

Research Process

Process of Research



1. Defining the problem

The starting point of any research is to formulate the problem and mention the objectives before specifying any variables or measures. This involved defining the problem in clear terms. Problem definition involves stating the general problem and identifying the specific components of the research problem. Components of the research problem include:

- a) The decision maker and the objectives
- b) The environment of the problem
- c) Alternative courses of action
- d) A set of consequences that relate to courses of action and the occurrence of events not under the control of the decision maker and
- e) A state of doubt as to which course of action is best

Problem formulation is perceived as most important of all the other steps, because of the fact that a clearly and accurately identified problem would lead to effective conduct of the other steps involved in the research process. Moreover, this is the most challenging task as the result yields information that directly addresses the management issue, though, the end result is for the management to understand the information fully and take action based on it. From this we understand, that the correctness of the result depends on how well the research takes on, at the starting point.

Following are the techniques to get a clear idea of a problem:

- Secondary data analysis
- Pilot studies
- Statement of research objectives

2. Planning a research design

After researcher has formulated the research problem, the research design must be developed. A research design is a master plan specifying the methods and procedures for collecting and analyzing the needed information. It is a framework of the research plan of action. The researcher must determine the source of information, the design technique (survey or experiment, for example), the sampling methodology, and the schedule and cost of the research.

There are four basic design techniques - surveys, experiments, secondary data, and observation.

a) Surveys: A survey is a research technique in which information is collected from a sample of people by using a questionnaire. The task of writing a questionnaire, determine the list of questions and designing the exact format of the questionnaire is an essential aspect of research design through survey.

b) Experiments: Test marketing is a frequent form of business experimentation. Business experiments hold the greatest potential for establishing cause effect relationships. The use of experimentation allows investigation of changes in one variable, such as productivity, while manipulating one or two other variables, perhaps social rewards or monetary rewards, under

controlled conditions. Ideally, experimental control provides a basis for isolating causal factors because outside influences do not come into play. An experiment controls conditions so that one or more variables can be manipulated in order to test a hypothesis.

c) Secondary Data: Collection of secondary data provides useful information for planning the research design.

d) Observation: In many situations, the objective of the research project is merely to record what can be observed. For example, the number of automobiles that pass a site for a proposed gasoline station. This can be mechanically recorded or observed by any person. Similarly, the amount of time taken by an employee to perform a task may be observed in a time study.

3. Planning a sample

Although the sampling plan is included in the research design, the actual sampling is a separate stage of the research process. However, for convenience, the sample planning and sample generation processes are treated together, here.

Sampling involves any procedure that uses a small number of items or that uses parts of population to make a conclusion regarding the whole population. In other words, a sample is a subset of a larger population. If certain statistical procedures are followed, it is necessary to select every item in a population because the results of a good sample should have the same characteristics as the population as a whole. Of course, when errors are made, samples do not give reliable estimates of the population.

There are two basic sampling techniques: probability and non-probability sampling. A probability sample is defined as a sample in which every member of the population has a known, and non-zero probability of selection.

If sample units are selected on the basis of personal judgment, the sample method is a non probability sample. As a matter of fact, the sampling decision is not a simple choice between two methods. Random samples, stratified samples, quota samples, cluster samples and judgmental samples are some of the examples of samples that may be drawn.

4. Collection of data

Adequate and appropriate data are required for any standard research work. The data may differ considerably keeping in view the financial aspect, time and other resources available to the researcher. The researcher, while collecting data takes into consideration the nature of investigation, objective and scope of the inquiry, financial resources, available time and the desired degree of accuracy. That apart his own ability and experience also counts much in the collection of required data.

Secondary data are collected from books, journals, newspaper, reports of the earlier studies etc., whereas primary data are to be collected either through experiment or through survey. For examining the facts through hypothesis, the researcher, takes recourse to experiment for observing some quantitative measurements.

But, for the purpose of a survey, data may be gathered by observation, personal interviews, telephonic interviews, mailing of questionnaires and through schedules. For any particular survey he may administer one or more than one of the above methods, depending on the nature of study.

5. Analysis of data

After completion of the collection of data, the researcher embarks upon the analysis of these data. This involves a number of operations such as establishment of categories, the application of these categories to raw data through coding, tabulation. Thereafter statistical inferences are drawn.

All these operations are very closely related to one another. At the outset, the researcher classifies the raw data into some usable categories on the basis of some purposes. At this stage coding operations is also done so as to transform the categories of data into symbols in order to make them amenable to be tabulated and counted. The researcher may also induct editing in order to improve the quality of data for coding.

Thereafter, in the post-coding stage, the classified data are put in the form of tables as a part of technical procedure either manually or through mechanical devices such as computers.

Computers are generally used in large enquiries for the dual purposes of saving time and for making the study of large number of variables possible. While analyzing data, the researcher applies various well defined statistical formulae for the computation of percentages, coefficients, tests of significance, so as to determine with what validity data can indicate any conclusion.

6. Conclusion and report

As we know that most of the business research is applied research. Hence, the purpose of the research is to make a business decision. An important but often overlooked aspect of the researcher's job is to look at the analysis of the collected information and ask "What does this mean to management".

The final stage in research process is to interpret the information and make conclusions for managerial decisions.

The research report should communicate the research findings effectively. Generally, management is not interested in detailed reporting of the research design and statistical findings but wishes only a summary of the finding. It should be noted that if findings of the research remain unread on the manager's table, the study is useless. Research is only as good as the applications made of it. Business researchers must communicate their findings to the management.

