execute as possible and easy to read.

- As simple and short as possible;
- Use open space for the questions and responses;
- Color code multiple versions of the questionnaire; and
- Use large clear type (at least 12 point)

5.12 PREPARE COVER-LETTER OR INTRODUCTION

Usually a cover-letter or formal introduction needs to be prepared that explains to the respondents why they should participate. This needs to be prepared carefully to both encourage participation and to prevent bias. Typically, several drafts of this document are prepared and approved by the client's organization.

5.13 SPECIFY DATA TRANSFER PROCEDURES

It is important to assure that the data can be easily transferred between the systems used to collect, code and tabulate the raw data and those systems needed for further analysis. Commercial data entry and tabulation packages provide a number of tools that were historically useful. However, many of them are not transferable to spreadsheet and statistical packages. Multi-punch allows for a compact data structure to store several choices. However, these are not transferable in the standard ASCII files used with personal computers. These need to be converted to an expanded form to be transferred. In addition, several alphanumeric codes tend to be used with the tabulation packages such as & and #. These are awkwardly in statistical packages and spreadsheet and generally need to be changed. Comas and other punctuation may need to be removed. It is also often necessary to assure that there are no blanks in leading fields on each record.

6 PRE-TESTING AND FIELDING

6.1 DOES THE RESPONDENT UNDERSTAND EACH QUESTION CONSISTENTLY?

It is almost always necessary to test the instrument before full scale fielding of the study. At a minimum, we need to be assured that each question is consistently understandable to the respondents. During this pretesting, we need to assure directly from the respondents that the question is understood. The respondents are usually asked to indicate any question that he has any problems with. In addition, the respondent may be asked to paraphrase any question that we suspect may have problems.

6.2 CAN THE RESPONDENT ANSWER EACH QUESTION MEANINGFULLY?

Respondents will try to answer all questions, whether meaningfully or not. Even if the question is understood by the respondent, it may not be appropriate for the respondent. Or alternatively, the question may be so worded that it may suggest any number of possible rational responses. Each question needs to be probed to assure that the responses are consistent and reflect what was the purpose of the question.

6.3 DOES THE RESPONDENT UNDERSTAND EACH ANSWER?

Similarly, choices of responses may be confusing. This may be due to the explanation of the choices or the actual wording of the options. All choices need to be examined to assure that they are understood by the respondent as they relate to each question.

6.4 ARE THE INITIAL RESULTS REASONABLE?

Typically during pretesting sufficient data is collected to examine consistency and reasonability of results. Usually this involves 10 to 20 responses. Typically, non-differentiation among questions is a clear indicator that there may be problems with questions and design. High levels of refusals likewise suggest problems with design or respondent selection.

6.5 CAN THE RESPONDENT FINISH THE QUESTIONNAIRE WITHOUT FATIGUE?

Fatigue is one of the greatest enemies of reliable data. Respondents get tired in answering long questionnaires. Results from later questions become unreliable. This is most often seen as an increase in skipped questions, refusal to answer, don't know responses, or non-varying responses. Check the results to assure that the respondents are completing the questionnaire appropriately and are taking the necessary time and care in answering later questions.

6.6 WHAT IS THE RANGE OF RESPONSES OF OPEN-ENDED QUESTIONS?

Pretesting can be used to verify or determine the range of responses to open-ended questions. If on-line coding of these questions is planned, it is important to verify that the options provided the interviewer correspond to those that the respondents will tend to use.

6.7 HOW WILL YOU ENCOURAGE THE RESPONDENT TO AGREE TO PARTICIPATE?

The big trick is getting participation. In consumer research using unsolicited mailings responses can be as low as a couple percent. In more targeted studies with excellent lists and using specific enticements response rate as high as 55% or more can be obtained. Indicate what is the necessary response rate that is needed for this study.

6.7.1 What type of incentive will you use?

Incentives are widely used for both consumer and industrial studies. These may be as high as $250 or more for specific hard-to-reach professionals such as medical specialties. Entries into lotteries as well as donations to charity are also successful. The objective is to get as many targeted respondents to complete the survey as possible.

6.7.2 Will you indicate the sponsor of the survey?

If the sponsor of the survey is a well known and respected supplier, acknowledging that source can help increase participation. However, the reverse is also true, for suppliers that are not liked or unknown may reduce participation. In supplying the sponsor, it is important to recognize the potential bias that could be induced. In general, it is usually not recommended to indicate the sponsor.

6.7.3 What type of references will you use?

References or organizational sponsors can be used to entice participation particularly if the respondent list is from that organization. These are usually included in the cover-letter for the survey.

