Chapter 2

RESEARCH METHODOLOGY

As Jankowicz (2005) indicates, research methodology is “the analysis of, and rationale for, the particular method or methods used in a given study, and in that type of study in general”. This chapter describes the purpose and scope of the study, objectives, hypothesis, data collection techniques used, the sample design, and limitations the study. This chapter also gives overview of the chapterisation of the thesis.

2.1 Purpose of the study:

Knowledge Process Outsourcing (KPO) provides domain based business expertise and thus helps the organisations. These KPOs require knowledge workers with high domain knowledge and with high analytical expertise. The costly high skilled resource in developed countries has forced many organisations to look towards developing world with low cost knowledge workers.

As per Pricewaterhouse Coopers (PwC) India has advantages over other locations as an offshore destination for KPO. The extensive knowledge, judgment and proficiency that plentiful educated professionals from India are offering, drives KPO.¹

As per the HRD ministry of India, India has 712 universities catering to 36671 colleges. As per AICTE, as of the academic year 2013-14, there are 8500 technical institutes producing approximately 34, 00,000 (3.4 million) technical professionals every year. This includes engineers, management students, computer science students, pharmacists and architects. In addition as per the Bar Council of India there are totally 1.3 million lawyers present in India. Thus India is the third largest brain bank in the world and the second largest English speaking country.

Different business sectors such as Fast Moving Consumer Goods, (FMCG) Research and Development, Engineering, Automobile and Banking and Financial Services have been offered various solutions by the Indian Knowledge Process Outsourcing Industry. The service portfolio included initially the basic services like research and
data mining. Now with the developing market services like legal, analytics and clinical trials are added to the portfolio.

Along with engineering, medical and Management students this has given a good career option to Indian youth from varied educational background like pure science, accountancy or pharmacy. It has helped to generate jobs and to increase the economic growth rate.

The main attraction for the companies from developed nations for India as a KPO destination is availability of skilled domain experts at comparatively lower rates. Also the Indian companies are well versed with the laws and regulations of the client countries.

In the light of all these factors, hence India is on the verge of becoming the Global KPO Hub and is well positioned in this emerging sector.

In an effort to understand the phenomenon of KPO and its true potential the researcher felt need of the in-depth study for the same. The purpose of this study is to study the historical development of the KPO industry, the reasons for the development of KPO and the effect of the macro environment on the KPO sector.

2.2 Rationale of the study:
As per Ernst and Young India is the most preferred KPO country for more than 100 Fortune 500 companies as the KPO destination. Pricewaterhouse Coopers (PwC) identifies India’s huge well qualified professional human resource as the reason for India’s emergence as Key player in the KPO sector.

But KPO has its unique challenges. Some are operational challenges like quality standard requirement by the client, infrastructure investment, confidentiality of data and risk management, while others are social challenges like recession in developed economies and pressure against outsourcing.
Most of the work in the KPO domain comes from developed countries like USA and UK. These developed countries are not still out of the economic recession. There are negative feelings about outsourcing amongst the public from developed countries. The people from developed countries are putting pressure on government to increase the strict regulations for outsourcing. Specifically for the KPO industry it is a crucial era. This industry gives jobs to white collar knowledge workers with hefty package. With the home industry down and lot of knowledgeable workforce available in the home country or in the nearby countries, industry from the developed world might have to cut down the outsourcing of KPO work. That means India could lose revenue as well as employment in the KPO sector. This will have strong economical as well as social effect on a developing country like India.

So the researcher felt the need to understand the scope and future of Knowledge Process Outsourcing and undertaken the topic for her doctoral research work.

The knowledge process outsourcing industry has various stake holders. The researcher would like to identify them. At the end, as the outcome of this thesis, the researcher would like to put forth various recommendations for these stake holders of KPO for exploiting the potential of the Knowledge Process Outsourcing industry.

2.3 Scope of study:
The study was focused on historical development and the reasons for KPO in India and for calculating the potential of KPO in India for the next five years. Also the study was aimed at drafting the suggestions for various stakeholders in India. As such the study is concentrated on only India.

