Chapter 3: Research Methodology:

Review of literature gave deeper insights into the dynamics of generic Competitive Advantage and enabled to understand impactful differentiators that contributed to profitability and growth of large and multinational companies. The knowledge also assisted in the formation of suitable hypothesis.

3.1 Research Objective:

Researcher undertook the study of various live cases of SME companies where sustained high profitability and growth was achieved despite hyper competition. In particular, the researcher tried to analyze and find the following objectives:

a) To find how strategic process actually gets defined, shaped, implemented, and practiced in SMEs in India.

b) To find what role do the differentiators play in the profitability and growth of Indian SMEs.

c) To find if the differentiators provide sustained competitive advantage during company’s existence and does any particular differentiator or set of differentiators have significant contribution to make in profitability and growth in such SMEs.

d) To find whether collectively such differentiators impact profitability and growth, and if so, what their relative importance is in the SME’s progress.

3.2 Research Design:

Indian SME sector does contribute substantial portion to Indian GDP but how such companies are able to face global competition needs a lot more understanding and assessment.

The flow chart of this study, to understand SME’s growth, can be presented as follows,

Step 1: Review of literature to understand dynamics of Competitive Management and to note impactful differentiators.

Step 2: Identification of gap in understanding of the role of differentiators in Indian SME segment companies.
Step 3: Formation of Hypothesis.

Step 4: Comprehensive live research of an Indian SME to understand (a) The strategic Process conducted to achieve competitive advantage, and (b) Assessing usage of important differentiators to enhance profitability and growth.

Step 5: Development of Questionnaire, to undertake above mentioned objective, was based on the research work of Gavin C Reid, U.K. (2007). However, the questionnaire for this thesis was modified to suit the conditions in Indian SMEs, based on the suggestions from research guide and subject experts.

Step 6: Assessing and testing the role of differentiators in select SMEs to supplement our understanding and to arrive at unbiased industry opinion.

Step 7: Data analysis:
- Compilation and tabulation of findings.
- Interpreting outcome based on ranking of differentiators and applying Spearman Correlation Coefficient test for further analysis.
- Hypothesis testing and arriving at statistical inferences by use of Multiple Regression Analysis and Linear Regression Analysis to test relationship between use of differentiator/s and profitability of SMEs.

Step 8: Concluding the Findings and suggesting Recommendations.
The **Conceptual Model** of the said research plan can be presented as follows;

![Conceptual Model Diagram]

3.3 **Exploratory Survey:**

Considering the complexity of the subject, the researcher opted for Exploratory Research Technique to find explanatory relationship between the role of differentiator and profitability of SMEs.

Exploratory research often occurs before we know enough to make conceptual distinctions or posit an explanatory relationship between two variables. This methodology of research relies on in-depth interviews of focus groups, projective methods, and live case research in the actual life of corporates. The purpose of research being gaining familiarity with a phenomenon or acquire new insight, the exploratory study (formulative research) became useful. This approach could provide significant insight on of the subject. (Naval Bajpai, 2011).

3.3.1 **Sampling:**

Sample is a part of population, or a subset from a set of units, which is provided by some process or other, usually by deliberate selection with the object of investigating the properties of the parent population or a set. (Beri, 2008).
Sampling can be defined as the “deliberate choice of number of people/units, the sample, who are to provide you with data from which you will draw conclusions about some larger group, the population, whom these people/units represent”. (Jankowicz, 1995).

The sampling process consists of: Define the population; Identify sampling frame; Specify sampling unit; Specify sample design; Determine sample size; Select sample units; Collect the data from sample units. (Tull, Donald, Hawkins. 1984).

3.3.2 Population Frame:

Population Frame was represented by the companies that satisfy following criteria’s;

1. The company must be incorporated in India,
2. The company belonged to SME category at the commencement and remained in SME segment for more than half of its period of existence.
3. The core activity of the company must be manufacturing.
4. The company must be an Indian company. (Not a subsidiary of any multinational company).

