Employment of Management Graduates in Manufacturing Industry: Expected Skills Sets and Preferred Model of Industrial Training

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Abstract:
Employability of MBA graduates is pegged at 10-15 percent. Dearth of domain knowledge, employment skills and various other qualities are cited as the main reasons for low employability. Many studies have been conducted to find out the qualities and skills required for the MBA graduates for enhancing their employability. Results of studies have indicated that the required skill sets and qualities in general are by and large the same but there would be variations depending on the nature of recruiting organizations. This study has investigated the expectations of manufacturing industry located in and around a tier –II city if Maharashtra. It was found that communication skills, problem Solving Skills, making students work ready and theoretical knowledge are the most important qualities/skills expected of MBA graduates. The study also gathered the views of employers to find out the most preferred model of industrial training out of 5 alternatives (4 weeks, 8 weeks, 6 weeks, 24 weeks and that project based training). However no agreement was found as the most preferred model of industrial training. Any industrial training model out of these can be adopted based on the requirement and/or in the context of employment being sought.

Key Words: Employment, Qualities and Skills, Industrial training, employability, MBA Graduates.

Introduction:

Management graduates are expected to possess deep knowledge and umpteen skills for being employable and to achieve/help to achieve business objectives. Academic leaders design the most suitable curriculum and pedagogical models to impart the required knowledge and develop skills in the management programs. Understanding the organizations and the business models, which are ever changing, are extremely important for this purpose. Organizations are going for automation, and manpower size is reducing even if their business turnover is growing. We have seen globalization of businesses and changing organizational structures and processes, frequent mergers and acquisitions, the emergence of social media as an important tool, technological innovations directed at the bottom of the pyramid, increasing access to online education, multiple generations—Gen X, Gen Y and Gen Z—working under the same roof, changing human resource management practices, and an increasing focus on talent management.

Most of the organization's structures have become flat and they work on a project basis. They are aggressively investing in AI due to which most of the entry-level jobs are vanishing. These changes have necessitated requirement of contemporary knowledge and different skill sets for

MBA graduates. In this scenario, it would be useful to seek the inputs from the manufacturing industry as to what priorities the B-Schools should give to the development of knowledge and different skills through their curriculum in general for enhancing employability of the management graduates. A number of studies have been carried out to find an optimum mix of knowledge and skill sets expected from MBA graduates commensurate with the job profiles. Since the requirement of skill sets will necessarily vary based on the type of industry, area of operation, strategy and business environment and models, it would be useful to study the priorities given by employers to various knowledge and skill levels in general and also when manufacturing industry employers actually recruit the students for their organizations. In addition to this, the MBA students are given industrial training for knowledge and skill enhancement. Different models of industrial training are followed by the B-Schools.

This study also attempts to find most preferred model of industrial training as viewed by the manufacturing industry employers. This study has been conducted in an area dominated by manufacturing industry which recruits MBA graduates. Results of the study are suggestive for the course of action which the management education institutes can adopt to make their curriculum more akin to the requirement of the manufacturing industry and hence enhance employability of management graduates.

Objectives of the Study:

The study has been conducted with the following objectives:

1. What priorities do the employers give to the knowledge, selected qualities and skills sets expected from the management graduates?
2. Do the employers of manufacturing companies give commensurate weightage to the skills/knowledge attributes when they recruit the management graduates?
3. Is there any preferred model of industrial training (out of the alternatives given) to the employers of manufacturing industry?

Literature Review:

Many studies, both in Indian and global context, are available in literature which highlight the important qualities (including the knowledge) and skills are expected of the management graduates and to enhance their employability.

An **ASSOCHAM** study of 2016 indicated that 93% of the B-school graduates are unemployable. This scenario is quite alarming especially when there are about 5500 B-schools in India offering 5, 20,000 MBA seats. A good number of MBAs passing out of the B-schools end-up getting job of less than Rs. 10000 and there are even larger numbers of those who cannot get any job at all. Therefore, enhancing the employability of the management graduates becomes one of the most important tasks of the B-schools. National Employability Report 2012 also cites low employability of MBA Graduates across all specializations.

