Methodology

Research Design and Approach

The study involves descriptive research, Naturalistic, interpretive, empirical study, which is often called statistical research. This helps to answer questions such as who, what, where, when and how. Thus, considering the requirements of this study, this particular research design was more appropriate for the current study.

The study will a statistical approach to process and analyzes the quantitative datasets to either reject or not to reject the hypotheses.

Population, Sample and Setting Plan

The population for the current research study will be IT infrastructure managers of Pune based IT companies. Since they majorly deal with and understand the requirements of infrastructural change and its influence on the organization as a whole considering inside and outside (clients) effects, these managers will be considered for data collection which will comprise of medium scale IT companies.

Sample Element

The sample element in the current study is IT infrastructure managers of IT companies from whom the information will be sought.

Sample Unit

The Unit of Analysis in the present study is the Medium scale IT companies.

In the current research study, the sample is from Pune which is a IT hub, growing rapidly with heavy industrialization. This is happening due to enterprises from across the world are setting up their facilities over here and competition.

Sample Size
To have the adequate sample to prove our research findings we will be covering 360 samples which is appropriate statistically since these are good sample in case of population size for 10,000. These sample would be working for medium scale IT companies in Pune.

**Sampling Criteria**
The sampling criteria included the following:
- The organization should be a medium scale IT organization.
- The organization must be located in or be in close proximity to the Pune region.
- The manager should be handling IT infrastructure.

**Sampling Procedure**

The probability sampling technique involved in this study is a two-stage cluster sampling method. Thus the method is employed to select respondents in a random fashion according to the following steps: first we consider all the IT hubs in Pune areas as clusters and at first stage of cluster sampling we will choose 5 cluster and then using the two stage clustering formula, (where the total sample size of 360 is divided by the average number of samples) we would select from each cluster (which is 72). Thus, it gives us an opportunity to deal with 5 clusters which we have chosen randomly to select the required samples 72 each from these clusters. This is done to ensure adequate and equal chance of respondents to get selected in the study.

**Sampling Frame**

The study will be conducted in the Pune district of the state keeping in mind the time and cost involved in collecting data. Therefore, the sampling frame will be developed from following sources:
- Directory of MSMEs provided by District Industries Centre.
- Directory of Mahratta Chamber of Commerce and Industries.

**Sample Duration**

The time required to complete the interview process of all the required sample elements (i.e. respondents) will take 4 months’ time.

**Source of data**

1) **Primary data**

   Primary data will be collected through questionnaires from IT infrastructure managers of IT companies using personal contact method which happens to deploy the one on one interview technique with the sample respondents.
2) **Secondary data**

Data will be collected from IoT magazines, Leadership Journals, Technology Management Journals and other relevant web resources such as industry reports from accredited agencies and research-based consulting websites.

**Work plan**

| In First Year | • Pre-planning of Research title.  
|              | • Identification of sample.  
|              | • Collecting of sample.  
|              | • Completion of Course work.  
|              | • Review of literature.  
|              | • To know me PPT Presentation.  
|              | • General PPT Presentation.  
|              | • Preparation of Synopsis.  
|              | • Appearing Pre-Ph.D. exam.  
|              | • Synopsis Presentation  
| In Second Year | • Obtaining Approval from DRC.  
|              | • Collection of reference standard or working standard and sample.  
|              | • Data collection  
|              | • Data analysis and interpretation.  
|              | • Participation in National and International Conference.  
|              | • Publication of Articles in an ISSN number referred Journal on the chosen topic.  
|              | • Summary preparation.  
| In Third Year | • Submission of summary of thesis.  
|              | • Writing thesis.  
|              | • Pre-presentation of thesis |