CHAPTER 1
INTRODUCTION

The rapid changes in technological, economic, political and cultural environment have profound effects on the world of work. These changes have created a kind of uncertainty in the nature and culture of work, thereby have affected the careers and lives of people. The hope of a secured and continuous life-time career with one employer or even within one industry is disappearing. This is due to uncertainties created by globalisation, technological advancements, changing structure of organisations, changing nature of work and increasing culturally diverse work force. The changes have altered the meaning of ‘career’ and ‘career management’.

Historically, career and career planning were institutionalised by organisations. The transformation of business environment from agrarian economy to knowledge based digital economy has resulted in the development of career management as one of the functions of human resources management.

Career management plays a significant role in every organisation and with every individual. It helps an organisation to evaluate the overall effectiveness of its programme of managing human resources. At the same time it guides the individuals through their career in achieving success.
Career management programmes are still rarely found in India, except in more progressive organisations. Individuals, especially educated ones, desire a career, not just a job. There has been an increase in the concern for quality of life. Employees expect more in terms of psychological and intangible benefits from their jobs than income and position alone.

In earlier days, career of an individual was expected to match to the environment of employing organisation. The result was traditional organisational careers that were internally oriented, emphasised vertical progression, increased responsibility, and achievement of status and rewards with in the organisation. This led to development of career planning and succession management. In the present environment the traditionally established paradigm of career management is unsuitable. The traditional psychological career contract between workers and employers seems to be shifting to self management of career, to achieve psychological success.

Traditional indicators of ‘objective career success’ such as status, income and level of responsibility have been replaced by contemporary indicators of ‘subjective career success’, such as increases in competence, recognition, and learning opportunities. In addition to this, literature provides evidence of shift in thinking from organisationally managed careers to self management of careers, wherein individual is in-charge of the career. However, careers are made within organisations and individuals are influenced to a considerable degree by organisational factors. Hence, career management is ‘joint responsibility’ of both organisations and individuals.
With the growth of service sector, the traditional career management practices of manufacturing era have also changed due to requirement of newer skills and competencies, more so in information technology (IT) industry. Upgradation of knowledge, skills and competencies are essential with the changes in technological environment. Career management in IT industry is in the state of flux, as IT professionals exhibit very short psychological association with their employer. IT professionals wish to work for many organisations in their life time, to achieve their career goals.

Indian information technology industry has played a vital role in positioning India on the global business scenario. The IT industry has transformed rural based agrarian economy into knowledge based digital economy. In recent decades, IT industry is one of the economically important growth catalysts of the Indian economy. The industry has made significant contributions to the various social and economic parameters like, creation of direct and indirect employment opportunities, improvement in standard of living, infrastructure, educational facilities, exports, etc.

IT revenue has continued to grow year after year. The estimated total revenue (domestic and exports put together) for the financial year 2014-15 is USD 118 billion. In which, contribution of domestic market is expected to be meagre USD 32 billion and remaining USD 86 billion revenue contribution is from exports. This growth is largely attributed to the exports of IT products and services. Due to variable impact of Indian currency, domestic market has witnessed growth of negative 1.2 per cent compared to financial year 2013-
14. IT industry is estimated to grow more than USD 225 billion by 2020. Compounded annual growth rate of approximately 14% is necessary to achieve this goal.

IT industry in India has emerged as highest impact sector in the economy. Significant contribution of 8.1% in 2014 to national gross domestic product (GDP) is made by the IT industry when compared to 1.2 % in 1998.

Currently, IT industry has directly employed more than 3.1 million people. It is the largest private sector employer in India. Indirect employment created by IT industry is approximately 10 billion which is almost 3 times of the direct employment. IT industry is the 4th largest urban women employer with more than 1 million women employees which accounts for 35 – 38% share in total employees.

In future, the IT industry is likely to go through a paradigm shift with the governmental pressures to create local jobs and the need for local knowledge will alter the employee mix resulting in a higher proportion of non-Indians with multilingual and localised capabilities. There will be an increased focus on the ongoing development of specialised skills and capabilities.

