1 Introduction

There are five major sources of information in marketing research. They are (i) Primary Data (ii) Secondary Data (iii) Information from Respondent (iv) Experimentation and (v) Simulation. Sources of primary and secondary data have already been discussed in class. For further details on Primary Data refer “Green and Tull (5/e), Chapter 5, Page 149 - 196”. For further details on Secondary Data refer “Green and Tull (5/e), Chapter 4, Page 110 - 199”.

2 Information from Respondents

A major source of information in market research is that obtained from the respondents. Asking questions and observing behaviours are the primary means of obtaining information whenever people’s action are being predicted or investigated. The term respondent means - “one who responds or provides the answers”. For purpose of collecting information it is useful to include both verbal and behavioural responses to define the term answer.

2.1 Sources of Information

2.1.1 Information from Communication

Information can be gathered from the respondents in various ways by communicating with them. One of the most widely used device is surveys — in which a group of people are asked questions and the people respond to the questions. Personal interviews, telephonic interviews, mail questionnaires etc. all form a part of surveys.

Questioning a respondent is virtually a necessity if one wants to obtain information about the level of knowledge, attitude, opinion, motivation or intended behaviour. Although questioning of respondents is often the most efficient and economical way to obtain the information, it requires considerable skill and care in recording, analysis and deduction to be of maximum value. In the best case scenario, people respond with correct information that they are able to provide. In the worst case scenario, the information provided may be misleading or highly biased or even completely inaccurate.
2.1.2 Information from Observation

Relevant information from many marketing problems may be obtained by observing either present behaviour or the result of a past behaviour. Observation methods make it possible to record behaviour as it occurs and thus eliminate errors arising from the reporting of the behaviour. However observing people’s behaviour cannot be used effectively to obtain information about the level of knowledge, opinion, motivation or intended behaviour of the respondent. Information from observation fails completely if the behaviour under study is extremely private or impossible to record.

2.2 Types of Information

All marketing decisions involve recognition of alternatives and making predictions. Making prediction always involves making a prediction about the behaviour of participants of the market. From a respondent two broad type of information can be drawn - behavioural correlates and non behavioural correlates. They can be broadly classified as follows:

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2.2.1 Past Information

Past behaviour is the type of information that has wide usage as a predictor of future behaviour. Each of us rely heavily on it in our daily lives. For example when we say that “Ms. X is an impulsive shopper” what we really mean is that in the past we have seen Ms. X to purchase things on impulse (study of past behaviour) and based on that behaviour pattern we can conclude that the next time Ms. X goes shopping - she will purchase things on impulse (prediction).

In a more formal application, the use of trends, seasonal and cyclical data for forecasting are all examples of the use of recorded information of past behaviour to predict future behaviour. Regardless of the nature of the variables to be forecasted, a basic premise involved in these kinds of prediction is the assumption that the relationship between past and future behaviour is somewhat stable. This relationship may either be explicit or implicit, may or may not be easily identified or measured; but the researcher non the less must believe that there is some continuity and stability in the behavioural pattern of the people. to believe otherwise would make impossible the use of prediction.
The record of past behaviour may have to be obtained from natural situations or controlled experiments. The assumption that there is a continuous and a relatively stable relationship between past and future behaviour is basic to and is explicitly recognised in controlled experiments in marketing.

Test marketing operations are carried out to obtain information on customers and/or obtain competitors responses to various stimuli. This recorded information is used to predict future behaviour, even though in many cases allowances must be made for expected changes in the condition. A formal classification of types of information with respect to past behaviour is concerned with three categories - acquisition, use and possession. Within each of these areas information on “what, how much, how, where, when why and who” becomes useful for understanding consumption patterns for the product. The requirements of a particular study will dictate which of these type of information would be required.

2.2.2 Intended Behaviour

Intention may be defined as presently planned action(s) to be taken in a specified future period. Intentions, in essence, are self prediction of future behaviour. Thus if intentions are obtained directly from the segment whose behaviour we want to predict, it would be a more reliable and direct method of prediction.

Intentions are relevant and commonly sought type of information in marketing research. However considerations of our own experience in terms of what we have planned to do vis-a-vis what we actually did, should serve to raise some questions about the reliability of intentions as a predictive tool. The question “what will you do?” must always be answered conditionally. The degree of assurance that can be given that a planned action will be translated into actual action varies widely — depending on circumstances, future happenings etc. — many of which are outside the control of the respondent.