3.3.3 Sample Frame:

Determination of sample size can be made either ‘Practical Approach’ or by ‘Statistical Approach’, (Beri, 2008).

In the present study, the Sample Frame is based on practical approach and includes those Indian SMEs who: Responded to the detailed questionnaire; Showed willingness to share their confidential data; and allowed discussions and deliberations with their CEO and other functional heads for understanding Research Objectives.

The methodology used can be termed as ‘Convenience Sampling Method’.

3.4 Data Collection and Statistical Analysis:

The methodology underlying the research combines primary and secondary data to provide a composite analysis of the usage of differentiators which contributed or benefitted favorably in enhancement of profits and growth of SMEs in manufacturing segment.
3.4.1 Primary Data:

Primary data was collected from manufacturing industry participants in SME segment companies, across different product types, based on ‘structured questionnaire’. Interviews were conducted with CEO’s and ‘functional heads’ in each company to obtain a fair and balanced reflection of industry opinion from the aspect of both contribution of differentiators and their impact on profitability and growth. For reliable consensus on the response from different sources, each respondent’s information and views were cross-checked with their counterparts to ensure reliability and to eliminate bias, whether intentional or unintentional, from any single source.

3.4.2 Research Questions:

Primary research is based on the key questions to understand and analyze the progress made, strategy framework followed, and differentiators used by SME Companies to gain competitive advantage. Questionnaire was developed, as detailed in step number five of Flow Chart, to study the Strategic Process, usage of Differentiators and their impact on profitability of SMEs. Questionnaire had both open and close ended questions.

The key questions proposed and addressed in the questionnaire were as follows:

Q1. What is the date of incorporation and the nature of business carried out by your company in last three decades?

Three decades being long-term existence, the products and nature of manufacture was expected to undergo lot of change. This progression was expected to throw light on business taking suitable action in line with changing external and internal environment and their executives constantly upgrading their skill-set.

Q2. Who are key decision makers in your company?

This information was expected to enable research scholar to identify Top Management executives to be contacted for further discussions.

Q3. What are the key milestones achieved by your company?
The information was required to track the progress made by the company, including technical breakthrough, mergers and acquisitions, major disinvestment made and other aspects of business, to understand ‘restructuring’ was carried out periodically to position and reposition the organization in line with changing market demand or customer preferences.

Q4. What is the range of products the company is manufacturing and what is firm’s market share vis-à-vis competitors?

This information was expected to enable researcher to understand firm’s Market Leadership position and how the company was changing their product mix to suit ever changing business conditions.

Q5. What was past, current and planned changes in your company’s Management Structure?

The suitable structure enables companies to improve internal linkages (part of business management process) and ensure effective line of command and chain of reporting to suit changing business requirements. This also throws light on management’s creativity and competence to adjust to future needs of business.

Q6. Whether and how SWOT analysis is done in your company?

This is expected to enable researcher to understand how resources are allocated to Strategy Critical areas, and whether firm is spreading its business risk judiciously among different types of products. It reveals quality of strategy making process.

Q7. Whether your company promotes innovation and how is it done?

This is expected to reveal what steps company management takes in developing new products and how they keep updating their business-processes to stand global competition and to reduce cost.

Q8. Is your company ‘Future Ready’?

This discussion is expected to inform the researcher about the ability and creativity of top management in shaping the organization and employees to keep upgrading for future competition. Successful multinationals are found to have clear plan for next five years to stand anticipated challenges from competitors and changing customer preferences.
Q9. How your company keeps watch on global development and competition emerging in your business area?

Researcher is expected to know whether the company has developed Peripheral Vision to track threats and opportunities signals from remote happenings that concerns their business.

Q10. Does your company use any management techniques and tools to improve productivity?

Benchmarking, core competencies, six sigma and balanced score card are some of the tools and techniques successfully used by multinationals to improve productivity.

Q11. What are prominent differentiators helping company to enhance profitability and growth?

