



(7) To study existing pricing, channels of distribution and market competition for suitable changes, if necessary.

(8) To find out methods for making the products of the company popular and raising its goodwill and market reputation.

(9) To assess competitive strength and policies.

(10) To estimate potential buying-power in various areas

(11) To know the company's expected share of the market.

(12) To determine the dimensions of the marketing problems, facilitate evaluation of the alternative solutions of different problems and help in the selection of a right course of action.

(13) To define the probable market for a specialized product and to report on general market conditions and tendencies, buying habits, etc.

Application of Marketing Research

1. Competitive Advantage.

The notion that achieving superior performance requires a business to gain and hold an advantage competitors is central to contemporary strategic thinking.

Businesses seeking advantage are exhorted to developed sincive competencies at the lowest delivered cost or to achieve differentiation through superior felle

The asce sing competitive advance as a second of the methods can be broadly classified as market-based and process-based assessment.

Market-based assessment is direct comparison with a few target competitors, whereas process-based assessment is a comparison of the methods employed.

2. Brand Equity.

• Brand equity is defined as a set of assets and liabilities linked to a brand that add to or subtract from the value of a product or service to a company and/ or its customers.





6. Data Processing and Analysis Once data have been collected these have to be converted into a format that will suggest answer to the initially identified and defined problem. Data processing begins with the editing of data and its coding. Editing involves inspecting the data collection – forms for omission, legibility and consistency in classification. Before tabulation, responses need to be classified into meaningful categories. The rules for categorizing, recording and transferring the data to "date storage media" are called codes. This coding process facilities the manual or computer tabulation. If computer analysis is being used the data can be key-product and verified.

7. Formulating Conclusions, Preparing and Processing the Report The final stage in the marketing research process is that of interpreting the information and drawing conclusion for use in managerial decision. The research report should clearly and effectively communicate the research findings and need not include complicated statement about the technical aspect of the study and research methods. Often the management is not interested in details of research design and statistical analysis but instead in the concrete findings of the research. If need to the researcher may bring out his appropriate recommendation or suggestions in the matter. Researchers must make the presentation technically accurate, understandable and useful.

Research Design

A **research design** encompasses the methodology and procedures employed to conduct scientific research. The design of a study defines the study type (descriptive, correlational, semi-experimental, experimental, review, meta-analytic) and sub-type (e.g., descriptive research question, hypotheses, independent and dependers variables, experimental design, and, if applicable, data collection methods and a statistical analysis pan



- 1. Identify a broad field or subject area of interest to your group
- 2. Dissect the broad area into sub-areas
- 3. Select what is of most interest to you
- 4. Raise possible research questions
- 5. Formulate objectives





subjects and conduct the study once again. This means the researcher can obtain a limitless number of subjects before finally making a decision whether to accept the null or alternative hypothesis. Using a quantitative framework, a sequential study generally utilizes sampling techniques to gather data and applying statistical methods to analze the data. Using a qualitative framework, sequential studies generally utilize samples of individuals or groups of individuals [cohorts] and use qualitative methods, such as interviews or observations, to gather information from each sample.

Formulate the Research Problem

1. Specify the Research Objectives

A clear statement of objectives will help you develop effective research. It will help the decision makers evaluate your project. It's critical that you have manageable objectives. (Two or three clear goals will help to keep your research project focused and relevant.)

2. Review the Environment or Context of the Research Problem

As a marketing researcher, you must work closely with your team. This will help you determine whether the findings of your project will produce enough information to be worth the cost. In order to do this, you have to identify the environmental variables that will affect the research project.

3. Explore the Nature of the Problem

co.uk Research problems range from simple to complex, depending on the number of variables and the nature of their relationship. If you understand of the problem as a researcher, you will e m be able to better develop a solution of h problem

bu might want to consider focus groups of consumers, sales people, managers, or professionals to provide what is sometimes much needed insight.

4. Define the Variable Relationships

Marketing plans often focus on creating a sequence of behaviors that occur over time, as in the adoption of a new package design, or the introduction of a new product.

Such programs create a commitment to follow some behavioral pattern in the future.