The study was mainly aimed at understanding the KPO environment and reasons for outsourcing of the knowledge process. So the study was mainly focused on companies performing knowledge process outsourcing functions. This has made Third Party Outsourcer as the normal choice for the data collection. This study does not involve the Captive units.
The research was based on Historical as well as Primary information. Research report from agencies like Nasscom & Crisil and companies like Evalueserve are used to collect information on the historical development of KPO, reasons for the development of the KPO, its current status and effect of the macro environment on KPO as an industry. Also the white papers and various published research papers are used as sources of secondary information for this study.

The study includes the in-depth interview of experts and the primary data has been collected by means of structured questionnaire of the employees working in KPO.

The primary data was collected from the people residing in the city of Pune. Pune has been amongst the top 10 destinations for the last five years consecutively as per the Tholons Top 100 Outsourcing Destinations Survey Report. Pune is considered as the most developing city of services outsourcing. Pune is a major engineering hub of India, growing very fast. Also it encompasses the rapidly increasing software industry. Many big software giants like TCS, Infosys and Tech Mahindra have their major establishments in Pune. Also Pune is known as the third largest city for KPO companies other than Delhi –NCR and Bangalore.

This researcher belongs to Pune. So companies situated in Pune district were selected for the primary data collection.

2.4 Research Objective:

The research objectives of the study are as follows:

1. To study historical development of and reasons for “Knowledge Process Outsourcing” in India.

Up till now nobody has made an attempt to review the complete historical journey of all the knowledge process services outsourced to India. Lot of research is done in bits and pieces. So the researcher has decided to study the historical developments and reasons for knowledge process outsourcing in India.
2. To study the Indian Knowledge Process Outsourcing business environment.
The external marketing environment is very dynamic and very changing. It will definitely have an effect on KPO. So the researcher studied effect of macro environment on the KPO sector in India.

3. To develop forecast for the next five years for Knowledge Process Outsourcing.
The researcher would like to forecast the trend in the Knowledge process outsourcing for the next five years. It will be based on the secondary data of revenue generated and the analysis of expert’s prediction from primary data collection.

4. To identify untapped potential for Knowledge Process Outsourcing.
The researcher also would like to study the untapped potential for KPO may be in terms of the new sectors and or the untapped geographies.

5. To offer recommendations to various stake holders for exploiting the Knowledge Process Outsourcing industries potential.
The knowledge process outsourcing is having various stake holders. The researcher would like to identify them. At the end, as outcome of this thesis, the researcher would like to put forth various recommendations for these stake holders for exploiting the potential of Knowledge process outsourcing industry.

2.5 Research Design:
“A research design is the arrangement of conditions for collection and analysis of the data in a manner that aims to combine relevance to the research purpose with economy in procedure.” (Claire Sellitiz and others, Research methods in Social Sciences, 1962, p.50, Stated in C.R. Kothari, Research Methodology Methods and techniques, Pg. 31)
a. **Type of research: Applied and Analytical Research:**
This study has used Applied and analytical type of research.

As per John Adams and et. All, 2014, “The aim of applied research is to improve the human conditions. It is designed to solve the practical problems of today’s world.”

As per Prof. Yang, “The analytical research usually concerns itself with cause–effect relationship. The analytical research tries to answer the question “why?” It uses the facts or information’s already available and analyses them for assessment of the research problem.”

In this study we are trying to understand the reasons for the growth of KPO in India and also trying to assess the growth potential for KPO in India. For that we are going to analyse the already available data. So the research is analytical in nature. The research will be used to understand the KPO industry in a better way, and the researcher would like to suggest some improvement plans for the stake holders so it is applied in nature.

b. **Population and Sampling:**

**Population:** Prof. Rajendra Nargundkar in his book titled Marketing Research Text and Cases defined Population as “This is not the entire population of a given geographical area, but the predefined set of potential respondents (elements) in a geographical area.”

