

COMPONENTS OF RESEARCH METHODOLOGY AND THEIR SIGNIFICANCE IN COMMERCE FACULTY

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ABSTRACT

In case of research paper writing or for project preparation or for Ph.D, thesis writing one of the important components is research methodology (RM). Further RM has different components. Each and every component of RM has its own significance and existence. The quality outcome of any research work is based on RM of the undertaken work.

Keywords: Research Methodology, Quantitative and Qualitative, Geographical Area.

Introduction

Data and data analysis is completely based on quality of developed RM. Further the development of RM is based title of the work. RM selection is based on types of work i.e., Quantitative and Qualitative. In this article an attempt is made to understand the importance of each element of RM. All elements are described below:

- Scope of the Study
- Duration of the Study
- Objectives of the Study
- Hypothesis of the Study
- Data Sources of the Study
- Tabulation of Data
- Tools and Techniques of the Study
- Significance of the Study
- Limitations of the Study

Scope of the Study

What is the Scope of the study?

The scope of the study refers to the boundaries within which your research project will be performed; this is sometimes also called the scope of research.

Types of Scope

It may be

- In the form of time period say last ten years that is duration of the study
- In the form sample size say 200 samples of male or female or both respondents
- In the form of geographical area say Gujarat, South Gujarat, Selected districts, Surat city etc.

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Benefits

“The scope of the study is always considered and agreed upon in the early stages of the project, before any data collection or experimental work has started. Without this, it is difficult to define an end point for a research project since no limits have been defined on the work that could take place. Similarly, it can also make the approach to answering a research question too open ended.” (2) Working for specific territory so focused work can be undertaken

- Surrounding internal and external factors can be identified with precision.
- Limitations of the study can be ascertained.
- Study of targeted group or groups.
- Easy for data collection – secondary or primary say questionnaire
- In both cases whether qualitative or quantitative data, defining of scope will make study very precise and systematic

Duration of the Study

“When designing longitudinal cohort studies, investigators must make decisions about study duration (i.e. length of follow-up) and frequency of outcome measurement.” (3)

It is also one of the important components. This can be treated as sub component of scope.

Past period becomes irrelevant but may be used for introduction chapter

Future period can be used for prediction purpose; these predictions will be based on your results.

All internal and external factors of respective period will be considered for study.

All government policies, Professional guide lines and statutory provisions are considered for core concept of the study.

Results of respective periods are to be collected, are to be analysed and interpretation is to be undertaken.

Your study is for respective issue and for respective period (so what happened, how happened, where happened, why happened and when happened) thus, answers of these questions are to be obtained for given period only. Because for different period may different findings. It is possible that your work is confined that period only and kind of situation has taken place that is to noted and in future same kind of situation takes place at that time findings of study done will be useful i.e., Corona Period, War period, Recession period Boom period etc. Non attention on period of study might be not of any use. Thus, proper attention is needed in any research work.

Benefits

- Unnecessary repetition can be avoided.
- Precise work can be done.
- Customized conclusion can be derived.
- Results can be used for comparison.
- Easy for data collection – specifically secondary data collection

Objectives of the Study

“Well-defined objectives of research are an essential component of successful research engagement. If you want to drive all aspects of your research methodology such as data collection, design, analysis and recommendation, you need to lay down the objectives of research methodology. In other words, the objectives of research should address the underlying purpose of investigation and analysis. It should outline the steps you’d take to achieve desirable outcomes. Research objectives help you stay focused and adjust your expectations as you progress. (4)

Identification, recognition and of the objectives is the core component of the research.

It is predetermined and planned vision of research work. Objectives are reasons for research.

Objectives are developed for selected beneficiary.

Due to objectives process and stages of research or study can be decided.

There should be proper synchronization between title and objectives and vice versa.

From objectives, limitations of the study can be ascertained. Objectives are based on need of investigation and other components of RM are based on objectives like collection of data – primary data or secondary data or both Selection of Tools and techniques is based on Nature of Data, in brief different elements of research work are linked with each other at different level of degrees.

How to Develop Objectives?

- Form clear and precise title of the study.
- Identify core component/s and sub component/s of the study.
- Feasible options should be identified to complete the study because completion of study is based on data availability.
- Available time period also should be kept in mind before formation of objectives.
- There has to be matching between title and formation of objectives.

Benefits

- Appropriate planning can be done.
- All other components of RM can be designed with precision.
- It gives clarity about research work to the researcher as well as to the readers.
- It decides the group of stake holders.

Objectives

- may be for investigation of reasons,
- may be for comparison,
- may be for identification of adopted procedure,
- may be for evaluation of decisions taken by third party,
- may be for identification of gap,
- may be for better quality production or better services to the end users,
- may be for evaluation of system developed,
- may be for evaluation for developed products or services, may be for pilot testing,
- may be for examination of impact or influence of certain policies,
- to identify influential internal and/or external factors,
- to examine the relationship between different factors,
- to examine dependency of one factor on other factors and many more.

Hypothesis of the Study

“The Hypotheses play significant role in the scientific studies. The following are some of the important role, which are Helps in the testing of the theories, Serves as a great platform in the investigation activities, Provides guidance to the research work or study, Hypothesis sometimes suggests theories, Helps in knowing the needs of the data, Explains social phenomena, Develops the theory, Also acts as a bridge between the theory and the investigation, Provides a relationship between phenomena in such a way that it leads to the empirical testing of the relationship, and Helps in knowing the most suitable technique of analysis.” (5)

It is an attempt to check relationship between graduate degree holders and investment in life insurance companies. Theoretically life insurance policy can be taken irrespective level of education, so null hypothesis is used.