Studying such a process involves:





- Determining which variables affect the solution to the problem.
- Determining the degree to which each variable can be controlled.
- Determining the functional relationships between the variables and which variables are critical to the solution of the problem.

During the problem formulation stage, you will want to generate and consider as many courses of action and variable relationships as possible.

5. The Consequences of Alternative Courses of Action

There are always consequences to any course of action. Anticipating and communicating the possible outcomes of various courses of action is a primary responsibility in the research process.

Sources of Experimental Error (Uncertainty)

1. Personal Careless Error

- Introduced by experimenter.
- Simply put, usually due to 'sloppiness.'

2. Determinate (Systematic) Error

- Uncertainty that is inherent in the measurement devices (hard G ad scales, etc.)
- Usually caused by poorly or misca uments ted
- There are usu determine
- Cannot reduce by repeated measurements, but can account for in some way.

3. Indeterminate (Random) Errors

- Natural variations in measurements.

- May be result of operator bias, variation in experimental conditions, or other factors not easily accounted for.

- May be minimized by repeated measurement and using an average value.





female as well as what proportions of each gender fall into different age categories, race or ethnic categories, educational categories, etc. The researcher would then collect a sample with the same proportions as the national population.

Probability Sampling Techniques

Probability sampling is a sampling technique where the samples are gathered in a process that gives all the individuals in the population equal chances of being selected.

Simple Random Sample. The simple random sample is the basic sampling method assumed in statistical methods and computations. To collect a simple random sample, each unit of the target population is assigned a number. A set of random numbers is then generated and the units having those numbers are included in the sample. For example, let's say you have a population of 1,000 people and you wish to choose a simple random sample of 50 people. First, each person is numbered 1 through 1,000. Then, you generate a list of 50 random numbers (typically with a computer program) and those individuals assigned those numbers are the ones you include in the sample.

Systematic Sample. In a systematic sample, the elements of the population are put into a list and then every kth element in the list is chosen (systematically) for inclusion in the sample. For example, if the population of study contained 2,000 students at a high school and the researcher wanted a sample of 100 students, the students would be put into list form and then every 20th student would be selected for inclusion in the sample. To ensure against any possible human bias in this method, the researcher should select the first individual at random Elesis technically called a systematic sample with a random start.

Stratified Sample. A stratified sum () is a sampling technique in which the researcher divided the entire target populated into different subgroups or strata, and then randomly selects the final subject proportionally from the different strata. This type of sampling is used when the researcher wants to highlight specific subgroups within the population. For example, to obtain a stratified sample of university students, the researcher would first organize the population by college class and then select appropriate numbers of freshmen, sophomores, juniors, and seniors. This ensures that the researcher has adequate amounts of subjects from each class in the final sample.

Cluster Sample. Cluster sampling may be used when it is either impossible or impractical to compile an exhaustive list of the elements that make up the target population. Usually, however, the population elements are already grouped into subpopulations and lists of those subpopulations





assembled, it becomes necessary for the researcher to arrange the same in some kind of concise logical order, which may be called tabulation.

Advantages of Tabulation: :

- 1. It simplifies complex data.
- 2. It facilitates comparison.
- 3. It facilitates computation.
- 4. It presents facts in minimum possible space.

5. Tabulated data are good for references and they make it easier to present the information in the form of graphs and diagrams.

Unit 4

Hypothesis Testing

Hypothesis testing allows us to use a sample to decide between two statements made about a Population characteristic. Population Characteristics are things like "The mean of a population" or " the proportion of the population who have a particular property". These two statements are called the Null Hypothesis and the Alternative Hypothesis.

Definitions *H0*:

Definitions *H0: The Null Hypothesis* This is the hypothesis or claim the **Sicu**lty assumed to be true.

which we initially assume to be HA: The Alternative Hypotheris The hypothesis of clan de to accept if the this sufficient evidence. false but which we



A type I error, also known as an error of the first kind, occurs when the null hypothesis (H_0) is true, but is rejected. It is asserting something that is absent, a false hit. A type I error may be compared with a so-called *false positive* (a result that indicates that a given condition is present when it actually is not present) in tests where a single condition is tested for. Type I errors are philosophically a focus of skepticism and Occam's razor. A Type I error occurs when we believe a falsehood.^[4] In terms of folk tales, an investigator may be "crying wolf" without a wolf in sight (raising a false alarm) (H_0 : no wolf).