**Sampling:** Prof. Ranjit Kumar defined Sampling as “Sampling is a process of selecting a (few sample) from a bigger group (the sampling population) to become the basis of estimating or predicting the prevalence of an unknown piece of information, situation or outcome regarding the bigger group.”

c. **Sample Universe:**
The first stage of sample design is to define the set of objects in perfect terms, theoretically called as Sample Universe to be studied.
The sample universe for this research work comprised of companies operating in the area of “Knowledge process outsourcing” in India and the clients of these companies.

d. **Sample Frame:**
The majority of the time the researcher does not have access to the whole population. So the researcher defines the subgroup of the population known as the Sampling frame. So the sampling Frame becomes a set of sample units from which the researcher can choose the sample of the desired population. The sample frame should be representative of the whole population and should exhibit identical characteristics as the entire population.

The sample frame for this project was selected as companies operating in the area of “Knowledge Process Outsourcing” in Pune and the clients of these companies.

The area under consideration for this frame was taken as Hinjewadi, Viman Nagar and Magarpatta. These are the area where maximum ITES companies from Pune are located.

e. **Sample unit:**
The sample unit is the lowest unit of the sample which is to be surveyed. It will be considered as one unit for the purpose of analysis. Ordinarily it is one respondent of the questionnaire.

The sample for this project was the person working at a decision making position in the company operating in the area of “Knowledge process outsourcing” in Pune and also a person working at a decision making position in the clients of these companies.

f. **Sampling Technique:**
Sampling refers to selecting a sample from the population. There are two methods of sampling: Probability Sampling and Non-Probability Sampling.
The sampling technique used for selecting a person working at a decision making position in the companies operating in the area of “Knowledge process outsourcing” in Pune was Non Probability Purposive Sampling.

g. Determination of Sample Size:
The number of items of the universe included in a finite sample is called the size of the sample. The exact number of companies in this domain is not known. Every ITES – back office processing company was calling itself as a Knowledge outsourcing provider. So the researcher has used the definition of Knowledge process outsourcing as the company which performs outsourcing task requiring a domain expert. A Domain expert is a person who has a special knowledge or skills in the particular field. By using this definition the company was classified as Knowledge process outsourcing Company.

Then sample size for this research was decided by:

1. Nature of work undertaken by the company
2. The type of human resource required by the company
3. The company operating in area of Hinjewadi, Magarpatta and Viman nagar.

There are totally 99 companies fulfilling the above mentioned criteria. Out of it 50 was taken as sample size.

The Sampling Plan designed for this research:

- **Type I:**
  - **Sample Universe:** People working at decision making position in the Management of “Knowledge Process Outsourcing” company in India.
  - **Sample Frame:** People working at decision making position in the Management of “Knowledge Process Outsourcing” company in Pune.
  - **Sample unit:** People working at decision making position in the Management of above company’s.
  - **Sample Size:** 90
  - **Technique of Sampling:** Non-Probability Purposive Sampling
• **Type II:**
  - **Sample Universe:** Clients of the “Knowledge Process Outsourcing” company’s
  - **Sample Frame:** Major selected Clients of the “Knowledge Process Outsourcing” company’s
  - **Sample unit:** People working at decision making position in the Management of above company’s.
  - **Sample Size:** 30
  - **Technique of Sampling:** Non-Probability Purposive Sampling

h. **Data Collection:**

As per Esomer Market Research, “Data collection is technique of gathering of information (figure, words or responses) that describes some situations from which conclusions can be drawn.

In the research we use two types of Data – The primary data and the secondary data. The primary data is the data collected for that particular research from the set of defined respondents while the secondary data is the information already collected by somebody else for his or her research and is available and suitable for the current research.

The primary data for this research was collected through survey method where the structured questionnaire was filled up from the persons working at the decision making position in the KPO company in Pune. The researcher had tried to collect information by way of one to one communication but if the respondent was very busy then the data was collected by way of email also.