1.1 PROBLEM STATEMENT

IT industry is a fast changing, knowledge based and people oriented field of operations. The most valuable capital of any IT company is nothing but the skilled manpower. The ever increasing demand for IT products and
services has created demand for skilled manpower, all over the world. As a result, most of the IT companies are facing the problem of either understaffing or high turnover. Normally IT professionals do not stay in any single organisation for a considerable length of time. Retaining the skilled manpower has become a real challenge for the managers, as the high aspirant young IT professionals change their employers frequently. Therefore it is a challenge for both the organisations and the individuals to equip themselves to face the realities.

IT companies are undergoing a revolutionary change in terms of organisational structures, technology, composition of the manpower, market and the vendors due to globalisation of business. On the other hand, IT professionals are very frequently exposed to the problems of loss of salary, loss of job caused by right sizing or the down sizing strategies of the IT companies. As a result, neither the companies nor the individuals are in a clear mindset to think of developing careers.

The concepts, principles and strategic approaches to career development and career management have become redundant, hence managers of IT organisations are at the cross roads and experiencing the difficulty of solving new type of problems, that are not expected in the traditional style of managing the manpower. Hence, there is a need to evolve conceptual model on career management based on the research to guide the policy makers in the IT organisations at large.
1.2 NEED FOR THE STUDY

The shift in career management necessitates an empirical research to understand the meaning of career and dynamics of career management. Research in the field of Indian information technology industry would add knowledge to the existing theories on career management.

There is no guarantee of a lifelong career in any one profession or organisation. Individual is the only one who can define and determine a successful career. Individual is responsible for his/her career and cannot rely on the organisations to set the rules and provide standardised careers. Every individual is responsible for making good career decisions that may change through different periods of life. In this context this study assumed high importance to evaluate the awareness among the professionals working in information technology industry on career management.

Career management programmes are a part of human resources management. Organisations often decide to adopt such programmes in the belief that they will be of benefit to individual performance and development. Hence, it was essential to conduct industry wide study whether career management practices are helping the individuals or not.

Employment opportunities for women are increasing due to technological advancements. Women are appointed under different circumstances than men. Men and women have different roles and responsibilities in family and in society. They have different career ambitions
and goals. In this context this study examined the perceptions and experiences of both women and men.

The existing literature provided little information on how professionals working in information technology industry are managing their careers. The understanding of career as perceived by them would help organisations in formulation of strategies, policies and practices.

1.3 OBJECTIVES OF THE STUDY

The main focus of the study was to analyse the career management practices in the Indian IT industry and to develop appropriate strategies that can be used by the IT professionals and the companies. However, following are the specific objectives through which the research problem was addressed.

1. To develop a conceptual model that explains the relationships among career management, career concerns and career success.
2. To identify the factors that influences the career success among professionals working in Indian information technology industry.
3. To analyse the extent to which career management activities affect the career of professionals in the information technology industry.
4. To examine the impact of career management on career concerns as experienced by the professionals working in the information technology industry.
5. To evaluate the impact of career concerns on career success.
1.4 HYPOTHESES OF THE STUDY

Null and alternate hypotheses of the study are as follows:

**Hypothesis 1:**

$H_0$: There is no significant relationship between organisational career management and career self-management.

$H_1$: There is significant relationship between organisational career management and career self-management.

**Hypothesis 2:**

$H_0$: There is no significant influence of organisational career management on work concerns.

$H_2$: There is significant influence of organisational career management on work concerns.

**Hypothesis 3:**

$H_0$: There is no significant influence of organisational career management on non-work concerns.

$H_3$: There is significant influence of organisational career management on non-work concerns.

**Hypothesis 4:**

$H_0$: There is no significant influence of career self-management on work concerns.

$H_4$: There is significant influence of career self-management on work concerns.
Hypothesis 5:
H⁰: There is no significant influence of career self-management on non-work concerns.
H⁵: There is significant influence of career self-management on non-work concerns.

Hypothesis 6:
H⁰: There is no significant influence of work concerns on objective career success.
H⁶: There is significant influence of work concerns on objective career success.

Hypothesis 7:
H⁰: There is no significant influence of work concerns on subjective career success.
H⁷: There is significant influence of work concerns on subjective career success.