Many judgements and expectations are bound up in a currently valid statement of intention to buy. Variables such as expected change in financial status, price expectations, general business forecast etc. all contribute to the final intention decision. As each of these — to some extent — are random variables; it seems plausible to assume that the stated intention is based on probabilistic terms. This supposition is supported by the fact that when intention measurement data when assigned probabilities have generally proved to be more effective and accurate than any other form. The most used scale is as follows:

Intention to Buy Scale

Q. with the help of the statements provided, could you tell me which statement best describes your intention to purchase the product in the next 6 months? SINGLE CODE

- Will definitely buy 1
- Will probably buy 2
- May or may not buy 3
- Will probably not buy 4
- Will definitely not buy 5
- Don’t Know / Cant Say 6
A major use of intention data is used in forecasting sales. However, it has been seen that sales forecast in industrial goods have been more accurate that forecasts for consumer products.

### 2.2.3 Socio Economic Characteristics

Social and Economic Characteristics of the respondents are often useful in forecasting their reactions. The knowledge of Socio-economic characteristics allow us to group respondents into various social groups; these groups tend to provide — on an average — a pretty accurate picture of the pattern of the behaviour a member of the group will follow. Traditionally grouping was most frequently done on factors such as income, occupation, level of education, sex, marital status etc. But now a days other bases of classification are gaining momentum. Personality traits, preferences, perceived risks etc are some of the new demarcators.

In general, the identification of the consumer classification is useful in marketing so long as (i) there is a differential purchase behaviour among the identified market segment (ii) there are practicable means of differentiating the marketing effort among segments (iii) it allows different marketing strategies to be put into action for different segment. It may be interesting to know that owners of Multi-Utility-Vehicles (MUV) have different personality traits than owners of small cars; but this knowledge will be worthwhile only if it can be used in developing and evaluating appeals for each type of buyers.

Two commonly used and widely accepted classifications of consumers are by (i) stages of life cycle and (ii) Values and Lifestyles. The Life Cycle Stage\(^1\) theory postulates that households move through various stages — Young Married (No Children) . . . Solitary Survivors — and each stage has a distinct buying and spending pattern. The SRI Values and Lifestyles\(^2\) classification segments customers by values, attitudes, opinion, interest, club membership, spending patterns etc.

Classification of consumer is essential if we are to learn more of consumer behaviour and utilize this information in developing more efficient classification techniques. Specialised Classification procedures like factor analysis, cluster analysis and discriminant analysis etc. are being employed more and more to help identify new and useful classifications.

### 2.2.4 Information on Extent of Knowledge

The assertion that the “extent of knowledge” about a situation is one of the determinants of the behavioural response to it, borders on being a tautology. So long as the action taken is rational, the amount that is known (or is believed to be known) about a situation will influence the action that will be taken in that particular situation. For example — supposed that there is a new shampoo available in the market. However the product has not been advertised in any media and as such none of the customers are aware about the product. The nest time a customer goes shopping for a shampoo, the chances are high that the customer will not buy the new shampoo. In other words, the extent of the

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\(^1\)See Leon G. Schiffman & L.L. Kanuk, Consumer Behaviour, 9th Indian Reprint, Chapter 12: The Family, Page 360 - 369

\(^2\)Ibid, Chapter 3: Market Segmentation, Page 68
purchasers knowledge concerning the relative concerning his knowledge about various brands play a major role in the choice of a brand.

Prediction of what action a respondent will take, is therefore often aided by knowing “How much does the consumer know?”. This information is crucial as they have direct impact on promotional campaigns. Products being launched for the first time need an exceedingly high promotion budget as opposed to the products that are already present in the market. The theory and practise of advertising is based on the premise that the consumer decision to buy or not buy is strongly affected by the level of awareness and the extent of knowledge of potential audiences concerning the product and its attributes. The job of the advertising is to build up awareness or - the extent of knowledge available with the consumers.