6.7.4 How will you convey a "quality" image to the questionnaire?

Particularly when materials are to be mailed or faxed, the appearance can have a major impact on the response rate. For example, when mailing questionnaires and supporting materials, first class or courier mail should be used. It is also preferred to use commemorative stamps rather than automated labeling.

6.8 WHO WILL BE THE INTERVIEWERS (IF APPROPRIATE)?

Choice of appropriate interviewers can be critical for the success of the survey. If interviewers (either phone surveys or personal interviews) are being used, it is desirable to that they provide a feeling of comfort to respondent. Furthermore, it is critical that the interviews be conducted consistently if more than one interviewer will be used.

6.8.1 How does the affect of the interviewer effect the respondent?

The objective is to secure the highest degree of completion and to least impact on bias. It is often useful for executive or specialty interviews to use interviewers that have knowledge in the area. Medical students are often used for pharmaceutical marketing research with physicians, for example. As such, what skills and interviewer background will be necessary for success in this study?

6.9 HOW WILL THE QUALITY OF THE EXECUTION BE MONITORED?

While fraud in the execution of marketing research is very unusual today, in the past it was not always the case. Most professional marketing research firms and field services monitor the execution of all surveys particularly those conducted by phone. Monitoring is often done on-line with interviews being tracked directly or recorded for later review. Indicate the level of monitoring that should be done for this study.

7 DATA PREPARATION, TABULATION AND ANALYSIS

7.1 CODING AND RECORDING DATA

With automated survey systems, the results of the survey are recorded continuously. If manual procedures are being used both coding and data entry need to be accomplished as soon as the fielding is completed or concurrently. With all procedures, it is useful to have on-line error capturing in the form of acceptable ranges of data entry. With manual data entry "double entry" procedures are recommended.

7.2 CODING OPEN-ENDED QUESTIONS

Most open-ended questions are recorded as full or partial sentences. If this data is to be analyzed quantitatively and not by textual methods, it needs to be coded. This is assigning categories to the range of responses. This is often done after the fielding of the questionnaire. Categories are set by random sampling of the questionnaires or by iteratively adding new categories. In either case, it is usually advisable to repeat the process to assure consistency.

7.3 CLEANING DATA

The term "cleaning data" refers to both checking for errors and transforming the data into an analyzable form. Typically, several types of errors creep into the data, including:

- Inappropriate use of symbols;
- Inappropriate blanks (particularly with constant sum series) where zeros were meant; and
- Inclusion of inappropriate responses (i.e. disallowed respondents).

Transformations that are often needed include:

- Correcting rotation;
- Merging sets of data; and
- Aligning questions across versions of questionnaires

In addition, during the cleaning process open-ended opinions are reviewed for completeness.

7.4 SETTING UP INITIAL TABLES

Initial tables are used to review the results of the survey. Typically, tabulation of results captures the vast majority of all of the information to be gleaned. The simple "top line" frequencies by question and cross tables based on prior selected criteria are generated. Usually, tabulation programs are available that will generate these tables. The cross tables are specified in terms of a **Banner**, which lists the explaining criteria and **stub** which are the specific questions to be tabulated.

These initial tables typically represent most of those generated and are often immediately set to the client if requested. The form of the tables is determined by the nature (metric) of the question. For:

- Discrete Responses - Percentage
- Ranking - Top Box/ Top Three Box Percentage
- Interval (Constant Sum, Rating) - Average, Median

7.5 TRANSFERRING AND CHECKING DATA

Most tabulation programs are not designed to perform multivariate statistical procedure. As such, the data needs to be transferred to one of statistical packages to perform that type of analysis as well as for production of professional graphs and charts. Most tabulation packages allows for the transfer of the data either into one of the standard formats or as an ASCII file. As previously noted, this sometime requires changes in symbols and in the expansion of multipunched codes.

During the process of transferring data, it is usually necessary to check results to confirm that the transfer was correct. Transfer errors due to the presence of commas and other incorrectly recognized symbols are not uncommon.

7.6 EXPERIMENTAL ANALYSIS

Survey data are often designed for subsequent analysis. Experimentally designed exercises such as conjoint and choice analysis require statistical regression to extract meaningful values. These analyses can be done either on the individual respondent level (if complete individual data was collected) or in terms of sub-samples or groups.

