CHAPTER- 3
SCOPE OF RESEARCH
WORK
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3.1 Background

This chapter elaborates on design of the research, approach utilized by the study and provides basis for selecting the suitable research design which can provide answer to the research questions and the methods adopted for collection of data. This section is the bridge between the research problem and the approach utilized for problem analysis.

A detailed comprehension of the methods utilized in the study, and the basis for selecting the said methods is given in the chapter. The section provides a medium to work towards fulfilment of research objectives identified in the beginning of the study.

3.2 Research Impact

Stating problems and issues, followed by assimilating a theory for determining solution to the same, and then testing the developed theory by collecting data and facts, and subjecting them to a statistical analysis for drawing inferences which may approve or reject the identified hypothesis, is all part of the research process, according to Woody (2006).

Kumar (1996) defines research as looking out for information proactively so as to determine answers to the stated questions. There must be a well defined structure of a research project within which the identified solutions and inferences can be implemented, related, or analyzed more to enhance the research. The data and conclusion of the research must be validated as well as open to use beyond the scope of the study. In addition, there must be universal applicability of the findings, i.e. the results must hold good for groups not studied in the research. Moreover, the study must be able to influence the
decisions, guidelines and the framework in some or the other way. Theorists hold the researchers responsible for ensuring appropriate data collection and validation, such that the findings have a general application.

Researchers have a rich and in-depth insight to social, political, commercial, and economic problems. They are involved in creating solutions that impact social groups. Their work allows them to examine an issue and a topic in detail from all its aspects and then provide a well-rounded solution or theory after due validation processes (Kumar, 1996).

Research benefits international communities, if it follows diligent processes to meet the acceptable requirements. A well-researched project helps implement policies designed around its conclusions; it also enables programme development and strategy design.

Langer (2002) opines that research is based as much on theory as it is on practice because a considerable amount of data is quantitative and can be tested using statistical methods. Experiments form a significant part of research, which helps substantiate conclusions.

Researchers are concerned with facts and collect data either directly or indirectly from previous research projects. This is possible because researchers are constantly working to validate their hypotheses and ensure that these hypotheses are applicable universally; they take rigorous steps to authenticate data.

This allows researchers to draw on another’s work, secure in the knowledge that the ethical tenets of research have been maintained. A detailed and careful analysis provides creative solutions that can be applied to real
problems since the steps taken to reach the conclusions from the theory involve a detailed and careful examination at each stage.

In our research impact of two wheeler consumer behaviour on marketing strategy and the relation between the two will be analysed. Three companies-Bajaj, Hero and TVS will be part of the study and Basis this we shall find where Bajaj stand and what steps are needed for Bajaj to take so that its market share in Jaipur market increases sharply.

3.3 Research Design and Philosophy
Methodology is the collection of data’s rationality to answer the research questions. Saunders, et al, (2009, pg, 108), indicate that the research philosophy has significance and these assumptions help in deciding research methods and strategy. According to Johnson and Clark (2006), in Saunders et al. (2009, pg, 106), it is very important for a business and management researcher, to choose proper research strategy since it will help to understand and investigate.

Research Design is a common sense required, clear understanding and thinking to carry out management of the entire research project. It is the strategy, a systematic plan and the structure, how to conduct a particular research project.

Diagram representation:
The onion’s first two layers from the top, research, focus on “the philosophy” and “research approach”.
A good research methodology is a technique of collecting data systematically. The population is identified in the research investigation. The design of the study is prepared with the help of the onion philosophy. Considering the onion peel out each layer leads to the centre. The first two layers consist of the data collection techniques and analysis procedure. Its philosophy approach depicts issues that affect choice in data collection techniques and the procedure becomes easier, Saunders et al. (2009). The instruments used for the collection of the data are evaluated, understood and presented in this chapter.

