RESEARCH METHODOLOGY

This chapter discusses the research design and methodology adopted in the present study. It on the research design used in the present study including details of sample, development of research tools, data collection procedure and statistical techniques employed for data analysis. Quantitative analysis of data was done using statistical tools wherever applicable.

Research is any organized inquiry carried out to provide information for solving problems. Business research is a systematic inquiry that provides information to guide decisions. More specifically, it is the process of determining, acquiring, analysing and synthesizing, and disseminating relevant data, information, and insights to decision makers in ways that mobilize the organization to take appropriate actions that, in turn, maximizes business performance. (Cooper & Schindler, 2006)

Social Research is a collection of methods and methodologies that researchers apply systematically to produce scientifically based knowledge about the social world. (Neuman, 2013)

The research design consists of:-

- An activity and time based plan.
- A plan always based on research question.
- A guide for selecting sources and types of information.
- A framework for specifying the relationships among the study variables.
- A procedural outline for every research activity.
Research design constitutes the blueprint for the collection, measurement and analysis of data. It aids the researcher in the allocation of limited resources by posing crucial choices in methodology. It is the plan and structure of investigation so conceived as to obtain answers to research questions. The plan is the overall scheme or program of the research. It includes an outline of what the investigator will do from writing hypothesis and their operational implications to the final analysis of data. It expresses both the structure of the research problem; the framework, organization or configuration of the relationships among variables of a study, and the plan of investigation used to obtain empirical evidence on those relationships. (Cooper & Schindler, 2006)

Survey is the most widely used data gathering technique in the social sciences and in related applied fields. Despite the popularity of surveys, it is easy to conduct a survey that yields misleading or worthless results. Good surveys require thought and effort. According to Bradman & Sudman, 1988, Surveys like other scientific and technical tools can be well made or poorly made and can be used in appropriate and inappropriate ways.

Survey researchers sample many respondents who answer the same questions, measure many variables, test multiple hypotheses & infer temporal order from questions about past behaviour, experiences or characteristics. An association among variables is measured with statistical technique. Survey research is often called correlational. Survey researchers use control variables to approximate the rigorous test for causality that experimenters achieve with their physical control over temporal order and alternative explanations. (Neuman, 2013)

Survey research can be complex & expensive and it can involve coordinating many people and steps. The administration of survey research requires organization and accurate record
keeping. The researcher keeps track of each respondent questionnaire and interviews. Then the researcher reviews responses on individual questionnaires, stores original questionnaires, and transfers information from questionnaires to a format for statistical analysis. Meticulous bookkeeping and labelling are essential. Otherwise, the researcher may find the valuable data and effort are lost through sloppiness. (Neuman, 2013)

This research is descriptive and empirical in nature. The purpose of the research is to assess how far the different talent management practices implemented by the organization are successful. Survey method is used to collect the feedback from the questionnaire. A mixed method approach was followed for investigation. Self-administered closed questionnaire was provided to software employees. HR executives were given both closed ended and open ended questionnaire. The research provides results both from quantitative and qualitative method. The survey was designed to gauge the maturity level of a comprehensive set of talent management practices i.e. the extent to which organizations practices are sophisticated, progressive, pragmatic and self-executed. This enabled the researcher to identify strength and challenges in talent management and key areas of focus for the future. Through supplemented in depth, open ended questionnaire, researcher captured innovative practices at selected companies with more developed talent management practices. This combination of quantitative survey data and qualitative results helped shape a better understanding of the complex issues surrounding the talent management today. The growing recognition that the quality talent is a sustainable competitive advantage, coupled with realistic view of the complexity and scope of changes in the global work has led to a renewed focus & emergence around talent management.
**Need of the study**

The dynamic environment of contemporary times, poses the challenge of economic evolution, demographic changes & technological advancements. These factors have dramatically influence every aspect of the society and there is a paradigm shift in the way the people work, the companies are organized and the talent is managed. In this era of globalization the economy is shifting towards knowledge economy where talent is considered as a strategic asset. The organizations have to face the challenge of skill gap, structural unemployment, changing demographics, workplace diversity & technological breakthrough. It is a daunting task for firms to manage the potential talent. This present research provides an insight of how Talent Management practices are implemented in IT organizations of Bangalore.

**Scope of the study**

The research is carried out to sample set of IT companies by administering questionnaire to group of employees. The main aim of the research is to assess the implementation of talent management practices from employees and HR executives’ point of view. It also further investigates the role of talent management in developing the pool of skills, giving employees the opportunity to widen the scope of their expertise and experience while at the same time providing the organizations with the talent they need to grow and evolve in Bangalore city.