Problem Identification and Definition of Marketing research plan

Introduction

A marketing research plan is the document containing the information regarding the potential market. It outlines specific actions to be taken to attract potential buyers to buy products or services. It is developed as an overall part of a business plan to accomplish the objectives of the organization. This paper will discuss the development of a marketing research plan for entry into the business of a coffee shop and the different methods to develop the plan. It will also discuss different modes of marketing research and the research instrument used to develop the plan.

Problem Identification and Definition

The first stage is to develop a clear and precise understanding of the research problem, to permit effective conduct of the research process. It is very important to analyze the problems to conduct the research effectively. In this scenario, a veteran market researcher wants to enter into the business of operating a coffee shop and the problem is to identify the potential market and to find the appropriate outlet and product mix for the products and services of the business. The determination of product line and the price to be charged for the product is the identified problem. At the same time, the business is also facing problems with the positioning of the shop in the relevant market.

Research Objectives

The objectives for this marketing research process are to find an appropriate market and potential customers for the coffee shop by identifying the buying behavior and habits of the prospective customers.

Research Approach

A research approach is an important part of the marketing research plan that helps to find relevant data and information and helps to convert information and data into numeric form so that it is easy to develop the marketing plan. There are basically two types of research approaches: qualitative and quantitative, which can be used to collect data and gather relevant information.

Qualitative research approach: Under a qualitative research approach, the information is gathered in qualitative terms to effectively answer the questions. In this research approach, an in-depth analysis of people's attitudes and behavior can be analyzed to know their preferences. This approach also helps to understand the complexity of the prospective customers very well so that relevant information can be gathered. The most important thing about this research is that there is no fixed way or theory how best to gather information for the specific problem. It generally uses a small number of respondents.

Quantitative research approach: On the other hand, in quantitative research, the data and information is generally transformed into numeric form to answer the research questions. Using this approach, the information is gathered in a holistic view to answer the research questions. All the people in the group are invited to answer the questions for a specific problem. This approach generally tends from general to specific to answer the objectives of the case problem.

In this case, quantitative research approach would be more appropriate to find the solution as it would be more effective in analyzing customers' behavior regarding the coffee shop business. It would also help in getting relevant information case through the data available and questionnaire. It will also help the researcher to decide the product line as well as its pricing structure.

Research Design

In this stage, a model is created to conduct the marketing research. An effective research design helps in answering the problems related to the case. The descriptive way of conducting the marketing research is being considered. The research design which will be used here is of a descriptive research design, so that solutions to the issues can be obtained. The effectiveness of the research design alone can determine the success of the marketing research process that ultimately affects the quality of the marketing research plan as well.

The descriptive design of the research plan will help to provide an in-depth analysis of the situation through effectively analyzing individual responses. It will also help to make the research process fast and accurate. At the same time, it brings smoothness to the information gathering and analysis as it answers the case problems effectively. In most cases, it has been seen that due to lack of effective research design the researcher is not able to find relevant answers to problems. The descriptive research design will help to find current users of coffee as well as help to analyze the future demand of the product.

As the design is the most time-consuming stage, it needs to be developed carefully. The design will help the researcher to prepare an effective questionnaire for the research process. This questionnaire will help the researcher to find appropriate market, product line and price. For the success of any research process, it is important to choose appropriate respondents, to maximize the chance of achieving a valid outcome.

Data Collection

Data collection is one of the most important stages in a marketing research process. Different activities, such as data gathering online and questionnaires, will be used to answer the case problems effectively. Following are some of the ways through which data can be collected.

- **Online data:** The online data available can help to gather information on which markets hold the most promise for a new coffee shop. Although Michael doesn't want to use the internet for this research, to answer the first question it will prove to be relevant. The number of coffee chains in a particular area, the increase in the number of percentage of coffee shops and the revenue of competitors can be collected to analyze which markets are most promising.
- **Online survey:** The researcher also has the option of conducting an online survey to find appropriate markets and customers for the proposed coffee shop. It is less costly and much preferred in today's world, where people don't have much time to respond in person. The online survey will also help the researcher to get several ideas from the respondents regarding the opening of the coffee shop. It also has additional benefits, such as having quick responses that can help the researcher to get relevant information rapidly and thus to start business as soon as possible. It is also believed that respondents in online surveys respond more honestly in comparison with other means of data collection and surveys. This source of information generation would be the most effective for the researcher to get relevant information.
- **Questionnaire:** The questionnaire will help the researcher to collect relevant information. It is one of the most critical aspects of the research and a good questionnaire must meet the two basic criteria of accuracy and relevance. It should be carefully designed to ensure the answers are relevant: thus, how the questions are framed, the sequence of questions and pretesting of questions.

Research Instrument

There are various research instruments available to be used for this research to find appropriate solutions to the problems. The use of effective research instruments is very important to

determine the success of the marketing research plan. The effective use of the research instrument will help to analyze the situations effectively. To get a solution for the problems, the researcher can use a questionnaire. This is an effective instrument to find solutions to the issues raised. It will help the researcher to find appropriate markets and customers for the coffee shop. Following is the description of how this instrument can help the researcher to find the appropriate market

Questionnaire: A questionnaire is the most common research instruments used to find solutions to research questions. It is a set of questions through which the respondents' preferences and taste are determined by the researcher. It will help the researcher to get relevant information. It is very important to prepare effective questions, so that appropriate information can be generated from respondents. Here, the effectiveness of the questionnaire will help the researcher to find the right market as well as potential customers. The wording, form and ordering of questions really matters a lot in an effective questionnaire as these factors determine the success of the questionnaire. It should also be considered, while determining what questions should be included, that each question should focus on the problems described in the present case.