3.3.1 Research Philosophy

Malhotra et al. (2006) suggest that a positivist approach would think of frameworks as being restrictive and, therefore, reducing the researchers’ ability to enlarge his/her perspective in the study. Remenyi et al. (1998), cited by Saunders et al, (2003), suggests that interpretivist approach allows to
develop a further understanding of the motivating factors behind peoples’ behaviour. For this study both approaches are meaningful, as a positivist approach constructs firm law-like generalisations based on a structured methodology and, the qualitative data makes the study progress with a partly interpretivist approach by looking further into consumers insights. The author has decided to follow a phenomenological approach due to the nature of the research question being all about experiences. To fully answer the research question it is necessary to understand people’s emotions and feelings, which will take the form of qualitative data. Phenomenological research focuses on qualitative data and often involves contemporary issues, hence why this type of approach is most suited. (Saunders et al., 2003)

3.4 Research Approach

The concepts of Induction and Deduction are critical to any research work. Bryman and Bell (2003) elucidate that a research based on the ‘Inductive Approach’ primarily involves arriving to a generalized conclusion based on observations. It involves linking the observation to a theory which is pertinent to the observed findings. However, in the ‘Deductive Approach’ a researcher works out a hypothesis based on what the previously known research, develops hypotheses and tests it on the basis of practical knowledge. The main logic behind a deductive study is to skilfully develop a hypothesis and relate it to operational terms (Bryman and Bell, 2003; Lee and Lings, 2008).

For the current study, we adopt a ‘Deductive Approach’, wherein we begin by analyzing broad ranged concepts, like marketing strategies and consumer behavior, and then narrow it down to analyze the relationship of marketing strategies with that of consumer behaviour adopted by Bajaj two wheelers in comparison to that of Hero and TVS.
3.5 Research Strategy

Researchers can use several methods to approach a project and collect data. This paper also offered several methods to address the issues posed by the study. The various alternatives appropriate for this paper are discussed to illustrate the options and the final selection rationale. These include:

1. Survey

Surveys are data collection methods that are collected directly from respondents through survey sheets with open ended and closed ended questions or an interview yielding qualitative and quantitative data. Since the questions are the same for all respondents a cross section of the demographic can be surveyed and compiled and analysed.

In our research we intend to use survey method to get answers to close ended questions which are framed in a questionnaire.

2. Action Research

This could imply a detailed research of one company or unit to which statistical techniques are applied to answer the research question. Action research models and case studies have a similar approach.

In our research we shall study consumer behaviour on buying decisions. Consumers in our research will be of Hero, Bajaj and TVS. As such there will be no case study, so we shall not use this type of research method in our study.

3. Case Study

Case studies are conducted when analyzing a problem or issue in greater detail to understand phenomena. It involves collecting detailed data and rigorous analysis and testing to understand behaviour, events and phenomena and uses elements of exploratory research.
Here we shall be using the survey method for collecting primary data from consumers of hero, Bajaj and TVS so the case study method may not be of much use to us.

4. **Ethnography**

   Ethnography is another research strategy which is a detailed study requiring time and understanding of behaviour. The method has its roots in anthropological studies.

   This research strategy may not be useful in our research because we need to understand only the buying behaviour of consumers and its impact on marketing strategies of different companies.

5. **Grounded Theory**

   This research strategy does not conform to the standard research norm of offering a theoretical construct and then supporting it with data but is the collection and analysis of data after which a theory is propounded.

   This strategy will not be useful in our research because data need to be collected first from consumers and basis that marketing strategy adopted by hero, Bajaj and TVS need to be analysed.

6. **Experimentation**

   This involves analyzing variables under controlled environments and recording the factors that create negative and positive impact on phenomena.

   In our research there will be no assumptions and basis feedback of consumers hypothesis will be tested. probably this type of research strategy will not be useful in our case.
A comparison of various research strategies is as under –

**Table 3.1: Comparison Research Strategies**

<table>
<thead>
<tr>
<th>Research Strategy</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
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</table>
| Survey            | • Convenient method of collecting data for large demographics  
                   • Cost effective  
                   • Controlled results | • Limited data  
                   • Time consuming to review and analyze data from a large database  
                   • Follow-up calls or contact possibilities are impractical |
| Action Research   | • Detailed study and analysis required by the researcher to gain perspectives  
                   • Opens up new research possibilities in allied fields | • Restricted use of data as applicability may be limited to the question under study  
                   • Cause and effect clarity is not effected |
| Case Study        | • Detailed study with in depth analysis  
                   • Allows subsequent follow up studies | • Not cost effective due to time taken |
| Ethnography       | • Detailed study and understanding of the phenomena and issues | • Time consuming and does not suitable for business studies |
| Grounded Theory   | • Experience and track record of the researchers is a factor in lending validity to the findings which leads to wider acceptance amongst common and categories | • Time consuming and not suited for commercial research  
                   • Researchers’ personal tastes, choices, viewpoints and opinions may influence results |
| Experimentation   | • Theoretical constructs can be tested, examined and verified  
                   • Results are verifiable | • Results are based on assumptions and actual perspectives of respondents may not be reflected in the data leading to skewed results |
The research uses survey approach as the customer base is large and a big sample size would enable the researcher to have a more uniform viewpoint. As capturing the views of a large sample of population is possible only through survey, hence researcher utilized the survey approach for the present study.