Alternative Hypothesis

A researcher has an alternative hypothesis when she or he believes, based on theory and existing scientific evidence, that there will be a relationship between two variables.

For example, when Government introduces any policy for the stakeholders it is believe that respective policy will have positive impact. There is positive impact of government loan schemes on development of Micro, Small and Start up business entities in India’

Use of Objective and Hypothesis in Conclusion

- **Objective:** To examine the impact of Government loan schemes on development of Micro, Small and Start up business entities in India’
- **Hypothesis (Alternative Hypothesis):** There is positive impact of government loan schemes on development of Micro, Small and Start up business entities in India’

If your results are positive, it can be said that hypothesis is accepted.

If your results are not positive (negative), it can be said that hypothesis is rejected (not accepted).

If null or alternate hypothesis is accepted or rejected, an attempt should be made to ascertain the probable reason which can be useful to undertake further research.

Data Sources of the Study

Data collection is based on objectives of the study.

The formation of objectives is totally based on title of the study. A precise title gives clarity to develop objectives.

Data is of two types: Primary data and Secondary data.

Selection of data collection is dependent on title and nature of study.

Sources of Primary data are Interview, questionnaires, Personal visit.....

Sources of Secondary data are published data, periodicals, magazines, web sites.....

Precautions to be Taken for Collection of Data

It should be collected from authentic sources, especially for secondary data.

Relevant data should be collected i.e., relevant respondent, relevant area, relevant period, relevant agency etc.

In case of primary data collection, before interview or development of questionnaire well designed set of questions should be prepared, keeping in mind research title and objectives of the study.

Chronological order of questions should be kept. There should be relevant coordination between questions. This order will help to undertake cross tabulation research work.

No repetition of question or questions.

Benefits

- Clear and precise data makes:
- Researcher very confident to carry on your study,
- Undertaken research work would become simple and easy tabulation works can be made organized manner
- appropriate tabulation work can be done and appropriate tools and technique can be selected.

Tabulation of data and Graphical Presentation

It is arrangement of collected data in the form of table. Under this title, data is rearranged as per need of the study.

Graphical presentation makes information and analysis more attractive and sophisticated and to understand the trend of the results.

Precaution

Tabulation also should be done in the chronological order to maintain the relevance of the work.

Benefits

- Analysis work becomes easy.
- Easy to understand by the stakeholders

Illustration

Year	C A	Changes in C A	C L	Changes in C L	C R Ratio	Changes in C R Ratio	Remarks
1							
2							
3							
4							
5							
Average							

- Responsible component/s for changes can be identified – CA or CL or Both
- Nature of changes can be checked - Positive or Negative
- Reasons for changes can be ascertained – Internal factors or External factors or Both
- Suggestions can be given.

Tools and Techniques of the Study

It is that component which helps you to reach on results. Results are to be analyzed,

The correct analysis and conclusion are based on selection of correct tools and techniques. In case of commerce related and management related research work accounting and statistical tools and techniques are used. The selection of tools and techniques is purely based on types of research undertaken and nature of data. After having selection and application of selected tools and techniques, researcher will have results and the analysis and interpretation is done. This analysis and interpretation would lead to researchers to prepare own findings and suggestions. Any mistake on selection of tools and techniques would lead to have misleading results. It is advisable to rethink before having final selection of tools and techniques.

Precautions to be taken for Selection of Tools and Techniques

Generally, in commerce two types of tools are used (i) Accounting tools and (ii) statistical tools.

One has to be very careful for selection of tools and techniques. Understand nature of data and applicability of tools. Relevant tools and techniques should be used.

Significance of the Study

- It explains the group of stakeholders for whom respective work is to be carried out.
- This element keeps researcher always aware about his/her work stakeholders and do not allow to the researcher to deviate from his/her work.
- Nonexistence of this element might lead to undertake meaningless work.
- Different stakeholders can be Government - Central, state, local Customized group – patients, investors, Common public, Company itself, Management, Workers, Selected agency, Regulatory bodies – SEBI, IRDA, TRAI etc.
- Professional bodies – ICAI, ICSI, Bar Council of India, Medical Council of India etc.

Limitations of the Study

The basic limitation is concerned with the scope of study.

It may be

- In the form of time period say last ten years,
- In the form sample size say 200 samples of male or female or both respondents
- In the form of geographical area say Gujarat, South Gujarat, Selected districts, Surat city etc.

All elements discussed here are having their specific role. All elements are interpretable. But their degree of dependency may vary. For example, development of hypothesis is highly dependent on title and objectives of the study. During any types of research due importance should be given to each and every element.

“To choose a research methodology, researchers need to reflect on the goals of their research and the type of data they want to collect and analyze” (6)

Here author explains the importance of goals and collected data in his research work.

“Research methodology is used to give a clear-cut idea of what the researcher is carrying out his or her research. In order to plan at the right point of time and to advance the research work, research methodology makes the right platform for the researcher to map out the research work in relevance to make solid plans. Moreover, research methodology guides the researcher to involve and be active in his or her particular field of inquiry.” (7)

In this case research work author has explained that RM provides clear cut idea of research work, planning or research work, map of research work, guides the researcher to be active for his work.

C R Kothari has said in his book *Research Methodology Methods and Techniques* “The research procedure used should be described in sufficient detail to permit other researchers to repeat the research for further advancement, keeping the continuity of what has already been attained.” (8).

Different contributors of the field have discussed RM and its relevance with their own perceptions. We can not deny their opinions in this context.

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