Chapter 1: Introduction

1.1 Introduction

Formal technical education was worldwide introduced by late 18th century. Mid 19th century can be the formal inception of Technical Education in India. The major policy initiatives can be listed down as, 1) 1902: A formation of the Indian Universities Commission 2) 1904: An Indian Education policy resolution 3) 1905: establishment of IISc. Bangalore. 4) 1913: The Governor General’s policy statement stressing the importance of Technical Education Just after independence, the growth in industries in India, also demanded the qualified professionals such as Business Management, Architecture, Hotel Management, Pharmacy etc. Although the traditional courses such as Commerce, Economics, Finance, etc., were taught for a long time, the need of formal Management Education was felt in India only in the fifties.

In 1954, a Board of Management Studies was established under AICTE promote Management Education. Other major initiatives taken in Management Education include: setting up of the administrative staff college of India at Hyderabad in the late fifties, National Productivity Council and Indian Institution of Management in the early sixties.

Understanding the commercial aspect of business and fulfilling the required needs, the business education has started its journey in India as follows:

1) 1886: India’s first B-school i.e. Commercial School of Pacchiappa Charties in the southern city of Chennai (Madras).

2) 1903: Presidency College in Calcutta.

3) 1913: Sydenham College, Mumbai.

4) 1920: Shri Rama College of Commerce.

5) 1948: The Indian Institute of Social Science founded as India’s first management program with an objective to train manpower to create & spread the knowledge required for managing industrial enterprises in India.

6) 1949: Xavier Labor Relations Institute (XLRI) at Jamshedpur by Catholic community.

7) 1953: Indian Institute of Social Welfare & Business Management (IISWBM) Calcutta. And also known as India’s first official Management Institute.

8) 1961: Indian Institute of Management, Calcutta and Indian Institute of Management, Ahmadabad (Gujarat) after receiving grant from the Ford
foundation. The IIM Calcutta established in collaboration with the Sloan School of Management with an intention to focus on quantitative & operational aspects of management. IIM Ahmadabad was founded in 1962, pioneered the case method of teaching in India with an emphasis on Qualitative strategic-integration.

9) 1973: Indian Institute of Management Bangalore (Karnataka) and Indian Institute of Management, Lucknow (Uttar Pradesh).

10) 1982: The Indian Institute of Forest Management, Bhopal (M.P.) with specialization in management education for the entire forestry system in India with the help of IIM, Ahmadabad.

11) 1996: Indian Institute of Management, Kozhikode (Kerala)
12) 1998: Indian Institute of Management, Indore (Madhya Pradesh)

Meanwhile, very slow growth was observed in expansion of Institutions and intake remained in the Government, Private-aided and University sectors. It was an era of eighties, where private and voluntary organizations were allowed in the setting up of self-financing Technical and Management Institutions as a part of government policy shift. It was phenomenal expansion of the Technical Education System, and the trend continued during successive Five Year Plans.

In 1947, before independence, the slow growth of Technical Education as far as number of Engineering Colleges and Polytechnics are concerned (including Pharmacy and Architecture Institutions) was 44 and 43 respectively with an intake capacity of 3200 and 3400 respectively.

The National Policy on Education (NPE), 1986, as updated in 1992, imposed greater stress on improvement in the quality and relevance of education at all levels, including technical and professional education.

### 1.2 Journey of Information Technology Industry in India

In 1968, Tata Group has started Tata Consultancy Services (TCS) for software development services in India by developing punched card facilities for TATA steel employees (TSICO). In 1966, WIPRO also entered into the IT services sector. In 1972, Patni Computer Systems erstwhile Data Conversion Inc started developing software and providing services since the inception. In 1981, Infosys committed towards providing quality software services. Their IT business model was later followed by majority of the IT companies in India. The private business entities were totally under control of government of India before 1991. Due to this, the functioning
of the software services providers was completely constrained. The first major IT reform was, corporation known as Software Technology Parks of India (STPI). The role was to provide satellite links to IT industry to transmit the work done directly to abroad. This was the major step taken to acquire the business of outsourcing. As the result, integration with other nations became very easy from business perspective.

The IT industry in India got the momentum with for establishing relations with foreign clients and enterprises willing for outsourcing. The major growth for Indian IT industry after 1991 reforms was the Y2K problem. Most of the work was outsourced to the Indian IT industries. The outcome was growth in a national GDP of more than 6%. And then, India is known as the IT hub of the world.

Further the government of India has decided the development of IT as the top priority in their long term agenda. Formation of Indian National Task Force with an objective of development of IT services in large and small IT enterprises in India proposed with more than 100 recommendations to improve the IT sector in India. An action plan was executed and all the recommendations were implemented resulted into IT exports touching more than $50 billion.

The New Telecommunications Policy, 1999 (NTP 1999) was another feather in the crown which helped in booming IT industry in India. The Information Technology Act 2000 provided legal recognition of the electronic documents, digital signatures, offences and contraventions. This made it possible in striking deals with clients as no across the table meeting was required for cracking the business deals.

1.3 Need of Master of Computer Applications (MCA) Program

Master of Computer Applications (MCA) is a program at post graduate level where inputs are derived from Computer Science, Computer Engineering, Computer Technology and Management streams. The increased requirement of manpower in the area of computer applications was mainly felt in nineties. Government of India introduced a Master of Computer Applications (MCA) program to increase the manpower pool for IT/ITES industry by giving additional enabling inputs to Science and Commerce undergraduates and by offering training in computer education. The available manpower from engineering programs was insufficient and a Master of Computer Applications (MCA) was a new program initiated by Indian Society for Technical Education (ISTE) in 1990, was taken up by All India Council for Technical
Education (AICTE) which proposed a curriculum for a Master of Computer Applications program.

