RESEARCH

METHODOLOGY
CHAPTER 2: RESEARCH METHODOLOGY

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2.1 OBJECTIVES OF THE RESEARCH

1) To understand the background of new product launches in the Auto Industry
   a) To study in depth the concept of new products and launch strategy and its
      relevance to any organization.
   b) To study the various stages involved in the process of a product launch
   c) To study the trends in the Indian Automobile Industry – Past, Present and
      Future.
   d) To study the trends of the Global Automobile Industry

2) To identify the steps involved in the development of new products with
   reference to the automobile industry

3) To identify the reasons for success and failures of new product launch in
   a) Two wheelers
   b) Four wheelers
       With specific reference to the auto companies based in Pune and some
       indicators to other Auto companies in India.

4) To develop a holistic model for improving the effectiveness of new product launch
   process.
2.2 HYPOTHESIS

H1: New product success or failure is dependent on the design of the product development process.

H2: Success or failure of a new product is dependent on the understanding of the customer needs by the company.

H3: There is no standard formula for the success of a product. The marketing strategies have to be modified as per the existing marketing conditions – both internal and external. The situation being chaotic, random errors have more contribution than known causal factors.

H4: Auto companies which use latest technology will have a promising future.

H5: Automobile companies with excellent dealer networks and dealer relationships and partnership will perform better.

H6: Without the consideration of multidimensional elements, a new product launch strategy will not be successful.
2.3 RESEARCH METHODOLOGY

2.3.1 Introduction:

The researcher after crystallizing the topic for research began with the conceptual framework. The researcher had certain ideas about how to develop the research project. There were number of factors linked to the concept of New Product Launch Strategy.

The study began by understanding of the concept of Product. The product concept has gone through a transition since it was evolved. Hence it was necessary to understand the various angles with reference to product. Experts have discovered number of dimensions related to the product. The researcher further studied New Products as explained by various management experts like Philip Kotler, Lamb, Hair and McDaniel etc. This study clarified the concept of new products. The researcher sought the feedback about what exactly new products meant to the company executives and the dealers. Next step was to understand the steps involved in the process of new product launch.

New Product Launch Strategy was to be discussed in context of the Automobile Industry in India with specific reference to the auto industries based in Pune. The researcher discussed the topic with management experts in the areas of manufacturing and marketing, academicians and users of the vehicles. New thoughts emerged as an outcome of the discussions.

Research papers, related literature and research reports were reviewed to build the framework of Research work. Special mention should be made of the Internet search
engine – Google which exposed the researcher to a vast pool of information when a concerned key word was fed.

2.3.2 Hypothesis:

The ideas crystallized into the hypothesis as stated earlier in 2.2.

2.3.3 Need for Information:

The research topic needed information from many entities. Information was needed to understand the product concept and strategies, dimensions of new products and strategies used for new product launch. The next step was to collect information on the structure of Indian Automobile Industry. Historical perspective was essential to study the current status and carry out a comparison. Information on future trends and challenges for the automobile industry in India and worldwide as identified by experts, consultants and reputed market intelligence agencies was needed. The researcher got an access to the reports published by agencies like McKinsey, AT Kearney, Frost and Sullivan, JD Power and KPMG etc. These reports helped the researcher in understanding the global trends for the auto industry for the future.

2.3.4 Data Collection:

Data was collected by carrying out both secondary research and primary research. Secondary data sources were newspapers, auto magazines, journals, marketing books, websites etc. This topic being critical and important to all companies worldwide, many articles and research papers were available for study. Internet was used extensively to extract information about New Product Launch from international journals and research papers. 50+ articles on New Products, Product Management and Automobile Industry were reviewed to understand the thoughts and theories on the topic of research. Work of
Robert Cooper, Antonio Di Benedetto, and Erik Jan Hultink gave new insights to the researcher. The websites of the automobile companies were accessed for company specific information. An overview of the Indian Automobile Industry was taken. At the same time, some global trends in the Automobile Industry were also studied.