Srikant Datar, David Garvin and **Patrick Cullen** in their study presented an assessment of the state of management education in a seminal work titled 'Rethinking the MBA: Business Education at a Crossroads' **(Datar, Garvin & Cullen, 2010).** They identified three trends that were shaping management education. One was a questioning by employers of the value of an

MBA degree the others were the shift away from traditional educational offerings towards diverse programs and changing enrolment patterns.

In their view, business schools, in order to be effective, in their mission, need to do two things: "reassess the facts, frameworks, and theories that they teach (the "knowing" component), while at the same time rebalancing their curricula so that more attention is paid to developing the skills, capabilities, and techniques that lie at the heart of the practice of management (the "doing" component) and the values, attitudes, and beliefs that form managers' worldviews and professional identities (the "being" component)". This knowing doing-being framework, which they adopted from a military leadership curriculum in the United States, is a useful framework to adopt when reflecting on the kind of knowledge that institutions seek to provide and, more importantly, seeking to "rebalance" the curriculum. **Datar et al. (2010)** listed eight areas that business schools seem to be weak in. These are: Global perspective in managing institutional, economic and cultural diversity, developing leadership skills, honing integration skills, analytical decision making, recognizing organizational realities and implementing effectively, understanding the politics of organizational behavior and acting creatively and innovatively

Bhandarker (2008) notes that the Indian businesses of tomorrow will need managers and leaders who can thrive amidst the challenges of living and working in global world and who can prepare organizations to cope with ambiguities, uncertainties and complexities. Her prescription for developing MBAs as leaders is a focus on four clusters: the intra-personal, which includes self-awareness, emotional self-awareness, intentionality, resilience, optimism and empathy; the "influencing others" cluster, which includes emotional expression, interpersonal connections, constructive discontent, and trust; the "managing complexity cluster" which consists of intuition and creativity; and "managing diversity", a tolerance for ambiguity and flexibility.

Pimpa, N. (2008); Hay and **Hodgkinson, (2006)** explored that a common reason of MBA education is that it leads to quick career success, in terms of improved salary and senior position. Management students from reputed institutes are more likely to get career progress at early stages but there is difficult to define whether MBA is being done to get higher pay packages, to attain position in hierarchy or for learning and development.

MBA students are generally thought to have realistic self-concepts and some career directions. Consequently, there may be certain objectives or ambitions which pursuits the person to do MBA i.e. many students are looking for MBA degree to improve their employability and to gear up their career goals (**Hay and Hodgkinson, 2006**).

A study titled Employability Skills of MBA Students at Entry level: An Employees Perspective **(Sunil S Dhanawade)** brought out that proficiency in communication skills is considered more of qualifying criteria for technical roles in industry.

With regard to employers, they are expecting graduates entering the profession to have as the top three skills analytical/problem solving skills, a level of business awareness or real life experience and basic accounting skills **(Kavanagh & Drennan, 2008).**

Sanket V. Ravan (2016), studied the employability skills i.e. skills that are required to get starting employment by candidate. These skills are mostly demanded by many recruiters/employers when they come to management institutes for campus placement. Those skills include good interpersonal and communication skills, problem solving, domain knowledge, learning, decision making and analytical skills etc.

Jha K R (2017), in his study on Higher Education and Employability Skills, explored the areas which are critical for employability of our students coming out of higher educational institutions. The paper considered what skill sets are lacking in our students and how this can be provided through soft skill training and Personality Development programs.

A study by **Samson Packianathan** and **Rajagopal Narayanan (2014)** on Employability Skills a Conceptual Framework, attempts to provide a conceptual framework on employability skills of business graduates based on in-depth reviews. Reviews for a period of 20 years between 1994 and 2013 had been assimilated and categorized into two propositions. Those are (i) Management students require specific job readiness knowledge and curricular up gradation employability skills. Based on these, a conceptual framework on job readiness skill had been formulated.The Skills Gap do exist, particularly in Skills such as listening, and team work and collaboration; Attitudes such as self-motivation, self-discipline, and commitment and dedication; and Knowledge such as understanding organization and process; product, solutions, and services; and consumer behavior. (Higher Education Forum supported by **1SOS &West** at, 2010).