The secondary data was collected from various published reports of the institutes like TPI, Nasscom and Crisil. Also various published research articles and company websites were used as a source of secondary data. It has been extensively used in the introduction and literature review chapters. If appropriate in the other chapters also the secondary data was used.
i. **Data Collection Tool:**
A structured questionnaire was designed for the decision makers working at managerial positions. As the data collection was of qualitative type, a five point likert scale was used in majority of the questions to get the data.

j. **Case study Method:**
From the secondary and primary data two cases each were formulated to study “Knowledge Process Outsourcing” industry.

k. **Pilot Study:**
After this a pilot survey of 10 samples was done. From the analysis of pilot survey, the questionnaire is modified and finalized.

l. **Data Collection:**
After this interview of 90 respondents were taken on this questionnaire. Few are through email while remaining was by way of face to face interview. The data was collected through Structured Questionnaire through email and In-depth Interview with the help of Structured Questionnaire in person.

m. **Data Processing and Analysis:**
The data in raw form does not give any information. It needs to be organized properly to extract relevant information and make it fit for the research.

This is done with the help of data processing that involves various steps including editing, coding, classification, data entry and tabulation. After processing the data the researcher needs to analyse it to draw the conclusions or inferences.

Excel is used by the researcher for data processing and analysis.
2.6 Hypothesis:
The researcher have framed and tested following three hypothesis:

1. In the years to come, outsourcing will change from simple to high technology areas of Knowledge Processing.
2. India with its large number of scientists and engineers will be the most preferred destination for Knowledge Process Outsourcing in the world.
3. Knowledge Process Outsourcing will require the organizations with highly talented and knowledgeable workforce.

2.7 Limitation:
This research was based on the data to be collected by people working in the Knowledge process outsourcing organisations. The main limitation of this study was “Non-Disclosure Agreement” (NDA.) Because of this many respondents have not shared the vital information or have taken lot of time to share the information. Following are the limitations of this study.

1. Data collection was complicated due to some information was considered as confidential and was not shared by the respondent. It took lot of time to collect the information.
2. The respondents also denied in sharing the details of the clients due to fear of competition. **So the researcher was not able to contact them and so that set of respondents had to be removed from the sample.**
3. A survey research inherently has a certain limitation. It is not possible to know the state of mind of respondents when they complete the instrument. So there can be respondent bias.
4. Sampling bias is another possible limitations as sample was collected from only one city i.e. Pune. Other cities may show a different picture.
2.8 Overview of Thesis:

This thesis comprises of five chapters including introduction, research methodology, literature review, primary research and conclusion and recommendation.

I. Chapter 1 – Introduction:
This chapter gives a broad overview of the topic. It introduces the readers to the field of Outsourcing and also covers major definitions used in the study.

II. Chapter 2 – Research Methodology:
This chapter outlines the research methodology used for the thesis. It covers the area of research, scope, objectives, hypothesis, population and sampling techniques. This chapter also outlines the limitations and scope for further study.

III. Chapter 3 – Literature Review:
This chapter introduces the concepts like outsourcing, business process outsourcing and knowledge process outsourcing. Moreover this chapter reviews the reasons and growth for KPO, the major KPO domains and the growth potential of KPO across the globe. This chapter also enumerates the reasons for increase of knowledge process outsourcing industry in India. This part of research is based on various secondary sources and analyzed using graphs and charts.

IV. Chapter 4 – Data Analysis and Interpretation:
This chapter covers data analysis of the questionnaire. It also covers the hypothesis testing.

V. Chapter 5 – Conclusions and recommendations:
This chapter tries to give forecast for the KPO industry for next five years. A trend analysis is used for this. This chapter also includes four case studies developed by the researcher. It also covers major conclusions and recommendations.
VI. **Annexures – 3:**

This includes three annexures as follows:

Annexure 1: Questionnaire:

Annexure 2: Story of Services outsourcing to India

Annexure 3: List of Respondent’s Company. (More than one respondents were present from one company, so the list is less than ninety)

**References:**