The study intends to use both primary and secondary data. Primary data sources shall include surveys conducted with owners of Bajaj, Hero and TVS two wheelers. This will be supported by secondary data from official records and data available across various marketing agencies.

3.6 Research methods:

This section is meant to evaluate methods of this research, with specific emphasis over qualitative and quantitative research processes. In qualitative approach, the researcher collects all the data within a text format, and by quantitative approach the researcher collects data that has been transformed under various formats (with just one option), where both the methods will get elaborately demonstrated to attain the logic about the use of both to attain research objectives. The determined 2 kinds of data are subject to get generated through the process of fundamental difference led by the research that will be illustrated in this section.

1. Qualitative Research Methodology:

Approach of qualitative research is meant for the collection of the information led under the process of interpretation, as in case of collecting opinions of the peoples with no intentions or the establishment of any statistical validity. These researches are useful for the attainment of motivation, beliefs, attitudes and intentions, instead of using samples based on probability. By means of this approach, there are various techniques implied for the compilation of information found under behavioural sciences. These are all marked as per
the samples of smaller scale and thus cannot get generalised under numerical terms. Though the derived results are usually subjective, evocative and conjectural, there remains the intricacy which is subject to offer decision-making approach of the consumer encompassing illustrated ways and the modes through which the consumers act. Various marketing research gets related to the process of assisting marketers for comprehending the way the consumers will attain next modes added by the process of buying in future. Thus, quantitative surveys related to buying intentions or the aspects related to past buying features of decisions possibly cannot get reliable.

Proceedings of quantitative techniques instead of statistical accuracy, in general cannot capture full intricacies added by the abundance related to interrelationships that gets associated with various activities of the market. Real value under qualitative research can assist the marketers in comprehending about things that are not intended by people but what they actually mean, along with a range of determined techniques developed for the assistance under the task as:

- Surveys questionnaires or research
- Considered Focus group
- Selected in-depth interviews
- Techniques of observation
- Experimentation.

In our research design we intend to use the Qualitative research approach wherein consumers will be asked to revert on their opinion on their buying behaviour and their perception to strategies adopted by Hero, Bajaj and TVS Companies.
2. **Quantitative Research:**

Approaches related to quantitative research are inclusive of the process of collecting information which can quantifiable and cannot be opened under similar interpretation level like the qualitative research. The process is inclusive of information like sales’ figures, share of the market, market-size, product returns or service/product complaints and demographic data and the mode to accumulate by the primary research like questionnaire related surveys and interviews, by secondary sources with published data.

This research is led under larger surveys that offer factual base for adequate development with enough strength related to analyses meant for statistical accuracy. Most of us attempt to attain end of determined quantitative research, as we get by the interviewer clipboard under hand interviewing selection in street. Success related to quantitative research is subject to establish representative sample which is huge in amount for allowing the researchers with the assurance to results that gets generalised for the application of wider population. This makes the approach look specific for the research which is subject to get undertaken by telephone interviews, interviews conducted face to face or mail questionnaire, which can attain advantage related to the sources of secondary data.

Internet has revolutionised process of quantitative research. Earlier the concentration was about the attainment to cooperation attained online and the mode of structuring questions however, now techniques are getting advanced, relevantly interactive, implemented overtime and directly connected to the systems to collate sources of information sources both offline and online.
Table 3.2: Difference between Qualitative and Quantitative Research Methodology

