CHAPTER 2
RESEARCH METHODOLOGY
2.0 RESEARCH METHODOLOGY

This chapter discusses about the following:

1) Secondary Data
2) Primary Data
3) Market Size
4) Sample Size
5) Activity Bar Chart
6) Scope and Limitations.

2.1) Secondary Data:

For collection of secondary data following institutions are visited:

a) Maharashtra Chamber of Commerce Industries and Agriculture.
b) District Industrial Center.
c) SIDBI Office.
d) Gokhale Institute of Economics.

The published literature on SSI is studied and following information is gathered as secondary data:

1) The Economic Scenario of India in post reforms era.
2) Norms for definition of SSI.
4) Regulations passed by government for the upliftment of the SSI sector.
5) The effect of WTO regime on the functioning of SSI.
6) Institutional support for SSI.

The sources of data are:

2) SIDBI report on SSI sector 2000-01.
3) Economic Survey 2000-01

2.2) Primary Data:

Primary data is collected from both Small Scale as well as Large Scale Engineering Industries in and around Pune City.

For this purpose the "Questionnaire" is used.

For Small Scale Industries:

Three respondents were interviewed in an unstructured way to know their views about "Polymarketing Concept."

Based on these interviews a check list is designed on the following lines:

1) Study the effect of present business cycle on cost incurred, time spent and manpower skills required by the SSI entrepreneur. For this purpose the marketing related activities are separated as under:

   a) Generation of requirements (Enquiry Generation).
   b) Processing of requirements (Enquiry Processing).
   c) Finalizing on technical requirements and sending the offers.
   d) Negotiations and order finalizing.
   e) Marketing activities during the order execution/processing.
   f) Post execution formalities i.e. getting goods clearance etc.
   g) Providing after sales service.
   h) Receipt of payment.
   i) Maintaining the customer relations.
In order to study the time spent by SSI entrepreneurs on various business activities, such activities are separated as follows:

a) Production activity
b) Planning activity
c) Marketing activity
d) Government formalities
e) Legal matters
f) Finance arrangement
g) Payment recovery
h) Maintenance
i) Labour problem
j) Personal work
k) Public relations

2) Introduction of the "Polymarketing Concept".

3) "Polymarketing Organisation" as a tool for bringing steady and consistent flow of business, i.e. utility and functioning of the organization.

4) Arrangement of Polymarketing Organisation with SSI firms, i.e. to decide the structure of the Polymarketing Organisation.

5) Cost benefit analysis, i.e. effect on sales value to cost incurred.
6) Advancement of tools like e-commerce and internet to bring steady and consistent flow of business.

Based on above considerations the framing of Questionnaire is done. The information in the questionnaire is divided under five broad groups viz.

1) General information of the SSI unit.
2) Personal profile of the entrepreneur.
3) Capacity analysis and investment information.
4) Information regarding four P’s of marketing i.e. product, price, place and promotion.
5) Views regarding Polymarketing Concept and Organisation.

The pilot questionnaire was tested by interviewing five respondents.

Based on these interviews the final questionnaire was designed and used for interviewing the remaining respondents. The questionnaires were mailed to predetermined sample size.

Apart from this some engineering SSI units were visited personally on random basis for the collection of primary data.

For Large Scale industries:

For Large Scale industries the questionnaires were circulated on random sample basis to the few industries to know the opinions of large industries about acceptability of Polymarketing Organisation as a source for creating sound vendor development base.
2.3) Market Size:

"Pune as a representative City for conducting the survey".

Industrialisation of Pune in real sense began with the establishment of M/S Kirloskar Oil Engines Ltd. at Khadki in 1946. This factory gave boost to the setting up of a number of small units serving as feeders to large factories. Subsequently a few more large scale industries like Buckau Wolf, KSB Pumps, Bajaj Auto, TELCO etc. were started and that helped in further growth of small scale industries in and around Pune. This growth was further accelerated mainly because of the proximity and easy accessibility of Pune to Mumbai. Other factors such as salubrious climate, availability of skilled personnel, necessary infra-structure facilities etc also played a major role in attracting industries to Pune.

Over the years many large scale industries have set up their manufacturing units in Pune. Today the MNCs from all over the world have set up their industries in the satellite areas of Pune city e.g. Ranjangaon, Pirangut etc. Since all these companies are from engineering industries, substantial growth has taken place in the small scale industries who are vendors of these MNCs.

Simultaneously, technical advancement also has taken place viz use of sophisticated machinery, advanced methods of manufacturing.
All such developments have put Pune on the different platform as far as Engineering Industry is concerned. Pune, therefore is treated as a representative city for carrying out the survey.