**Statement of the problem**

Research carried out on talent management has revealed that fewer organizations have talent management strategies in place. Based on interviews, the results paint a sorry picture of the
way the organizations manage their most precious assets. In the knowledge economy the ability to translate the talent potential into profits and performance dictates organizational success or failure. Employees have to upgrade, repackage and proactively market their talents to survive in the competitive environment. Employers and employees who neglect these new challenges do so at their own peril. The human resource directors have also acknowledged that it is not just enough to hire the right talent. Bringing in the people is easy. The real challenge is to nurture and engage the talent over the long term.

The purpose of the research is to find out how far the talent management practices are effectively implemented in IT organizations. This perspective also help in aligning formal processes that support talent management system and also throws light on how organizations recruit, retain & develop performances, manage reward and promote their talented people.

**Objectives**

1) To study about the talent management practices regarding acquisition and retention of talent in the organization.

2) To investigate about employee engagement, performance management and succession planning practices implemented by IT companies.

3) To assess the training and development opportunities to enhance talent acquisition and development.

4) To assess the success of talent management practices implemented by IT organizations.

5) To find out the opinion of employees & HR executives with respect to success of talent management practices.
6) To analyse whether the effective implementation of talent management practices is strongly dependent on its alignment with strategic HR objectives.

**Hypothesis formation**

H$_{01}$ = Talent management practices are not effectively implemented in IT organizations of Bangalore.

H$_{a1}$ = Talent management practices are effectively implemented in IT organizations of Bangalore.

H$_{02}$ = There is no significant difference between employee opinion and HR opinion with respect to success of talent management practices.

H$_{a2}$ = There is a difference between employee opinion and HR opinion with respect to success of talent management practices.

H$_{03}$ = Success of Talent management practices are not strongly dependent on its alignment with strategic HR objectives.

H$_{a3}$ = Success of Talent management practices are strongly dependent on its alignment with strategic HR objectives.

**Research Method**

The research comprised both the quantitative and qualitative research methods, which helps to address the research questions. The quantitative research involved a survey questionnaire that was distributed to the respondents. The qualitative research involved face to face interview / telephonic interview with HR managers.
Quantitative research is thought to be more concerned with deductive testing of hypothesis and theories, whereas qualitative research is more concerned with explaining a topic and with inductively generating hypothesis and theories.

Qualitative data analysis entails:-

1) An on-going process involving continual reflection about the data, asking analytical questions and writing memos throughout the study.

2) Open ended data; for the most part require asking questions and developing an analysis for the data collected.

3) Tailoring data analysis to specific types of qualitative research strategies or designs, including case studies, ethnographic research, life histories, phenomenological research and narrative research.

4) The researcher has tried to integrate both quantitative and qualitative measures, so that a more holistic and comprehensive understanding of talent management practices is assessed in the organization.

**Sampling**

The research is empirical and analytical. The target population are the employees working in IT sector of Bangalore. Employee feedback was collected using structured questionnaire. The respondents for the survey are employees working in IT companies in Bangalore city. The population for the survey are IT companies in Bangalore who have been in existence for not less than ten years and minimum number of employees working in the organization should not be less than thousand, as the research focuses on studying the talent management practices. Using NASSCOM membership as a measure, the number of IT companies are
314 during the base year of data collection. The organizations which are in existence for a minimum of ten years forms the sample size of the companies. Fifty leading companies were selected using this criterion. Since the number of employees vary from organization to organization, 20 software employees and one HR manager is selected from each of the company. Convenience sampling and snowball sampling is resorted to in this study because it is the feasible alternative to get adequate responses given the stringent criteria of IT industry.

A total of 1000 software employees and fifty HR managers from 50 different IT companies in Bangalore city are approached for data collection. The respondents which were selected had minimum of six years of experience. To gain better understanding of the state of talent management current practices of talent management i.e. talent acquisition, talent development, employee engagement, performance management, succession planning & talent retention are examined carefully.

These companies are chosen for the following reasons:-

- They are located in the Silicon Valley of India i.e. Bangalore Since all these are IT companies and are located in IT hub, they are ideal for assessing the Talent management practices as they follow the international benchmark and standards.