2.3.5 Surveys:

The researcher identified three key elements for the surveys to be conducted for Primary Data Collection.

For Primary data, three different surveys made are as under:

1) Survey of the Automobile Manufacturing Companies based in Pune
2) Survey of Automobile Dealers in Pune
3) Survey of Customers using two wheelers and four wheelers

Three different questionnaires were designed.

2.3.5.1 Company Survey:

For the company survey, marketing departments of the auto companies were contacted. Detailed interviews were conducted with Product Managers / Marketing Managers who handled specific product responsibilities. Discussions were also carried out with a few General Managers. Interviews were based on a checklist of questions. Information was further sought in the form of a structured questionnaire.

The purpose of Company survey was:

1) To discuss the concept of New Products
2) To understand the structure of New Product Development Process in the company
3) To know the reasons for various product launches
4) To know the extent of innovation in the organization
5) To understand the views of the company on market characteristics

6) To know the strategy for launch and the various launch channels used by the company.

7) To know the participation of customer and dealers in the process of New Product Development and Launch.

8) To know the company views on the status and challenges for the Indian Automobile Industry

2.3.5.2 Dealer Survey:

The secondary research and self-thoughts brought out the importance of dealers in the New Product Launch Process. So structured questionnaires and structured interviews were planned with the dealers. Interestingly the dealers also discussed on a number of issues related to the topic but not included in the questionnaire. They were more comfortable and open during the discussions with the researcher in comparison to filling the questionnaire.

For the dealer survey, visits were made to dealer outlets. Interviews of General Managers / Sales Managers/ Marketing managers were taken based on a checklist of relevant questions supported by structured questionnaire. Repeat visits and follow up was done in most of the cases. Dealers had the desire to contribute in the research work but time was a major issue.

The purpose of the dealer survey was

1) To know the various vehicles handled by them.
2) To know the various factors of importance in a vehicle from the customers' perspectives.

3) To know the participation of the dealers in the New Product Development and Launch Process.

4) To know the various activities carried out at dealer outlets for promotion of the vehicle.

5) To know the company support received by the dealers in promotional activities.

6) To know the environment at the dealer outlet.

7) To know the dealer views on the reasons for New Product Success or Failure.

8) To know some hidden concerns/problems, if any.

2.3.5.3 Customer Survey:

Customer survey covered users of vehicles. Random Sampling was done. This survey covered Professionals, Students and Housewives. Discussions were carried out with a few customers with a checklist. Questionnaires were circulated.

The purpose of the customer survey was

1) To know the attributes desired by the customer in the vehicle the buy

2) To know if the company takes a feedback from them directly to know about the performance of their vehicle.

3) To know if the customers are asked to share their ideas on new products by the company.

4) To know which launch vehicles are most effective for a high impact launch.
5) To know the customer expectations with reference to the role of the Indian Automobile Industry.

2.3.6 Sampling Method:

Preliminary discussions with experts brought across the fact that for information on the topic of research, following samples are required

1) Product Managers and senior managers of the Automobile companies who are involved in New Product Projects and Strategy Formulation.

2) Senior Staff at the Automobile Dealer outlets with experience and knowledge about the activities in the automobile market.

3) Customers who are the users of the vehicles.

For Companies and Dealers, judgment sampling method was used. Researcher used her judgment to select samples in such a way that they were representative of the above said groups. Convenience sampling method was used to collect feedback from the customers.

The distribution of the sample is as under

1) Auto Company Executives - 12

2) Auto Dealers - 10

3) Customers - 48

TOTAL - 70

All surveys were restricted to the city of Pune. Questionnaires were pilot tested for content to check up if the desired objectives were met. Necessary changes were made accordingly. It is important to note that in some cases the senior managers were interested
only in discussions rather than filling up the questionnaire. In such cases, a checklist of questions was made to facilitate the interaction. In case of the dealers also, it was observed that their comfort level was high when engaged in discussions rather than while filling up the questionnaire.