The title of the thesis clearly states that this study is pertaining to Small Scale Engineering Industries in and around Pune. So virtually all engineering units in and around Pune who have obtained SSI registration certificate from the Joint Directorate of Industries i.e. from D.I.C., form the market size for the research.

As the study is aimed at engineering units only following industries are considered:

1) Automobile and Ancillary.
2) Machinery and Machine Tools.
3) Metallic Products and Fabrication.
5) Rubber Industry (serving for Automobile / Engineering Industry).
6) Transport Equipment.

However, for the purpose of study the market size is divided into following major groups:

1) Job workers (general).
2) Job workers (specialized skills).
3) Product manufacturers.
4) Manufacturers having export orientation.
5) Capital equipment manufacturers.
6) Categorization according to types of Users Industries Served viz chemical industry, electronic industry, agriculture industry etc.

2.4) Sample Size:

For deciding the sample size the data available with MCCI & A and DIC was referred.

a) The Pune Industrial Directory- 2000 is published by MCCI & A. In this directory all the industries in Pune are arranged in alphabetical manner. Total No of industries covered are 4950

Year of establishment of the industries- 1969 onwards. Turnover generally above 10 lakhs.

No separation of industries is available as required. So also, out of 4950 units given in the directory, how many of them are in existence today? is not known.

b) Registered units with Joint Directorate of Industries i.e. at DIC. The permanent registration for SSI is 44816 and provisional registration is 10337 by 2001 end. However these registration numbers are since 1963. Also this represents the SSI units in Pune District. So how many of these industries fall under engineering units? is not known. Again how many of these industries are in existence? is not known.
So both of the above sources were unable to decide the sample size. Then the researcher focused his attention on the members of MCCI & A. The total membership of the chamber was @ 1350 out of which the industries falling under engineering category were @ 400 Nos. Since these were existing members of the chamber all industries were in existence in the year 2002. Therefore the sample size was selected as 400 Nos. The questionnaires were mailed to all 400 members and were actually received by them. In addition to this, the questionnaires were given to around 150 industries personally (who were not MCCI &A members) on random sample basis. Out of the total 550 questionnaires circulated, 155 questionnaires were finally received duly filled in by the respondents. Researcher actually visited all these 155 SSI’s personally and held discussions at length with the respective SSI Entrepreneurs, in order to gather the desired Primary Data. Hence, the response rate is 38.75% in relation to the sample size. Response rate is 28.18 % in relation to the questionnaire circulation. For the purpose of conducting the survey cluster sampling was done. Pune city and adjoining area was divided into four groups as under:

1) Sinhgad Road / Warje / Pirangut.

2) Hadapsar / Kondhwa / Mundhwa / Katraj / Shivapur.

3) Bhosari / Pimpri / Chinchwad / Talwade / Chakan / Nagar Road.

4) Pune City.

For large industries opinion survey was conducted as a Litmus - Test to know the view point of large industries. The questionnaires were circulated in 10 industries on random sample basis. Out of these 6 were received duly filled in.
2.5) **Data Analysis**:

The data collected through the questionnaires is analyzed statistically. As the analysis is qualitative no advanced statistical methods like "T" test or "Z" test are used. The **Observations** are made and **Conclusions** are drawn. Based on the observations and conclusions drawn thereafter, the model organisation structure of Polymarketing Organisation is recommended.

2.6) **Activity Bar Chart**:

Chart No. 2. C 1

![Activity Bar Chart](image-url)
1) Secondary data search.

2) Questionnaire designing, personal interviews, testing of questionnaires and finalizing of questionnaire.

3) Mailing of questionnaires and primary data collection.

4) Thesis writing.

5) Submission of synopsis and submission of thesis.

2.7) Scope And Limitations:

Scope:

1) The scope of study is restricted to Small Scale Engineering Industries in and around Pune City.

2) The scope is restricted to establish the need of Polymarketing Organisation and form a Model Organisation Structure. As such operational problems and ethical issues involved are not considered.

Limitations:

1) The Data Analysis is carried out on the basis of actual response rate as stated in 2.4 above. Some respondents did not answer some questions for the sake of secrecy.

2) The study is focused from the need and point of view of Small Scale Engineering Units. However, researcher has carried out an opinion survey of a few Large Scale Engineering Industries only, on random basis to understand their view point and acceptability about Polymarketing Organisation, as a Vendor Development Source. As such, scope is left for further in depth study, from the view point of Large Scale Engineering Industries.