MCA is a three year (six semesters) program. The students entering MCA must be any graduate with Mathematics / Statistics as one of the subjects at 10 + 2 level or at Graduation. This program became popular and a large number of self financed institutions introduced this program. Currently in the State of Maharashtra, 121 institutes offer this program with an intake of 10610 students (AY 2015-16). Out of these institutions, 53 institutes (44%) are affiliated to the Savitribai Phule Pune University (SPPU) with an intake of 5925 (56%). These institutes are private, self financed institutes. Table 1 with Graph 1 and 2 depicts progress in increase in intake of MCA as well as number of institutes as compare to Engineering intake and institutes.

Table 1.1 : Growth of Engineering and MCA Institutions with intake capacity

<table>
<thead>
<tr>
<th>Year</th>
<th>Engg.</th>
<th>Intake</th>
<th>MCA</th>
<th>Intake</th>
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<td>499697</td>
<td>1576</td>
<td>61991</td>
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<td>1642</td>
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<tr>
<td>2012-13</td>
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<td>1761976</td>
<td>1241</td>
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</tbody>
</table>

*Source: AICTE Approval Process Manual 2014*

Graph 1.1 - AICTE approved Institutes
1.4 Present Scenario: MCA Institutes in Maharashtra

As number of institutes has increased along with intake capacity, now a day, the management of these institutes are facing a problem of vacancy during the admissions every year. In 2012, 33% vacancy was recorded for MCA course in Maharashtra. The similar trend was observed during academic years 2009-10 to 2013-14. And therefore, the million dollar question is in front of management of these institutes is to fill the vacancy.

It is a fact that in a particular location, two adjacent institutes have contradictory scenario as one institute is having full admissions and another is striving for the students.

1.5 Purpose of the study

Since majority of the institutes are private, self financed institutes, economy of the institute is completely dependent on number of admissions in the institute. Hence it becomes prime important for the management to make sure that the admissions are made fullest of its intake capacity.

The purpose of study is to find the way to improve admission status with the factors responsible for it and the method to implement or improve these factors.

1.6 Rationale of Study

The rationale behind the study is to offer suggestive action plan to management of all types of MCA institutes irrespective of geographical location like rural/urban etc. so that institute will survive and improve the admission status in due course of time.
1.7 Research Questions
A survey of undergraduate (UG) engineering students has shown that a majority of them preferred to seek admission to institutions which can offer placement in jobs immediately after their UG studies and same is the case with PG courses like MCA, MBA.
A large number of IT graduates are available every year from different universities, but NASSCOM claims that very few IT graduates are employable, in addition, Ministry of Human Resource and Development (MHRD), New Delhi released a report which supports this view expressed by NASSCOM.
Looking into present scenario, the researcher has identified questions for research as:
a) What are the factors that are largely influencing the campus placement?
b) Are the factors for recruiting engineering graduates and MCA graduates different?
c) What are the industry needs/expectations from aspiring MCA candidates?
d) Are these needs/expectations known to the management of institute?
e) Is there any gap between industry and academia?
f) If the gap exists, how to bridge the gap?

1.8 Need and Significance of the study:
Since NASSCOM feels that a small percentage of IT graduates are readily employable, it is imperative for the Management of institutions to look into various aspects leading to the employability of the students passing out from the institutes. It is a challenge to the Management of such institutions to improve the quality of education imparted to the students to ensure employability, which is a major attraction for all the candidates joining these programs. Industry always looks for a pool of candidates having the knowledge of core subjects and value added skills. Since IT industry recruits engineering graduates as well as MCA graduates, MCA graduates have to compete with engineering graduates for getting jobs.
From institute’s point of view, one of the real challenges is to groom such industry ready graduates within the present or traditional educational system, to satisfy industry needs.
Therefore the objective of this research is to identify factors that can improve employability of MCA graduates and propose guidelines to the management of such institutions to groom industry ready graduates.
1.9 Organization of the thesis
This thesis is structured into eight chapters.

Chapter 1:
Chapter 1 consists of brief introduction about inception of MCA program, development journey of IT industry in India, fact findings, rationale of the study, research questions, along with its need and significance in today’s world.

Chapter 2:
Chapter 2 consists of review of literature. The researcher has reviewed the literature regarding employability in general with focus on need of IT industry, influencing parameters of employability, opinion about curricula from job placement perspective, views of government. Also researcher has presented gap analysis from the study.

Chapter 3:
Chapter 3 consists of definition of hypothesis. Based on introduction and literature review, objectives were consolidated for study. On the basis of objectives, the construction of hypotheses along with justification is made.

Chapter 4:
Chapter 4 consists of the research methodology implemented to carry out the research work. It consists of type of research, research design for collection of data.

Chapter 5:
Chapter 5 consists of analysis of collected data, and interpretation.

Chapter 6:
Chapter 6 consists of testing of hypotheses. Hypotheses were tested with standard statistical tests and a renowned tool SPSS.

Chapter 7:
Chapter 7 consists of observations and findings of the research work.
Chapter 8:
Chapter 8 consists of conclusions to this research work. This section concludes with contribution by researcher, limitations of the study, future scope and finally recommendations and suggestions for the managements of institutes offering MCA program.

Publications:
This section consists of the research papers published by the researcher based on the research carried out. The research papers are published in National Conference, International Conference, and International journal with impact factor 6.9071 calculated by G ISI.

References and Bibliography:
This section consists of all the references referred by the researcher to study the present facts and scenario with employability issue of MCA / IT fresh graduates in India.

Annexure:
This section consists of

- MCA Admission Vs Vacancy Scenario 2012-13
- Survey form circulated to IT/ITES industry
- Survey form circulated to faculty of various institutes
- Survey form circulated to students admitted to MCA , and
- Publications by researcher on the basis of the research topic