In MBA graduates the institutions must be responsive to demographic shifts that have occurred in higher education by engaging in ongoing strategic planning similar to that which is done in the business world (**Burell & Grizzell 2008**). Historically, colleges and universities have been extremely slow in adapting to social change (**Smith and Tamer 1984**).

The academia traditionally has trailed business in its grasp of trends. It must be and remain aware of trends-not fads-in business so that it continues to be relevant in its "production" of graduates who will be seeking employment after finishing their degrees & leaving the institution (**Montgomery and Porter 1991).**

These studies throw pointers to the importance of training MBA graduates. Firstly, the graduates need to be equipped with generic qualities of ‘knowing’, ‘doing’ and ‘being’. Specifically, the qualities of self awareness, interpersonal relations, resilience optimism, empathy, thinking and problem solving skills, leadership, business knowledge and communication skills are expected from management graduates.

Data Collection:

In order to study the expectations of employers from management graduates a questionnaire was developed and posted as a Google Form. Responses of employers from manufacturing industry located around Aurangabad (Maharashtra) were sought. A total of 32 (n=32) employers responded. Some responses were rejected being incomplete and unintelligible. Data obtained was compiled, edited and analyzed using excel and SPSS. There hypothesis were tested.

Research Methodology:

As brought out in the past studies, the management graduates are expected to demonstrate qualities of ‘knowing’ (cognitive aspect), doing (skills) and being (affective). Based on the

reviews of related studies and the selection criteria of companies in manufacturing sector, nine expected qualities/skills were shortlisted for seeking responses of the employers. The respondents were asked to prioritize developmental tasks which the employees expect the B-Schools must include in their curriculum in order to meet the expectation of industry in general.

In the second question, the respondents were asked to assign the weightages which they would attribute to the above mentioned knowledge qualities/skills while they select the management graduates for their organizations i.e. manufacturing companies. Second question was not shown until and unless the respondents answered the first question to negate the bias of their answers to the first question.

In the third question, the respondents were asked to give their preference to the modes of conduct of industrial training/summer training for MBA students which is a compulsory developmental part of a MBA program.

Data Analysis:

Empirical research suggests that generic attributes of 'knowing', 'doing' and 'being' are expected to be inculcated in all MBA graduates in general. Domain knowledge and a number of qualities and skills make up these three attributes (this study has selected 9 qualities and skills). The respondents gave priorities to the knowledge, qualities and skills which are expected from management graduates in order to make them suitable for industry in general.

In the second question the respondents were asked to give weightage to the same knowledge qualities and skills which they would consider while selecting the graduates for manufacturing industry. The order of priority in both the cases is given in the table below.

Table: Order of Priorities given to the Knowledge, Qualities and Skills expected from the Management graduates and the Weightage Given to the Qualities by Employers of the Manufacturing Industry while Recruiting the Management Graduates

Knowledge/Skills Expected of a Management Graduate	Priority/Weightage given by the Employers (of manufacturing industry)	
	To the Knowledge Qualities/Skills Expected from the Management Graduates in General	To the knowledge and Skills while Recruiting Management Graduates
Communication Skill (K)	1	1
Problem Solving Skill (D)	2	4
Making Student Work Ready (K,D)	3	8
Theoretical Knowledge (K)	4	3
Leadership/Soft Skill Development (D,B)	5	2
Ethics & Morals consciousness (B)	6	5
Entrepreneur Skill (K,D)	7	7
General Awareness (K)	8	6
Etiquette and Mannerism (B)	9	9

(K= Qualites of Knowing, D= Qualities of Doing, B= Qualities of Being)
The table shows that the employees of manufacturing industry give highest priorities to communication skills, problem solving skills, work readiness and domain knowledge.

In order to investigate if the employees of manufacturing industry give equal priority to the qualities expected of a management graduate in general and the weightage given to those qualities and skills at the time of recruitment, the following hypothesis was developed.
Ho – There is no significant difference in the priorities given to the knowledge, qualities and skills expected from the management graduates in general (μ_1) and the mean score of priorities of same knowledge/skills while selection of managment graduates by the manufacturing industry employers ($\mu 2$).