<table>
<thead>
<tr>
<th>Qualitative Research Methodology</th>
<th>Quantitative Research Methodology</th>
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<tbody>
<tr>
<td>According to Donald Campbell &quot;All research ultimately has a qualitative grounding&quot;</td>
<td>According to Fred Kerlinger, &quot;There's no such thing as qualitative data. Everything is either 1 or 0&quot;</td>
</tr>
<tr>
<td>Aims in detailed and complete description.</td>
<td>It aims in classifying features, counting and constructing statistical structure to explain observation.</td>
</tr>
<tr>
<td>Researcher can have some idea about the objective related sources.</td>
<td>Researcher knows specifically about the objective related sources in advance.</td>
</tr>
<tr>
<td>Recommended in the initial stage of research.</td>
<td>Recommended in the latter part of research.</td>
</tr>
<tr>
<td>Design unfolds study.</td>
<td>Study gets designed before the collection of data.</td>
</tr>
<tr>
<td>Researcher is the instrument for collecting data.</td>
<td>Questionnaires/equipment are followed to collect numerical data.</td>
</tr>
<tr>
<td>Data takes the form of pictures, words or objects.</td>
<td>Data are all statistics and numbers.</td>
</tr>
<tr>
<td>Subjective, where the interpretation of the individuals turns important, as participant’s observations and in-depth interviews etc.</td>
<td>Objective, where the research seeks specific measurement as well as analysis of concepts, like surveys and questionnaires.</td>
</tr>
<tr>
<td>Qualitative data remain more 'rich', relevantly time consuming, and least generalized.</td>
<td>Quantitative data get more efficient, test hypotheses gets managed, yet can miss context.</td>
</tr>
<tr>
<td>Researcher immerse subjectively in the subject.</td>
<td>Researcher gets objectively separated from subject.</td>
</tr>
</tbody>
</table>
According to Halvorsen et al. (2000), use of questionnaires by the researchers for the collection of data from diversified investigations and quantitative method are very relevant. Entire purpose of this research is related to the process of identifying and assessing how marketing strategy influences the consumer behaviour. As per research purpose, quantitative data collected from questionnaire is made applicable by the quantitative methodology (Patton, 2002).

### 3.7 Data Collection

The data amassed by the investigator can be segregated into primary data and secondary data.

#### 3.7.1 Primary data:

When the investigator initiates an investigation for the very first time and gathers data such data is said to be primary in nature. This type of data is amassed through feedback forms, interviews and focus group debates. Such data is subject to statistical manipulations to reach deductions. This technique is extremely precise and results in correct inferences. However, it is difficult to gather such data and also the time required is much more. Thus primary data may be referred to be data which is gathered through interrogative sessions and individual documentation from the individuals who have been part of the incidents. Documentation here refers to individual interaction, memoirs, journals, snaps and movies (Singleton and Straits, 2005).

In our research, primary data will be collected through questionnaire from respondents of Hero, Bajaj and TVS consumers as per the sample size.

The sample of each manufacturer will be taken basis their respective market share in Jaipur market.
3.7.2 Secondary data:

Data which has previously been amassed by other investigators for other aims and may suit the current investigation are known to be secondary data. Such data is amassed through the documentation of the enterprise and other tomes in the annals. If the investigator finds the secondary data to be suitable, he/she also has to be content with the primary sources of data. Such secondary data may be employed to contrast the primary data gathered via feedback forms. It is relatively simpler to amass secondary data as information is amassed through the extant secondary sources like editorials, white papers, the web and print media, broadsheets and available investigative articles and educational publications. However, this kind of data is also time-consuming as one need to gather data which is accurate and pertinent. Additionally, secondary data also needs to be sorted to get the suitable data which suits the investigative aim (Kvale, 1996).

Here Secondary data in our research will be collected through internet, journals, research paper published in the past and companies Regional offices in Jaipur.

By employing techniques such as survey questionnaire forms and editorials the investigator has selected both primary and secondary investigative techniques. The aim of drafting the survey form was to amass details from people about the marketing strategies and consumer behaviour on buying process of Bajaj, Hero and TVS. In addition to using secondary techniques like editorials, publications, Google scholar to amass data it was the pertinent literature which provided the foundation of the present investigation.