Hypothesis 8:
H⁰: There is no significant influence of non-work concerns on objective career success.
H⁸: There is significant influence of non-work concerns on objective career success.
Hypothesis 9:

H₀: There is no significant influence of non-work concerns on subjective career success.

H₉: There is significant influence of non-work concerns on subjective career success.

Hypothesis 10:

H₀: There is no significant influence of organisational career management on objective career success.

H₁₀: There is significant influence of organisational career management on objective career success.

Hypothesis 11:

H₀: There is no significant influence of organisational career management on subjective career success.

H₁₁: There is significant influence of organisational career management on subjective career success.

Hypothesis 12:

H₀: There is no significant influence of career self-management on objective career success.

H₁₂: There is significant influence of career self-management on objective career success.
Hypothesis 13:

$H_0$: There is no significant influence of career self-management on subjective career success.

$H_{13}$: There is significant influence of career self-management on subjective career success.

Hypothesis 14:

$H_0$: There is no significant mediation by work concerns between organisational career management and objective career success.

$H_{14}$: There is significant mediation by work concerns between organisational career management and objective career success.

Hypothesis 15:

$H_0$: There is no significant mediation by work concerns between organisational career management and subjective career success.

$H_{15}$: There is significant mediation by work concerns between organisational career management and subjective career success.

Hypothesis 16:

$H_0$: There is no significant mediation by non-work concerns between organisational career management and objective career success.

$H_{16}$: There is significant mediation by non-work concerns between organisational career management and objective career success.
Hypothesis 17:

$H_0$: There is no significant mediation by non-work concerns between organisational career management and subjective career success.

$H_{17}$: There is significant mediation by non-work concerns between organisational career management and subjective career success.

Hypothesis 18:

$H_0$: There is no significant mediation by work concerns between career self-management and objective career success.

$H_{18}$: There is significant mediation by work concerns between career self-management and objective career success.

Hypothesis 19:

$H_0$: There is no significant mediation by work concerns between career self-management and subjective career success.

$H_{19}$: There is significant mediation by work concerns between career self-management and subjective career success.

Hypothesis 20:

$H_0$: There is no significant mediation by non-work concerns between career self-management and objective career success.

$H_{20}$: There is significant mediation by non-work concerns between career self-management and objective career success.
Hypothesis 21:
H₀: There is no significant mediation by non-work concerns between career self-management and subjective career success.
H₂₁: There is significant mediation by non-work concerns between career self-management and subjective career success.

Hypothesis 22:
H₀: There is no significant difference in the perception of career by male and female employees.
H₂₂: There is significant difference in the perception of career by male and female employees.

Hypothesis 23:
H₀: There is no significant difference in the perception of career by employees belonging to different categories of age.
H₂₃: There is significant difference in the perception of career by employees belonging to different categories of age.

Hypothesis 24:
H₀: There is no significant difference in the perception of career by employees belonging to different levels of experience.
H₂₄: There is significant difference in the perception of career by employees belonging to different levels of experience.
Hypothesis 25:

$H_0$: There is no significant difference in the perception of career by unmarried and married employees.

$H_{25}$: There is significant difference in the perception of career by unmarried and married employees.

Hypothesis 26:

$H_0$: There is no significant difference in the perception of career by employees with different levels of education.

$H_{26}$: There is significant difference in the perception of career by employees with different levels of education.

Hypothesis 27:

$H_0$: There is no significant difference in the perception of career by employees belonging to different departments.

$H_{27}$: There is significant difference in the perception of career by employees belonging to different departments.

Hypothesis 28:

$H_0$: There is no significant difference in the perception of career by employees belonging to different levels of management.

$H_{28}$: There is significant difference in the perception of career by employees belonging to different levels of management.
1.5 RESEARCH MODEL

Research model is a pictorial representation of the relationships between various variables considered for the study. Following research model has been developed and examined in this study.

Figure No. 1.1: Research model

1.6 SCOPE OF THE STUDY

This study has focused on understanding of career management in terms of activities initiated by both organisations and individuals (employees) in the Indian information technology industry.

Career management activities performed by organisations are called as ‘organisational career management’ (OCM). This study covers following OCM activities: organisational career planning, organisational commitment to
implement career policies, career counselling and mentoring, career
development initiatives, flow of career related information and career
opportunities.