In order to compare the equality of means of μ_1 & $\mu_{2,\ Mann}$ Witney test was applied to see the difference in means. Value of calculated test statistic z was 1.67 against the $z_{\alpha} = 1.96$. Since z calculated value is lower than z_{α} i.e. the critical value, therefore there is no evidence to reject the null. It means that the priorities given to the knowledge, qualities and skills expected of the MBA graduates and the weightages given to these qualities while selecting the students by the employers of manufacturing industry are not significantly different.

Secondly Spearman rank order correlation between the order of skills/qualities is in both cases was found to be strong (r = 0.669) which further proves that the expectations from the management graduates and the weightages given to the qualities/skills during recruitment are strongly related in the positive sense.

The employers also were asked to rate the attributes of MBA graduates of Aurangabad region against their expectations. The mean score of the priority for skills/qualities to be included in curriculum of B-Schools, (μ_1), employer's expectations regarding knowledge & skills from management graduates (μ_2) and the attributes of management graduates of Aurangabad region (μ_3) were compared for equality. The following hypothesis was developed.

Ho: $\mu_1 = \mu_2 = \mu_2$

H1: At least two means are different.

Equality of means of three aspects was tested applying Kruskal-Wallis Test. Value of test statistic H' (df = 28, $\alpha = 0.95$) for the sample was against χ^2 value of 16.9. Since the computed value of sample H' is more than critical value of χ^2, the null hypothesis cannot be accepted. Therefore the priorities given to qualities and skills expected from the MBA graduates, the priorities given to these skills and qualities and the qualities and skills available are significantly different.

MBA students are given an industrial exposure through summer internship/compulsory industry training. Different models of industrial training are adopted by B-Schools depending on the duration and conduct of training such as:

a) Industrial training of 6 weeks between 1st and 2nd year.
b) Industrial training of one full semester.

c) Industrial training of 8 weeks.
d) Industrial training of 4 weeks only.

The aim was to investigate the most preferred system of industrial training out of the ones mentioned above. In question number 3, the employers were asked to give preferences to each mode of training. Hypothesis developed was as under:

Ho: There is no agreement on the preferences given to different models of industrial training as mentioned above.

H1: There is an agreement on preferences given to different methods of training.

χ^2 test for independence of variables was applied to test if the model of training and preferences given were independent or not. Calculated value of χ^2 at 0.01 percent level of significance was 16.681 which was lower than critical value of 49.588. Therefore the null hypothesis was accepted. This means there is no relationship between the model of training and the preference given to them by the employers.

Research Result Discussion:

Prioritization of qualities expected of management graduates in general and the weightages given to the qualities while recruiting the management graduates suggested the following:

a) Development of Communication Skills is priority one task which the B-Schools should include in their curriculum**.** The employers of manufacturing industry also give topmost priority to communication skills while selecting the management grads to their organizations. Importance of communication skills, problem solving skills and domain knowledge has come out in the study by Sanket V Raven (2016). There is corroborative evidence that all these skills and domain knowledge are important for employment in manufacturing industry.
b) Priority two tasks of B-School is the development of problem solving skills where as this task is placed at priority four while selecting the candidates.
c) Employers place 'making students work ready' lies at priority 3 but while selection of students, it is on 8th priority. This difference needs further investigation.
d) Imparting theoretical knowledge is priority 4 task for B-Schools and is at 3rd place while selection students.
e) Remaining skills and qualities are given comparable priority.

Examination and testing of mean prioritization scores of the qualities and skills expected from the management graduates, and scores of qualities of management graduates of Aurangabad region, which is dominated by manufacturing industry, indicate that B-Schools and students both need to work intensively on the development of priority qualities i.e. communication skills, problem solving skills, making students work ready and for imparting theoretical knowledge for enhancing their employability.

There is no relationship to the preference given by the employers to different methods of training. Therefore, given methods are recommended to be followed in their own context/requirement.

Conclusion:

Qualities of 'knowing', doing and being' as mentioned above bear a strong relationship both as expectations from the management graduates in general and for their recruitment for manufacturing industry. Development of Communication skills, problem solving skills and making students work ready and imparting theoretical knowledge are the most important tasks for B-Schools. The B-Schools in tier II industrial towns should include relevant subjects and activities to develop the above attributes in their students for enhancing their employability. Finally there are no preferred models of industrial training. All methods considered in the paper can be adopted contextually and based on the requirement.

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