2.2.5 Information on Attitudes and Opinions

Extensive studies of Attitudes and Opinions have been made by investigators in the field of psychology, sociology, political science etc. In Psychological or sociological experiments the term “attitudes” and “opinions” have been frequently differentiated. Attitude is viewed as predisposition to act in a certain manner, whereas Opinion is defined as the verbalisation of the attitude. Thus the statement by a respondent that she prefers colour to B&W television would be an opinion expressing her attitude towards colour television

However, in marketing, when attitudes and opinions are used to predict actions that the respondent will take — the difference between attitudes and opinion become rapidly blurred. As such the terms are used interchangeably in marketing. Attitude research in marketing has been conducted with the use of both qualitative and quantitative techniques. In either forms, the problems that are encountered in assessing attitudes and opinions are more severe than any other information gathering exercise. As such the information on attitudes and opinion is fraught with danger. However as attitudes and opinion of perspective buyers clearly affects purchase decisions, the marketing manager needs to be well informed about the nature of the relevant attitudes and opinions and the degree of intensity with which they are held.

Attitudes and opinions have been used successfully in designing new products, advertising, selecting store location, developing customer care policies and in choosing company and brand / trade names.

3 Experimentation

3.1 Natural Experiments

A natural experiment is one in which the investigator intervenes only to the extent required for measurement. That means there is no manipulation of the assumed causal variables. The investigator merely looks at the effect. As such natural experiments can be looked upon as a form of “ex-post factor” research.

In this type of study, the researcher approaches the data collection assuming that a controlled experimentation design has already been conducted; the variables of interest have occurred in a natural setting on their own violation. The researcher looks for respondents who have been exposed to the experimentation — also known as experimental group. If a control group is desired then researcher
also has to look for a set of respondents who have not been exposed to the experimentation. Measurements then can be made on the variables of interest.

For example — Impact of a Print Based Commercial on Purchase Behaviour — can be looked upon as a natural experimentation. The commercial can be launched by the advertising agency in the normal process. After the launch of commercial there would be two set of people - one who have been exposed to the commercial in the normal process (experimental group) and others who have not yet been exposed to the commercial (control group). The researcher then can meet respondents from both groups and ask relevant questions.

The major drawback of natural experimentation is that one can never be sure whether the obtained relationship is causal or non-causal; since it is very difficult to isolate cause and effect in such cases.

3.2 Controlled Experiments

In controlled experiments, investigator intervention is required almost at all the stage of the study. Specifically two types of intervention is required: (i) Manipulation of at least one assumed causal variable and (ii) Random assignment of subjects to experimental and controlled groups. Manipulation of at least one variable is required in order to administer the treatments whose effects are desired to be measured. Randomised allocation of subjects to groups is essential for the purpose of controlling differences arising out of extraneous variables.

For example — Impact of a Print Based Commercial on Purchase Behaviour — can also be devised as a controlled experimentation. Assuming that the commercial was for a newspaper — the commercial is launched using a technique called “split run”. Under this technique - the commercial is released in say north and south calcutta and not in east and west calcutta. After the launch of commercial there would be two set of people - one who have been exposed to the commercial (experimental group) and others who have not yet been exposed to the commercial (control group). The offtake from stores can be measured from north, south, east and west Calcutta and conclusions drawn regarding the effectiveness of the commercial in changing purchase behaviour.

Both natural and controlled experiments can provide causal inferences of associative variation and sequence of events. But only controlled experiments can provide causal inference about the absence of possible causal factors.

4 Simulation

Simulation can be defined as “a set of techniques for manipulating a mode of a real world process for the purpose of finding numerical solutions that are helpful in deducing about the real world process that is being modelled”. Simulation as such is a model of the operational situation which is experimented with, instead of the real world situation.

The difference between simulation and other models of marketing information is that the simulation provides information from an “imitation” of the real world situation; whereas the other models of marketing information provide information directly from the situation being investigated.

Models that are experimentally rich (i.e. contain complex among variables, probabilistic components, time dependencies etc.) are usually too difficult to
solve by standard analytical methods such as calculus or various mathematical
programming techniques. The researcher views the simulation model as an
imitation of the process under study and attempts to run the system to see “what
would happen if” a particular policy was put into effect. The complexity of
simulation problems requires computers with huge processing power to simulate
the problem.

Various simulation techniques are being developed for marketing decision
support systems. For the marketing researcher the role of computers and simu-
lations should not be ignored. It is becoming increasing apparent that in future
simulation techniques will play a major role in marketing research.
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