

Chapter 3

3. Research Methodology

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3.1 Introduction

Research in common parlance refers to a search for knowledge. It is also known as scientific and systematic search for pertinent information on a specific topic. In fact research is an art of scientific investigation. According to Advance Learner's Dictionary of current English, research means "A careful investigation or inquiry especially through search for new facts in any form of knowledge." While American sociologist Earl Robert Babbie define it as "research is a systematic inquiry to describe, explain, predict, and control the observed phenomenon. It involves inductive and deductive methods." thus the search for knowledge through objective and systematic method of finding solution to a problem is research. Methodology in research is a way to solve the problem, to unfold the probable answer, and to test the hypothesis stated. As there are many roads leading to a city, likewise there are many methods to solve the problems of research.

Webster's dictionary defines research as "A careful and critical enquiry or examination in seeking facts or principles, diligent investigation in order to ascertain something" while moody defines as " Research comprises defining problems, formulating hypothesis or suggested solutions , collecting, organizing and evaluating data, making deductions and building conclusions and at last carefully testing the determine whether they fit the formulated hypothesis." So from above definitions we can conclude that social research aims at adding to knowledge of human being about the problems they face.

3.2 Research Design

A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to research purpose. It is a logical and systematic plan prepared for guiding a Whole study. It constitutes a blueprint for the collection measurement and analysis of data and thus direct research study in right direction. According to Nachmias & Nachmias, “A research design is the programme that guides the investigator in the process of collection, Analyzing and interpreting observations”. While Phillips, 1976 in his book Social Research strategy and tactics define Research Design as a blueprint for research. Black & Champion, 1976 in their book Methods and Issues in social research stated that, “the design of research enables the researcher to anticipate potential problems of data gathering, Operationalization of concepts, Measurement etc.” A clear plan of research describes the boundaries of research activities and enables the researcher to channel his energies in the right direction.

It is a descriptive study. The purpose of descriptive surveys is to collect detailed and factual information that describes an existing Phenomenon. The present study had used Survey design through structured questionnaire which has been made in selected University Libraries.

3.3 Selection of Samples

The Samples have been selected from the Total 23 State, 3 Central, 2 Private Aided and 32 private universities of Gujarat State based on analysis of Central Library website of receptive university. Total 16 University Libraries of Gujarat State have been selected for final Sample survey. Total 490 Samples have been selected with a simple random sampling technique from below list of universities.

Table 3-1 List of university libraries as sample

No.	Name of the University	Place
1	Gujarat University	Ahmedabad
2	The Maharaja Sayajirao University (The M.S.University of Baroda)	Vadodara
3	Shree Somnath Sanskrit University	Veraval
4	Institute of Infrastructure Technology Research And Management	Ahmedabad
5	Central University of Gujarat (CUG)	Gandhinagar
6	Sumandeep Vidyapith (Deemed University)	Vadodara
7	Centre for Environmental Planning and Technology	Ahmedabad
8	Nirama University (NU)	Ahmedabad
9	Ganpat University	Mehsana
10	Dhirubhai Ambani Institute of Information and Communication Technology (DA-IICT)	Gandhinagar
11	Auro University of Hospitality and Management.	Surat
12	Uka Tarsadia University	Bardoli
13	GSFC University	Vadodara
14	Parul University	Vadodara
15	Marwadi University	Rajkot
16	P.P.Savani University	Surat

3.4 Sources of Data

In order to achieve the objectives of present study, relevant of below data used for research

3.4.1 Secondary Data

Secondary Data sources are type of sources that already collected, validated and compiled for some other research study for other purpose. This can be used to support, discuss and guide present study. Secondary sources of data are diverse and consist of all sorts of material. They are readymade and readily available. They are not limited to time and space.

The researcher have used various kinds of secondary sources like peer reviewed research journals, magazines, research reports, full text articles of conference proceedings, published and unpublished work of the peers of the field of library and information science on the topic of web 2.0 and library 2.0 as well as Blogs of experts, websites of various academic libraries, search engines and various subject databases and consortium of eBooks and e journals.

3.4.2 Primary Data

Primary sources of data are original sources from which researcher directly collects data. They are first-hand information collected specific for present study through various methods like observation, Interviewing, Mailing etc.

Primary data have been collected with validated structured questioner. A descriptive survey was conducted which sought to ascertain the use of we2.0 in the academic library websites. A separate structured questioner was used for library users, which consist of faculties and students- to know user's expectation from libraries and perception of web 2.0 technologies for academic use.

The questions used in this study falls under the following categories:

- ❖ Close ended questions
- ❖ Rating and ranking question
- ❖ Multiple choice question

3.5 Data Analysis

The data generated through structured questionnaire were analysed with suitable statistical tools for the purpose of data analysis and interpretation. The collected data had been scrutinized, Edited and validated. The data is arranged, processed, classified and brought into the logical order. They are summarized and tabulated for the purpose of analysis, interpretation and producing meaningful findings and suggestions. The data analysis was carried out with the help of statistical software SPSS and Smart PLS.

3.6 References

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