The target population of research consists of two categories:-

- Employees who are working as software engineers/tech leads/ Project managers in these IT companies.
- HR managers of the organizations who have the pertinent knowledge of Talent management practices.
For quantitative aspect of the study, non-probability convenience sampling method was used to collect the data using a survey questionnaire which was administered to the respondents of these companies. The Convenience sample of individuals identified by the researcher was complemented by the Snowball sampling procedure as each employee was asked to propose the name of the colleagues who fitted the criteria of the study. Snowball sampling is typically used in an interconnected network of people which begins with a few people and spreads out on the links to the initial cases. For the qualitative in-depth aspect of the study, fifty HR executives were administered with open ended questionnaire, to give their opinion regarding talent management practices.

Fifty leading companies which formed the sample of the research have been selected on the criteria that they are in existence for not less than ten years. These companies are:-

**Table 3.1 Name of the IT companies and the year of their establishment**

<table>
<thead>
<tr>
<th>Name of the company</th>
<th>Year of establishment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apple Inc.</td>
<td>1976</td>
</tr>
<tr>
<td>Ericsson</td>
<td>1876</td>
</tr>
<tr>
<td>Genpact</td>
<td>1997</td>
</tr>
<tr>
<td>Intuit</td>
<td>1983</td>
</tr>
<tr>
<td>Netapp</td>
<td>1992</td>
</tr>
<tr>
<td>CGI group</td>
<td>1976</td>
</tr>
<tr>
<td>Collabera</td>
<td>1991</td>
</tr>
<tr>
<td>Capco</td>
<td>1988</td>
</tr>
<tr>
<td>Synopsys</td>
<td>1986</td>
</tr>
<tr>
<td>Oracle</td>
<td>1977</td>
</tr>
<tr>
<td>Company</td>
<td>Year</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Dell Inc.</td>
<td>1984</td>
</tr>
<tr>
<td>Cisco</td>
<td>1984</td>
</tr>
<tr>
<td>Microsoft</td>
<td>1975</td>
</tr>
<tr>
<td>Mphasis</td>
<td>2000</td>
</tr>
<tr>
<td>Sonata Software ltd.</td>
<td>1986</td>
</tr>
<tr>
<td>Lam Research Corporation</td>
<td>1980</td>
</tr>
<tr>
<td>Cap Gemini</td>
<td>1967</td>
</tr>
<tr>
<td>Ittiam Systems</td>
<td>2001</td>
</tr>
<tr>
<td>EMC$^2$ Corporation</td>
<td>1979</td>
</tr>
<tr>
<td>Infinera Corporation</td>
<td>2000</td>
</tr>
<tr>
<td>Sasken Technologies ltd.</td>
<td>1989</td>
</tr>
<tr>
<td>SAP AG</td>
<td>1972</td>
</tr>
<tr>
<td>Nous Infosystems</td>
<td>1996</td>
</tr>
<tr>
<td>Ness Technologies</td>
<td>1999</td>
</tr>
<tr>
<td>Microland</td>
<td>1989</td>
</tr>
<tr>
<td>Texas Instruments</td>
<td>1931</td>
</tr>
<tr>
<td>Unisys Corporation</td>
<td>1986</td>
</tr>
<tr>
<td>Symphony Telecea</td>
<td>2001</td>
</tr>
<tr>
<td>Tally Solutions pvt. Ltd.</td>
<td>2000</td>
</tr>
<tr>
<td>Tavant Technologies Ltd.</td>
<td>2000</td>
</tr>
<tr>
<td>Siemens technologies and services pvt. Ltd.</td>
<td>1992</td>
</tr>
<tr>
<td>Samsung R &amp; D Institute in India</td>
<td>1996</td>
</tr>
<tr>
<td>Manhattan Associates</td>
<td>1990</td>
</tr>
</tbody>
</table>
Novel Inc. 1979
Intel 1968
LG corporation 1947
ITC Infotech 2000
Hitachi data systems 1989
Cognizant 1994
Huawei Technologies 1988
Mind tree ltd. 1999
Accenture 1989
HCL technologies 1991
Infosys 1981
Wipro 1945
Motorola 1928
Tech Mahindra 1986
IBM 1911
HP 1939
TCS 1968

Data collection

For the purpose of the study various sources listing the companies were used to compile the sampling frame such as National Association of Software and Services Companies (NASSCOM). In addition online data were also sourced from prowess research database.
The use of multiple lists ensured that there is a high degree of correspondence between the sampling frame and sampling procedure.

Data was collected with the help of questionnaire survey from different type of respondents to get the view from cross section of stakeholders. Those respondents are selected who has a minimum of six years of experience to give their feedback.