7.7 SEGMENTING RESPONDENTS

Identifying groups of respondents with common characteristics is often an objective of most marketing research projects. However, even if it is not explicit objective, it is a useful tool, if only to determine the uniformity of the sample. Cluster analysis tools for segmenting the respondents is available in most statistical packages. Depending on the use of the survey, several types of questions are typically used, including:

- Attitude and Opinion (Value Segments)
- Importance of Factors (Importance Segments)
- Perceived Value and Conjoint data (Benefit Segments)
- Readership (Communication Segments)

7.8 VISUALIZING DATA (PERCEPTUAL MAPPING AND GRAPHS)

Perceptual maps are used to present a large amount of data across a number of segments and groups. These techniques[7] compress the data in such a way that the results can be displayed in either a flat or a three-dimensional graph. It should be noted, however, that these projections are only approximations and are useful for showing an overall effect. For detail insight, the analyst is referred to the actual cross tables. Standard graphs including histograms, scatter diagrams, and bar charts are used to present the details of the analyses along with Perceptual maps.

[7] These techniques include: Factor Analysis, MultiDimensional Scaling, and Correspondence Analysis.

7.9 UNDERSTANDING KEY DRIVERS AND MARKET STRUCTURE

Detailed multivariate statistical analysis[8] can be used to highlight the drivers of behavior. This type of analysis relates the variation in behavior with other collected data by respondent. The underlying assumption is that the correlates of behavior are related to the causes of that behavior. This is, of course, not necessarily correct, but the procedure does indicate a trend. Where multiple variables are highly correlated, it is usually assumed that there exists an underlying, latent, variables, which drives the behavior. Typically, the preferred model focuses on obtaining the simplest description of behavior in terms of primary and latent variables.

[8] Four types of statistical tools are typically used in this analysis: (1) multilinear regression, (2) factor analysis, (3) path analysis, and (4) canonical correlation. For discrete behavior variables, it is sometimes useful to employ logistics (Logit) regression rather than standard linear forms. Factor analysis is used to structure latent variables. Path analysis is used for complex forms such as recursion models. And canonical correlation is used with multiple dependent variables.

7.10 SETTING UP FINAL TABLES

Usually additional cross tables need to be developed based on the insight provided by the multivariate analyses. Tables based on various types of segments are usually developed. Tables using the identified "latent variables are usually generated along with those that support perceptual maps. Typically, these are combined with the initial tables and sent to the client with the final report.

8 INTERPRETATION AND REPORTING

8.1 WHAT ARE THE RESEARCH OBJECTIVES?

During the process of the research study, the objectives may have changed. While this is not desirable, it is often inevitable due to the continued accumulation of information. Indicate what the objectives were and are?

8.2 WHAT RESEARCH CONCLUSIONS CAN BE DRAWN DIRECTLY FROM THE RESULTS?

Based only on the results of the research, what conclusions can be drawn? It is important not to extend the results beyond the scope of the data and the study. Implications for the market should be included with expected precision bounds. Indicate all assumptions regarding these conclusions.

8.3 WHAT ARE THE KEY BUSINESS OBJECTIVES?

Return to the essential business objectives that had driven the research study. These are the key issues that need to be addressed. What conclusions can be drawn from the data that relate to these objectives? These may require extending beyond the scope of the study. Here we have to be very careful to "hedge" our bids and discuss key assumptions. It should be noted that in this area, we enter "dangerous" ground. Be careful not to project more confidence than the data allows.

8.4 WHAT DECISION SUPPORT SYSTEMS BASED ON THIS DATA WILL HELP MEET THOSE BUSINESS OBJECTIVES?

Decision support systems include market models and simulators based on the market research data. Some experimental procedures lend themselves to this type of approach including conjoint for product and communications development and choice modeling for pricing. However, market simulators can be developed using most types of marketing data. The main question is its value to the client for obtaining insight into the business.

8.5 WHAT BUSINESS IMPLICATIONS CAN BE DRAWN DIRECTLY FROM THE RESEARCH?

Beyond the scope of the specific research and business objectives, are there any other business implications that can be drawn from the research? Typically, marketing research studies glean data and information of a wide range of issues. These may provide insight into the nature of the business not envisioned in the inception of the study. These insights may provide more value than that for which the study was originally generated.

8.6 WHAT ARE OTHER RESEARCH IMPLICATIONS?

Research inevitably brings to light insights into the nature of the market, the buying process and the survey methodology that had not been foreseen. What insights can be drawn from this study? How might those insights effect the design and execution of future studies?

8.7 WHAT ADDITIONAL INFORMATION DO SHOULD THE CLIENT WANT?

Most research projects generate as many new questions as old ones are answered. What additional information should the client seek to meet their overall business objectives? What market information is needed? What additional survey research should be considered?

8.8 HOW SHOULD THE REPORT TO BE ORGANIZED?

Who is the audience for the report? What should be the key report elements? What is most important to the client? What should be in the Executive Summary?