This vital part analyses importance of differentiators in conducting the business and was expected to give what is happening under the Corporate Veil and throws light on how company not only survived for more than three decades but has registered comparatively better profits and growth despite fierce competition. This data was collected on percentage scale to compare different companies having varying level of Sales/ Scale of business size.

Q12. What has been company’s financial performance in last ten years?

The success or otherwise of business ultimately gets reflected in the form of how much internal generation (profit after tax) is made, how much wealth (net worth) is created, and what is CAGR growth registered by the company.

Unless a company earns a profit greater than the cost of capital, it really operates at a loss, (Peter Ducker, 1989).

3.4.3 Secondary data:

Secondary data was mainly collected from; Balance Sheet of companies and from internal records of the select organizations. Generic understanding of competitive advantage and their adaptation by multinational companies came from relevant research papers, books, business and academic journals, MCCIA publications, websites and case studies. In secondary research an author also consulted previous research studies and findings on Indian SME Segment companies. The collected information complemented the data obtained through primary research, to arrive at more informed conclusions.
3.4.4 Scope and limitations:

In studying importance of differentiators in enhancement of profitability and growth, SME Companies in manufacturing segment were chosen, however, companies in Cottage Industry having government assistance and very small companies having annual turnover less than rupees twenty crores were not considered for their limited understanding of the concept. Most of SME companies operate as Firms or Private Limited companies and their financials are not open to public knowledge or inspection. They were averse to disclosing some of their confidential data and detailed financial analysis was restricted to available information only. Importance of each differentiator differs from company to company depending on factors like: Unique internal skills, different level of competition both local and global, variety in market size and many more. Under the circumstances opinion of respective CEOs, who proved successful, were considered. Their views were backed by data and discussions based on structured questionnaire.

3.4.5 Testing of Hypothesis and Statistical Inference:

Research outcome was compiled and tabulated based on the importance attached to each differentiator in its contribution to enhance company’s profitability and growth. Firstly, interpretation from outcome of findings was tested on the basis of ranking of differentiators and by applying ‘Spearman Correlation Coefficient’ test for further analysis. Secondly, hypothesis testing was done using ‘Multiple Regression Analysis’ between ‘collective’ impact of the differentiators and the resultant profitability of SME companies. Thirdly, ‘Linear Regression Analysis’ was run to understand whether ‘individually’ the differentiator impact profitability of SME Company or otherwise. Lastly, based on results provided by various statistical techniques, were analyzed and an inference was drawn.

The relevant literature and findings from primary and secondary data on the subject enabled to arrive at following hypothesis to assess the relationship between the differentiator/s and the profitability of the SME companies.

**H₀₁**: There is No significant association between “Collective” impact of Differentiators and Profitability of the SME companies.
H11: There is a significant association between “Collective” impact of Differentiators and Profitability of the SME companies.

H02: There is No significant association between “individual” impact of differentiator and Profitability of the SME companies.

H12: There is significant association between “individual” impact of differentiator and Profitability of the SME companies.

3.5 Justification of Research Methodology:

Many researchers have emphasized that the live company-based research, in which phenomenon occurs, is rich in adding knowledge to the body of ‘Management Science’ particularly in real-world context.

Davidson quotes, “I hold that there is no inherent property in ‘quantitative data’ that prevents one from going deep in the analysis & interpretations. I also hold that ‘qualitative research’ that is both rigorous & deep, (well-founded motivation for the selection of cases/firms or the like; systematic & transparent procedures for data collection and analysis etc.), is appreciated by large part of entrepreneurship research community, including journal reviewers & editors” (Per Davidson, 2002).

Yin quotes, “Case studies are rich, empirical descriptions of particular instances of phenomenon that are typically based on a variety of data sources” (Yin, 1994).

This exploratory research tried to analyze live corporate cases supported, aided by confidential data to understand the role and adaptation of differentiators while formulating Strategic Process in SMEs.

NB: The progress made by SMEs was tracked post 1991 when Indian economy shifted from ‘License Raj’ to ‘Free Global Competition’. After liberalization Indian SMEs lost ‘level playing field’, and ways of doing business drastically changed.