Career management activities performed by individuals are called as
‘career self-management’ (CSM) or ‘individual career management’ (ICM).
This study covers following CSM activities: individual career planning, career
strategy, career appraisal, education, training and developing professional
network.

This study encompasses an individual’s work and company related
perspectives, expectations and preferences which are termed as ‘work
concerns’. It also covers an individual’s life and family related perspectives,
personal choices and aspirations which are termed as ‘non-work concerns’.
This study delineates sense of ‘career success’ from the perspective of
professionals working in Indian IT industry. Perceptions and expectations of
respondents regarding ‘objective career success’ and ‘subjective career
success’ are part of this study.

Demographical factors have profound effects on managing careers.
Hence, factors such as, (i) department – technical (software development and
testing) and non-technical (management, human resources, finance, sales
accounting and others), (ii) management level (top level, middle level and
lower level), (iii) gender, (iv) marital status, (v) level of education, (vi) age
group and (vii) experience levels have been considered.
This study spans over the Indian information technology industry of the service sector of the economy. The study encompassed the professionals working in the organisations operating in the Indian information technology industry, more specifically, professionals working in software products and services organisations operating in the cities of Bangalore, Mysore, Chennai, Pune, Kolkata, Hyderabad, and NOIDA. Professionals working for the organisations operating in these cities are the best representatives of the population. Also, the contribution of the organisations operating in these cities to the Indian economy is considerably high. Organisational profiles are not presented due to ethical considerations.

1.7 RESEARCH METHOD

The study is of descriptive in nature. The cross-sectional survey method has been used to collect data. In this study, influence of organisational career management and career self-management on career success is analysed and interpreted. Also, effect of mediators (work concerns and non-work concerns) and moderators (demographic factors) on career success has been studied.

1.7.1 POPULATION AND SAMPLE SIZE

The population considered for the study consists of professionals working in organisations operating in Indian information technology industry. Results of the pilot survey indicated that 135 sample size at 99% confidence level is adequate to conduct descriptive and inferential statistical analysis.
But, data has been collected from 549 respondents in order to get better statistical validation using simple random sampling technique.

1.7.2 SOURCES OF DATA

Primary data was collected using close-ended questionnaire from professionals working in technical (software development and testing) and non-technical (human resources, finance, sales, accounting, administration, facilities, etc.) departments of software companies. Respondents include professionals belonging to various age groups, genders, marital status, educational levels, management levels and experience levels.

Secondary sources of data would mainly contribute towards reviewing the relevant literature to find out the research gap, quantum of research and also for developing the conceptual framework. Further, to develop profile of Indian information technology industry. Secondary data in the form of articles, research papers and reports was collected from various sources.

1.7.3 UNIT OF ANALYSIS

Unit of analysis considered for the study is ‘individuals’ working in the capacity of an employee in organisations operating in Indian information technology industry.

1.7.4 MEASUREMENT AND SCORING TECHNIQUE

Attitude and perception of respondents were measured using Likert’s 5-point attitude measurement scale. Wherein, strongly agree was scored as
the highest with numerical value of ‘5’ and strongly disagree as the lowest with numerical value of ‘1’.

1.7.5 PRE-TEST AND PILOT SURVEY

Survey instrument developed initially was subjected to a pre-test to establish face validity. Later it was subjected to a pilot survey comprising of 67 representative sample. Reliability test using Cronbach’s Alpha and factor analysis were conducted to check the reliability and validity of the survey instrument.

Pre-test to establish face validity of the initial questionnaire was conducted using a small convenience sample of 2 academicians and 5 IT professionals. Responses of academicians towards questionnaire items were important to establish ‘appropriateness’. Further, responses of IT employees towards questionnaire items were important to establish ‘comprehensibility’ by decreasing difficulty level in responding to the questionnaire. Based on their responses, some of the wordings were changed. Results of this pre-test provided a strong basis for conducting pilot survey.