Quantitative questionnaire was either self-administered/ sent through e mail if the respondent is busy. Similarly, face to face interview was conducted for HR managers who are available. For those who are not available because of their busy schedule telephonic interview was conducted. The survey questionnaire also included the covering letter explaining the rationale behind the survey and assuring the respondents of the confidentiality and utmost privacy.

**Tools for Data collection**

The research instrument used to collect the feedback from the respondents’ is questionnaire. The survey instrument was used to collect from a large sample of employees and HR managers from different organizations of Bangalore. Based on extensive review of literature, i.e. the questionnaire and face to face interview/telephonic interview included the items that addressed the perception of the themes of talent management practices. The different items/parameters to measure the Talent Management practices in an organization were consulted through various related articles and literature as the basic framework. Questionnaire for employees was designed including all aspects related with general information on talent management practices. The validity and reliability of the questionnaire was also checked.
A good questionnaire forms an integrated whole. The researcher weaves questions together so they flow smoothly. Researcher includes introductory remarks and instructions for clarification and measures each variable with one or more survey questions. Two key principles for good survey are to avoid confusion and to keep respondent’s perspective in mind. Good survey questions both give the researcher valid and reliable measures, and help respondents feel that they understand the question and that their answers are meaningful. Questions that do not mesh with a respondent’s viewpoint or that respondents find confusing are not good measures. A survey researcher exercises extra care if the respondents are heterogeneous or come from different life situations than his or her own.(Neuman,2013)

Questionnaires are of two types; open ended and closed ended questions. Open ended questions are unstructured ones, providing free scope to the respondents to reply with their own choice of words and ideas. Open questions are useful to start a depth interview. Open ended questions are especially valuable in early or exploratory stages of research. For large scale surveys, researchers use open ended questions in pilot tests, then develop closed responses from the answers given to the open questions.

A closed ended question both asks a question and gives the respondent fixed responses from which to choose. The closed ended questions have many advantages like it is easier and quicker for respondents to answer, the answers of different respondents are easier to compare, answers are easier to code and statistically analyse, the response choices can clarify question meaning for respondents, respondents are more likely to answer about sensitive topics, there are fewer irrelevant or confused answers to questions, replication is easier and even less literate or less articulate respondents are not at a disadvantage. A
Interviewing is one of the prominent methods of data collection. It may be defined as a two way systematic conversation between an investigator and an informant, initiated for obtaining information relevant to a specific study. It involves not only conversation, but also learning from respondent’s gestures, facial expressions and pauses etc. If the interview is a structured one, then the interviewer ticks the appropriate answers on the interview schedule. For unstructured interviews the interviewer writes the responses of the interviewee either during the interview or after the interview depending on the style of the interview. It is important that the interviewer uses the same kind of approach for all the interviews of the study. By treating all respondents uniformly, the accuracy of the data is enhanced, (Wolff, Kant, 2002). Face to face interviews have high response rates and permit the most detailed enquiries, but are costly and time consuming. The telephone interview is a popular survey method because about ninety five percent of the population can be reached by telephone.

Data of qualitative research are particularly attractive because they provide:

- Well grounded, rich descriptions and explanations;
- Preservations of time flows, chronologies causality;
- Serendipitous findings for new theory construction.

The goal of this research is to understand as fully as possible the talent management practices through “perceptual triangulation” and the accumulation of multiple entities as supporting sources to assure that the facts being collected are indeed correct. The in-depth
open ended questionnaire complements the closed ended survey question by allowing the much more meaningful question of “why”, rather than just “what” and “how”, to be answered with a relatively full understanding of the nature and complexity of talent management practices.

**Pretesting of tool**

The questionnaire was distributed to thirty respondents for pilot study. The pilot study was conducted for possible refinement of the items, before it was sent out to the target population. The testing of survey instrument was done for the following reasons:-

- To measure the time it took for respondents to complete the questionnaire.
- To identify the areas of difficulty from pilot respondents.
- To gauge the ease of filling the survey instrument.

The feedback from pilot test was positive and it is established that the instrument took almost fifteen minutes to complete. The respondents were impressed that questions were to the point and it made them easy to respond. Some of the questions were modified and changed, according to the advice of the respondents. Overall the respondents felt that the questionnaire was well designed for the purpose it is trying to serve.

