## Chapter 5
### Research Methodology

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5.1 Introduction

The present study aimed to find out existing methods of communication by SMEs of Anand and Kheda districts, their awareness on available communication techniques and technologies, communication tools used by them, ICT usage in their companies and reasons for underutilization of communication technologies.

The study is based on the primary data collected from entrepreneur and managers of SMEs of Anand and Kheda districts. The data collected were duly edited, classified, and analysed using all type of relevant statistical techniques and employing the most appropriate tests. The data were presented through simple classification and with the help of percentage and average, the data were analysed and the hypotheses were tested at 5 percent level of significance by employing Chi-square test and t-test.

The population of the study consists of around 1500 SMEs located in various industrial areas of Anand and Kheda districts. The sample has been drawn in a single phase so as the opinion suggested by the entrepreneurs is correct and situation based. The data were collected between June 2014 and March 2015. Nearly 260 responses were contacted from which 257 are used for analysis purpose. As the primary data has its own limitation and based on the respondent the study is limited to Anand and Kheda districts only and it cannot be applicable to the SMEs of the National or International level.

5.2 Research Problem

For the present research work, the title of the problem is “Managers are unable to utilize the full potential of communication technology and techniques for effective management”. From this research work, the researcher aims at studying the awareness on communication techniques and technology among managers of SMEs
of Anand and Kheda districts. The study revolves on the premise of a hypothesis that managers are not able to utilize their full potential of communication for effective management.

5.3 Research Objectives

1. To study existing techniques and technologies of communication used by SMEs of Anand&Kheda district.
2. To study patterns of Management Communication in SMEs of Anand&Kheda district.
3. To study Importance of Management Communication in SMEs of Anand&Kheda district.
4. To understand benefits of techniques and technologies of Communication which can help managers as well as employees realize their communication and organizational goals.
5. To explore reasons for underutilization of techniques and technology by SMEs of Anand&Kheda district.
6. To evolve a Framework for Effective Management Communication

5.4 Operational Definitions

For the research purpose following terms have been used with their given measurement tools.

1. Communication Techniques: Various communication techniques like written, oral, non-verbal, visual and audio-visual, electronic or computer generated etc. for formal and informal communication in the organization. The usage is measured using scale of these techniques and surrogate activities which decided two-way versus controlled use of these techniques.
2. **Communication Technologies:** Use of modern ICT tools supported by various technologies like Web 2.0 tools (Collaborative Technology and Social Media), Mobile Technology (Smart Phone and Instant Messaging Services etc.), Industry specific technology, ERP solutions for internal communication, Online Business Transactions, Company Website and blogs etc. the usage is measured asking direct questions and relating their usage with business advantages like turnover, time saving, collaboration and coordination and attainment of functional goals.

3. **Effective Management:** For the purpose of this study effectiveness of management is measured with accomplishment of functional goals like Manufacturing, Finance, Marketing, HR, General Administration, Supply Chain, Customer relationship and public relation. Certain goals have been identifies within each of these functions and their achievement is related with the existing communication plan of the organization.

5.5 **Hypotheses**

**Hypothesis 1**

\[H_o\] 1= Communication techniques and technologies do not contribute to the effectiveness of management

\[H_{11}\]=Communication techniques and technologies do contribute to the effectiveness of management.

**Hypothesis 2**

\[H_o\] 2= Traditional and Modern communication technologies have similar impact on effective management of SMEs of Anand & Kheda District.

\[H_{12}\] =Traditional and Modern communication technologies have different impact on effective management of SMEs of Anand & Kheda District.
5.6 Research Methodology:

5.6.1 The Approach

Computer and internet have affected management communication in so many ways. Technology has become integral to the way organizations communicate today as a result the role of employees ranging from supervisor to manager is changing. Use of communication for various management functions like improving employee relations, union relations, community relations, work culture, media relation, crisis management etc. have become more challenging. Newer ways are required to handle all these relations effectively and efficiently.

Technological tools can enhance the uniquely human ability to communicate. But as with any set of tools, how one uses them determines their degree of effectiveness. By using mind both to create message and to focus the technology appropriately one can improve the quality of communication. But in majority of cases, people tend to communicate mechanically as the process to communicate is made easy by technology.

Technological tools are becoming more and more common for the resource management of the modern organizations. They are powerful tools to perform complex tasks of an organization.