The purpose of the pilot survey was to further purify the survey instrument through assessment of reliability and validity. Further, to statistically determine the approximate sample size required for the main survey. Data for the pilot survey was elicited randomly from 67 respondents by using the questionnaire so finalised after pre-test.
Descriptive statistical test results using mean, standard deviation, variance, skewness and kurtosis revealed that the data so collected conforms to normality. Hence, factor analysis was conducted using ‘principal component method’ for extraction and ‘varimax method’ for rotation, thereby for data purification and to check convergent and divergent validity.

As a result of factor analysis, 12 items were developed to measure organisational career management, 12 items to measure career self-management, 9 items to measure work concerns, 9 items to measure non-work concerns, 5 items to measure objective careers success and 5 items to measure subjective career success were selected.

Cronbach’s alpha was calculated to check reliability of all the variables. Results of the reliability test are presented in the following table.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Cronbach’s Alpha</th>
<th>Number of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organisational career management</td>
<td>.932</td>
<td>12</td>
</tr>
<tr>
<td>Career self-management</td>
<td>.916</td>
<td>12</td>
</tr>
<tr>
<td>Work concerns</td>
<td>.869</td>
<td>9</td>
</tr>
<tr>
<td>Non-work concerns</td>
<td>.888</td>
<td>9</td>
</tr>
<tr>
<td>Objective career success</td>
<td>.881</td>
<td>5</td>
</tr>
<tr>
<td>Subjective career success</td>
<td>.852</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: Survey data

Cronbach’s alpha for organisational career management was 0.932, career self-management was 0.916, work concerns was 0.869, non-work concerns 0.888, objective career success was 0.881 and subjective career success was 0.852. These results indicated that acceptable internal
consistency exists in the questionnaire items. Hence, the questionnaire is reliable and valid to measure intended variables.

Based on the results of the pilot survey, a close-ended questionnaire was finalised (Appendix 1). It comprised of 7 sections. First section dealt with demographic factors such as age, gender, marital status, educational level, experience, department and management levels. Second section contained statements to measure organisational career management, third section contained statements to measure career self-management, fourth section contained statements to measure work concerns, fifth section contained statements to measure non-work concerns, sixth section contained statements to measure objective career success and finally, seventh section contained statements to measure subjective career success.

1.7.6 STATISTICAL TOOLS USED

Descriptive statistical tools like mean, standard deviation, variance, skewness, kurtosis and chi square were used to check normality of the data so elicited. A detailed analysis of primary data was made using inferential statistical tools like factor analysis, correlation analysis and multiple regression modelling. They were used in data analysis to validate the conceptual model and to arrive at a logical conclusion.

1.8 LIMITATIONS OF THE STUDY

One of the limitations pertains to the measurement of the variables. Only recall method was used in the study to elicit data regarding career
management. If an alternate method like observation was used, results would have been different.

Data was collected solely from one type of industry i.e., information technology industry as specified in the scope of the study. To establish external validity, the research model should be tested using data collected from other industries.

Longitudinal data would be useful in explaining and understanding the career concepts and meanings which develop over time. Longitudinal data is not a part of this study. Only cross-sectional data has been used in this study.

Though there are several perspectives to study career management, the present study focussed on the perspective of management science.

1.9 THESIS DESIGN

Chapter 1 : Introduction

This chapter covers introduction to career management and Indian information technology industry. It also problem statement, objectives, hypotheses, research model, scope, need, research design, limitations of the study and thesis design.

Chapter 2 : Literature Review and Conceptual Analysis

A detailed review of literature to identify research gaps in the form of conceptual analysis is presented in this chapter. Apart from research gaps,
this chapter contains detailed explanation of career concepts and operational definitions of the variables used in the study.

Chapter 3 : Indian Information Technology Industry – A Profile

A profile of Indian information technology industry is presented in this chapter. The profile encompasses IT industry's evolution, contribution to GDP and employment generation along with list of top IT companies.

Chapter 4 : Data Analysis and Interpretation

This chapter contains demographic analysis, descriptive statistical analysis and inferential statistical analysis of the data collected along with results of hypotheses testing.

Chapter 5 : Summary of Findings, Suggestions and Conclusion

Summary of major findings, suggestions to organisations and individuals, conclusion and future research directions are presented in this chapter.

Bibliography

Appendix 1 : Questionnaire