Univariate analysis

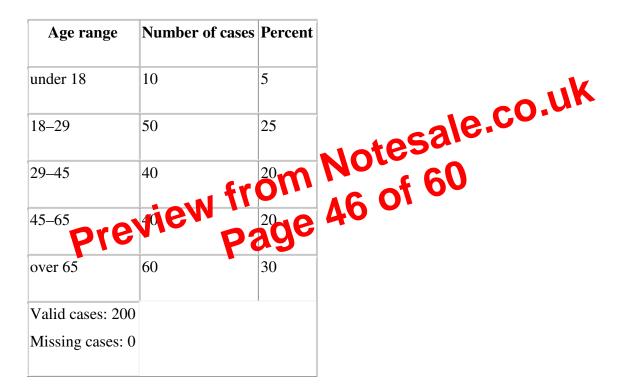


Univariate analysis is the simplest form of <u>quantitative (statistical) analysis</u>. The analysis is carried out with the description of a single <u>variable</u> in terms of the applicable <u>unit of analysis</u>. For example, if the variable "age" was the subject of the analysis, the researcher would look at how many subjects fall into given age attribute categories.

Univariate analysis contrasts with <u>bivariate analysis</u> – the analysis of two variables simultaneously – or <u>multivariate analysis</u> – the analysis of multiple variables simultaneously. Univariate analysis is commonly used in the first, <u>descriptive</u> stages of research, before being supplemented by more advanced, <u>inferential</u> bivariate or multivariate analysis.

Methods

A basic way of presenting univariate data is to create a <u>frequency distribution</u> of the individual cases, which involves presenting the number of cases in the <u>sample</u> that fall into each category of values of the variable. This can be done in a table format or with a <u>bar chart</u> or a similar form of graphical representation. A sample distribution table is presented below, showing the frequency distribution for a variable "age".



In addition to frequency distribution, univariate analysis commonly involves reporting measures of <u>central tendency</u> (location). This involves describing the way in which <u>quantitative data</u> tend to cluster around some value. In univariate analysis, the measure of central tendency is an <u>average</u> of a





Here are 11 basic elements of a standard report. I'm not a masochist, so this structure does not need to be rigidly adhered to. Instead, bring your own circumstances, needs and creativity to the mix, and use whatever's appropriate.

- 1. Title page
- 2. Index (or Contents)
- 3. Thesis (or Terms of Reference or Abstract)
- 4. Introduction (or Executive Summary)
- 5. Background

- Appendices 11. Bibliography (PReferences) Use the right style

- 6. Use the right style

Use hard facts and figures, evidence and justification. Use efficient language - big reports with too many words are awful. The best reports are simple and quick to read because the writer has interpreted the data and developed viable recommendations.

Here are some tips:

- 1. Write as you speak.
- 2. Avoid empty words.
- 3. Use descending order of importance.
- 4. Use the active voice.
- 5. Keep sentences short.
- 6. Don't try to impress; write to express.





- 2. Does it do what I was asked to do?
- 3. Does it do what I said I'd do in my introduction?
- 4. And bottom line: Am I pleased with it?

Evaluation of a Research Report

- TITLE [in a memorandum, the subject] •
- ABSTRACT [in a memorandum, the first paragraph] •
- **1. INTRODUCTION** •
- 1.1 Background •
- om Notesale.co.uk Sige 58 of 60 1.2 Outline of the problem and its context •
- 1.3 Previous related work •
- 2. PURPOSE •
- 2.1 Hypothesis
- 2.2 D Initions
- 2.3 Assumptions
- 3. METHODS
- 3.1 What are the data that were used? •
- 3.2 How were they collected? •
- 3.3 How were they analyzed? •
- 4. RESULTS •
- **5. CONCLUSIONS** •
- 6. RECOMMENDATIONS •
- 7. SUMMARY AND ACKNOWLEDGMENTS
- APPENDIX OR APPENDICES •



- 2. www.nyu.edu
- 3. www.springer.com
- 4. www.emathzone.com
- 5. www.socialresearchmethods.net

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