The present study was conducted adopting an empirical approach. A preparation phase involved a study through literature of the Communication in general, Management Communication, Business Communication and Communication systems and Communication Technology in the organizations at large. This initial phase built an essential basis for the rest of research work, as it provided an overview of the different processes of how various management functions are carried out in the SMEs
with the help of technological tools. A study of the functionality of Communication System in the organization helped to undertake the various management situations that include communication among the employees and other stakeholders. This further helped to narrow down the study to focus on optimum usage of technology for effective management.

A few months were dedicated to data collection, during which a survey (by a questionnaire) was conducted and data were sought from managers, employees of the sample SMEs. Entrepreneurs and professionals of the various local industries of Anand & Kheda district were contacted, and interacted to fill the questionnaire.

Web resources were used as lot of information in the form of cases, articles and white papers and blogs are available on internet regarding successful implementation and roadblocks of technology implementation for management communication in business set up.

Different methods were used to extract the relevant information and collected data from questionnaires and interviews with professionals.

All the results and relevant outcome was finally analysed and tabulated using graphs, charts and tables as per the need.

As a result of the data analysis, problems of and opportunities for Communication technologies for ideal Management Communication in SMEs were identified.

5.6.2 Sampling Technique and Sample Size:

Looking at the size of the population, convenient sampling technique was used to collect the data from the respondents (owners-managers) of the SMEs of Anand and Kheda districts. Total 257 small and medium scales of organizations / companies,
business units, firms, etc. located in Anand & Kheda district were contacted where entrepreneurs and managers have their hands on carrying out various management processes using technological communication systems.

For the purpose of this investigation:

1. Organizations with / without communication technology Implementation.

2. Entrepreneurs who are using technology to operate management functions.

3. Managers who are working with technology based communication systems to carry out business processes were contacted.

5.6.3 Sampling Method:

Convenient Method of Non-probability sampling was adopted for the study.

5.7 Data Collection and Analysis Method:

5.7.1 Data Collection

Primary Data:

The study was mainly based on primary data which were collected through a well-structured questionnaire containing questions regarding area, investment, turnover, export and other communication techniques, technology and tools. The data were collected during June 2014 to March 2015.

Observation Method, while interacting with Managers, entrepreneurs and employees of the organization during filling up the questionnaire, is also used.
**Secondary Data:** Secondary Data have been collected from Books, Magazines, Journals, Periodicals, case studies, News Papers, and Reference Books and Government Reports. Web resources were also referred for the purpose of the study.

**5.7.2 Data Analysis: (Statistical Methods)**

1. Likert’s Scale
2. Rank Method
3. Descriptive Statistics
4. Chi – square Test
5. t-Test
6. Correlation
7. Charts, graphs and tables

**5.8 Scope and Limitations of the Study:**

**The Scope:**

The research explores three areas: Technology, Management and Communication. It investigates existing communication patterns for various management functions in the SMEs, the usage of techniques and technology in the SMEs which facilitate management communication and the methods for extending the support of high technology for communicating with more focus on effective management and productivity. The aim is to research out effective and modern ways of exploiting technology to help managers as well as employees of SMEs, effortlessly and completely to realize their communication and organizational goals. The study also helps to establish the relationship between use of ICT and generation of business.
Limitations of the study:

1. This study is conducted for the limited companies of Anand & Kheda district only. To overcome this geographical limitation, the similar study can be conducted for the companies of Gujarat as well.

2. The study also has a limitation of companies under the category of SMEs, i.e. companies having their annual turnover of more than Rs. 3 crores and less than Rs. 100 crores irrespective of their investment size.

3. The study derives lot of information from secondary data hence, the limitation of secondary data is applicable to this study as well.

5.9 Summary

The outcomes of this study highlights a shift from conventional to the modern methods of communicating in a business set up. The outcomes also suggest available communication tools to enhance Management Communication in the modern and high-tech organizations.

The evaluations aim at revealing new concepts of management communication and reorient entrepreneurs for further modification in the usage of communication methods and tools. Towards the end this research evolves with a newer communication framework for more advanced communication methods and tools to facilitate future management.

The study also comes out with a set of evaluated tools and techniques to be used in organizations, and also presents some models that may be commercialized and/or utilized in further research projects on related domains. The graphical representation of analysed data illustrates the theoretical aspects of the study as well as provides a base for practical implementation of the findings.