The current research opted the primary methodology in the form of questionnaire wherein the pre-drafted questionnaire with close-ended questions was formed. The details of the questionnaire utilized have been given in the next section.
3.8 Data Collection Technique

3.8.1 Questionnaire

A format of questionnaire is actually an instrument relevant in terms of collecting data without any kind of pre-requisite status of having the contribution of the interviewer towards the respondent in the process of filling the questionnaire (Brace, 2004; Kumar, 1996). In general ‘questionnaire’ gets considered as a very popular research instrument in the quantitative methodology. Questionnaire structure is basically a set of questions that gets circulated among the selected sample population. All the selected respondents need to answer offered research oriented questions based on their experiences and thoughts. Relevant approach is conditioned as flexible and therefore the questionnaires are popular and relevantly common instrument in terms of collecting primary data. To exemplify this context, we can follow Census in large-scale process of collecting primary data through questionnaire. As per Ruane (2005, p. 123) a questionnaire is comprised of “self-contained, self-administered instrument for asking questions.” There is also the possibility for both structured and unstructured questions. The structured questions have a scale, multiple choices or dichotomous questions. On the other hand, unstructured questions are basically open-ended and are implacable towards the respondents’ answer (Malhotra, 2004). Selected questions for respective questionnaires can turn up as open-ended and close-ended those are created under demographics of consumers (Moustakas, 1994). Approaches of questionnaires are usually easy in terms of administering research among various samples (Phillips, 2001). Advantages of collecting primary data through questionnaires can be noted as-

- These are relevantly better than other kinds of survey methods.
- These are cheaper for administration and never depend over the presence of researcher. As for instance in a telephonic survey.
- To collate information from questionnaire is an easier mode as the collected answers follow same kind of structure.
Still, there are some disadvantages related to the implication of questionnaires. Firstly, due to a very common kind of format for answers, there is the possibility to irk the respondents.

Secondly, if the respondents cannot comprehend some questions, the answers can turn vague and can cause failure to the entire process. Thus, for Patton (2000) for some kind of social research cases, questionnaires can turn up to be impractical instrument for the collection of data.

Listing the merits of web-surveys, Couper (2000) states that this method has many advantages like “low cost, speed, convenience and global reach.” Furthermore, designing and setting up a questionnaire online is a great attempt to “democratize the research process.” However, Groves (1989) argues that web-surveys are susceptible to errors like mismatch between the target and the frame population, inability to calculate the non-response rate, the online questionnaire may not be compatible with the respondents screen size, web-settings, etc (Miller 2001). This is further corroborated by Grandcolas, et al. (2003) who assert that web surveys could have low response since invitations to participate are placed on websites rather than personally emailed. In comparison to the web surveys, hand-distributed printed instruments enable the researcher to avail full-scale rich descriptions and are also less susceptible to the respondent’s short-term memory (Dillman and Bowker 2001).

For the purpose of getting the data from the customers, the survey questionnaire will be drafted. The questionnaire with carry close-ended questions prepared in advance. The questionnaire will contain questions pertaining to demographic details of the respondents, the factors influencing the buying strategy of customers, and an assessment of Bajaj with TVS and Hero on various parameters. The survey questionnaire will not be kept too long and will be easy in language so that the respondents should not have problem in answering the questions.
3.9 Sampling Design

Sampling plan or design is the method that is used in describing how participants are selected from the accessible population. Probability sampling technique and non probability sampling technique are two types of sampling techniques.

Probability sampling can be very easy or extremely critical, costly and time consuming depending on the field situation. Probability sampling eliminates unconscious or conscious biases in choosing the element on part of researcher. Probability sampling also calculates sampling error. The probability sampling methods are: 1) Cluster sampling; 2) Simple random sampling; 3) Stratified sampling; 4) Systematic sampling; and 5) Multi stage sampling (Takona, 2002).

Non probability sampling is a subjective procedure in which selection probability for every population unit is unknown beforehand. The non probability sampling methods are: 1) Convenience sampling; 2) Judgment sampling; 3) Snowball sampling; and 4) Quota sampling (Levy and Lemeshow, 2011).

In our research we will use Convenience sampling method of Non probability sampling technique wherein required sample of respondents can be interviewed as per the convenience of the researcher.

3.10 Sampling Design Adopted

This study will make use of the convenience sampling for various regions in and around Jaipur. Convenience sampling is a sampling technique in which the participants are obtained wherever they can be found and typically wherever is convenience for the researcher (Taylor, 2006). Haphazard sampling is another name of convenience sampling. In the case study of all the available sampling procedures the convenience sampling is very weak. Convenience samples are the least time consuming and they are least
expensive among all the techniques of sampling and convenience sample generally is any process that easily and quickly selects the sample elements.

We shall be getting the questionnaire filled by consumers of Hero, Bajaj and TVS at various workshops in city and rural points as per our convenience. Thus we can say we will use convenience sampling procedure in our research work.