**Reliability and validity of questionnaire**

The questionnaire was sent to the experts in the field. Whatever modifications and suggestions were given by them, it was incorporated in the questionnaire and then it was sent to the respondents.
For reliability of the questionnaire cron bach alpha test was conducted. The result is given below:-

Table 3.2 Cron bach alpha test

<table>
<thead>
<tr>
<th>Question</th>
<th>Cron bach alpha test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talent Acquisition Practices</td>
<td>0.908</td>
</tr>
<tr>
<td>Talent Retention Practices</td>
<td>0.843</td>
</tr>
<tr>
<td>Employee Engagement practices</td>
<td>0.902</td>
</tr>
<tr>
<td>Succession Planning Practices</td>
<td>0.848</td>
</tr>
<tr>
<td>Talent Development Practices</td>
<td>0.828</td>
</tr>
<tr>
<td>Performance Management Practices</td>
<td>0.840</td>
</tr>
<tr>
<td>Degree to which organization executes and aligns talent practices</td>
<td>0.814</td>
</tr>
<tr>
<td>Critical talent practices implemented by organization</td>
<td>0.842</td>
</tr>
<tr>
<td>Managers capability to develop employees</td>
<td>0.836</td>
</tr>
<tr>
<td>Organization initiative to reward the performance of the employees</td>
<td>0.821</td>
</tr>
</tbody>
</table>
Effective implementation of Talent Management Practices

Consistent implementation of Strategic HR objectives

Analysis of primary data

Data analysis amongst other things entails a process of systematically searching and arranging interview transcripts, field notes and other materials the researcher accumulates to increase his/her understanding of the subjects subjective experiences to enable the researcher to present his/her findings. Data analysis enables the researcher to organize the mass of information into logical systematic outcomes. Each category of the data was clearly defined to ensure consistency in the analysis and interpretation of the results. The analysis of the data helps to explore links, themes and patterns with data. An important phase in the interpretation of the collected data is to structure the material in a way so that data from different sources which deals with the same issues or concerns are positioned together. The reason for organizing the data in this way is to simplify the interpretation process and make it easier to communicate to the reader.

When interpreting the collected data, it is important to sort out all relevant information and at the same time ensures that no information is lost. This is particularly crucial when using unstructured questions because the content of such data often involves a large amount of redundant and unnecessary information that may complicate the process. In organizing the data three major phases should be considered. In the first phase the data has to be written down and printed, so that it should be carefully examined. In the second phase all the
relevant information has to be sorted out. All irrelevant & redundant information has to be removed. In the last phase information from different sources are structured and put together as a set of main themes which should be analysed.

For the present research, the collected data has been analysed using SPSS 20. The non-parametric technique such as percentages, correlation and regression has been used for analysing the data. The parametric technique ANOVA has also been used for analysing the data. Tables, charts, diagrams and graphs are used to make the presentation of data more effective. Factor analysis is used to reduce the number of variables.

Factor analysis is a multivariate data reduction technique. All the variables under investigation are analysed together to extract the underlying factors. Factor analysis helps in identifying underlying structure of the data. Factor analysis makes use of the metric data. A factor is a linear combination of variables.

Although Likert scale is strictly ordinal, several researches consider the scale to be an equal interval, when there are at least five categories of responses. In line with the approach of several authors, the Likert type scale with five response categories was considered as an equal interval scale in the study.

**Limitations**

- Since the data was collected from fifty IT companies, the results cannot be generalized.
- The survey was limited to the city of Bangalore.
- The research was carried out only in IT sector.
Chapter Scheme

- **Chapter 1:- Introduction**
  This chapter includes the introduction of thesis topic, definition, meaning, role, process & principles of talent management. It also discusses the brief history of talent management and elaborates on talent acquisition, talent development, talent retention, employee engagement, performance management & succession planning.

- **Chapter 2:- Review of literature**
  This chapter reflects the researcher understanding of the relevant theoretical and empirical background of the problem. Focus should be more on logical representation of the empirical evolution of the conceptual and methodological issues pertaining to research problem.

- **Chapter 3:- Profile of the companies**
  This chapter contains a brief description of the companies selected for research.

- **Chapter 4:- Research Methodology**
  This chapter includes the title of the study, statement of the problem, scope of the study, objectives of the study, hypotheses, methodology adopted for the research, sample design, tools and techniques of analysis, data collection procedure, structure of study with sound justifications and explanations.

- **Chapter 5:- Data analysis & Interpretation**
  The data collected through the research is analysed using SPSS 20 package and accordingly interpretation is done.

- **Chapter 6:- Suggestions & Recommendations**
  Suggestions and recommendations are drawn according to the interpretation.
➢ **Chapter 7:- Conclusion & future implications of research**

This chapter gives the overview of research, conclusions drawn from the research and future implications of the research.

➢ **Bibliography**

The different books, books, journals, websites and databases those are referred & useful for the research is listed.