2.3.7 Use of Kano Model in Dealer and Customer Survey:
Prof Noriaki Kano’s model has been used for seeking some responses from the dealers and the customers. As per the model some questions were typically structured in functional and dysfunctional form. Information on the Kano model is given in topic 2.4.

2.3.8 Analysis:
Based on the responses given by the respondents, a detail analysis was carried out. All the three questionnaires were analyzed separately. Tables were made using Excel spreadsheets. The sample was not very large and representative for its category. Counts method was used and percentages were calculated. The findings and conclusions are in three sets namely company, dealers and customers. This research is qualitative in nature.

Bar charts and Pie charts are used for the diagrammatic representation of the analysis done.
2.4 KANO MODEL

2.4.1 Introduction

The researcher has used the Kano Model to study certain responses of the customers and the dealers in view of New Product Development and Launch. Customers and Dealers perceive certain attributes of the product to be important. For this research, Kano Model has been used as a visualization tool.

Developed in the 1980's by Professor Noriaki Kano, this model is based on the concept of customer quality. The model helps in differentiating between the most essential and other attributes from the customers' point of view. This model can be used for measuring the happiness of the concerned entities. The researcher has applied this model even to the dealer responses to know the areas of satisfaction in context of the automobile company they deal with.

2.4.2 About the Kano Model:

Kano’s model of customer satisfaction distinguishes six categories of quality attributes from which three actually influence customer satisfaction:

1) Basic factors (Dissatisfiers- Must have) – These are the minimum requirements that will cause dissatisfaction if they are not fulfilled. But these don not cause dissatisfaction if they are fulfilled or exceeded. The customers consider these factors to be prerequisites.

2) Excitement Factors (Satisfiers-Attractive) – The factors that increase customer satisfaction if delivered but do not cause dissatisfaction if they are not delivered.
These factors surprise the customer and generate delight. Using these factors a company can compare itself with competition and create a distinguishing position for itself.

3) Performance Factors: The factors that cause satisfaction if the performance is high and they cause dissatisfaction if the performance is low. These factors are directly linked to customers' explicit needs and desires. If the company moves closer to these needs, more would be the satisfaction of the customers.

The additional three attributes identified by Kano are

4) Indifferent Attributes- The customers do not care about this feature

5) Questionable Attributes- It is unclear whether the customer expects this attribute.

6) Reverse attributes – The reverse of this product feature was expected by the customer.

2.4.3 Kano model for Automobiles:

Automobiles are complex products consisting of several tangible and intangible attributes. The reasons for customer satisfaction or dissatisfaction are many and very difficult to identify. The researcher in this work has attempted to evolve a holistic model for new product launch. Understanding this model is likely to improve the chances of product success in the market place. Kano model in this research has been used with the following purpose:

a) To know the participation of the customers and dealers in product development activities

b) To know the product requirements

c) To know the customer and dealer enthusiasm to participate in NPD and launch process.
2.5 LIMITATIONS OF THE STUDY

This study was framed on the basis of available information and the information shared by key respondents from the companies. Managerial perceptions about the new product development and launch were sought. There is also a possibility that the respondents may have upwardly biased their responses. In some cases the executives agreed for an open discussion rather than filling up the questionnaire. In such situations a checklist of questions was used to structure the discussion. Hence it has not been possible to directly establish cause and affect relationship. The researcher has developed the research topic with the intention of evolving some broad based strategies. The focus of recommendations given by the researcher is on the aspects important from the launch point of view.

Looking at the overall changes going on in the Automobile Industry in India, it would have been ideal if some companies like Hyundai, Maruti Suzuki, Fiat, Hero Honda based outside Pune could be covered for research work. But the title of the topic was perceived to be sensitive by the Automobile companies. Hence, in spite of writing emails and follow up with the Marketing Heads of a number of companies such as Fiat, TVS Motors, Maruti Suzuki, Piaggio and Hyundai no response was received.

Further, due the vast nature of the automobile industry and deep segmentation within, the study was restricted to two wheelers and passenger cars. Three wheelers, Commercial vehicles, Agricultural Machinery have not been covered.