Quality of Management Education in India: Development of a Conceptual Framework

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Abstract

The growth of B-schools in India has been phenomenal in the past decade. Unprecedented growth (1400 B-schools) has raised concerns about the quality of management education imparted in Indian B-schools. Various challenges faced are, dearth of quality faculty, infrastructure, funding, research and development, quality of students, global competition, admissions process etc. Measuring quality of an educational service is complex because of the various stakeholders involved- namely, students, faculty, corporates, parents, society etc. Quality is extensively researched in the manufacturing industry and some models of quality in higher education have been proposed but a specific measure for quality is not available for B-schools. We propose a conceptual framework for measuring quality of management education in India.

Key Words : Pedagogy, TQM, Stakeholder, Industry Interface, Top Management Philosophy

Introduction

The Indian B-school scenario has witnessed numerous changes in the recent past. 1. 91 lakh students appeared for the CAT examination, conducted by Indian Institutes of Management (IIMs) in November 2006. 55 institutions offered post graduate programs in management in 1989-90, today; industry estimates suggest that there are 1400 B-schools in India. Gupta, Gollakota and Sreekumar (2003) have attributed three reasons for studying quality of B-school education in India- First, outside of the U. S. A, India now trains largest number of MBAs with about 75,000 degrees annually. Second, the Indian government has liberalized the business education market over the 1990s, resulting in a rapid growth of business schools offering programs at both undergraduate as well as graduate levels. Third, Indian business schools have sought to replicate the US-based organizational, pedagogical, curricula, industry-

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interface, and academic research models, but are struggling to introduce several adaptations because of the differences in the work culture.

Various scholars (Leavitt, 1989; Pfeffer and Fong, 2002; Pfeffer and Fong, 2004; Ghoshal, 2005; O Toole, 2005) have highlighted different, often conflicting, reasons for postgraduate management education in the US becoming rudderless. An underlying idea, emerging from these scholars is that, pressures from various sources like media, stakeholders like students, have forced management institutions to adopt practices that may make sense in the short run but are likely to have serious negative effects in the long run.

The B-school scenario in India is very diverse and there are different types of B-schools in the country. The role models are the autonomous Postgraduate programs offered by the IIMs. There are reputed autonomous programs offered by IMT Ghaziabad, FMS Delhi, Symbiosis Pune etc. Various Indian universities offer MBA courses, where the entire course framework is decided by the respective university offering the course; private colleges affiliated to universities also offer MBA courses. There are also a few private universities like- ICFAI, Hyderabad, deemed universities like Madurai Kamaraj etc offering MBA Programs. The degree of autonomy, course content, curriculum design, role of faculty, grading, evaluation pattern, tuition fees charged, admissions process etc vary widely among the different types of B-schools.

Quality in B-School Education

Quality is an elusive and indistinct construct (Parasuraman, Zeithaml and Berry, 1985).

Quality is a complex and difficult construct to measure in service sectors. The ISO (1986) definition"The totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs". The words 'characteristics' and 'satisfy needs' in the definition imply two important points, which are also in line with TQM principles: (a) quality is what satisfies customer's needs (b) quality is a set of characteristics that can be measured qualitatively or quantitatively.

Quality has been defined in business as- conformance to specifications (Scrabec, 2000). Garvin (1984) has given attributes of quality in product/service models (TQM) in business, they are, performance, features, reliability, conformance, durability, serviceability and perceived quality.

Spanbauer (1995) defines TQM in education, as "TQM is a management philosophy which puts systems and processes in place to meet and exceed the expectations of customers. It is a relentless quest for continuous improvement through documentation and the use of tools in a problem-solving atmosphere that features team action and good leadership practices"

In application to higher education, both market-orientation and measurement pose arguments. While some authors believe that, because of the complex, dynamic and intangible outcomes of education, an objective measurement of quality is very difficult or impossible (Tofte, 1993; Sayed, 1993), many view it as essential if quality improvement is to be monitored (Seymour, 1992; Morris & Haigh, 1993; Burkhalter, 1993). The terms 'customer' and 'market' have also met with resistance from some educationalists, who argue that they are applicable only to commercial environments (Sallis, 1993; Corts, 1992).

Critique of Adopting TQM in Academics

Spanbauer (1995) raises a very pertinent question, to whom the education is intended to benefit? Students are primary customers but the customer relationship is somewhat different from a customer in a restaurant or bank.

In both the industrial and general service sectors, the customers are well defined whereas in a university, as Madu and Kuei (1993) suggest, the definition of customers is quite broad. While students are accepted as the primary customers by many authors (Sallis, 1993; Corts, 1992; Hittman, 1993), other potential customers like parents, employers, government and society, should also be considered.

Another complexity arises from the dynamic and interactive nature of higher education is; "While students are prime customers of colleges and universities, they are also their raw material, suppliers, co-processors, and products" (Harris, 1992). For this, a clarification is necessary for specifying customers and prioritizing or reconciling their different requirements based on a university mission (Taylor & Hill, 1993; Sallis, 1993).

Extant literature review shows that treating students as customers may compromise on course content and rigors of learning. Treating students as products, characterizes students as too passive and accepting. Treating students as partners would be assuming that students are self-directed and are willing to share the responsibility of learning, along with faculty on the same level. A student may be viewed as a stakeholder ; a stakeholder who has vested interest in acquiring higher education. Student's needs will be given utmost priority by faculty in all aspects of curriculum design and delivery.

Faculty will be the final decision maker, by virtue of acquired knowledge and meaningful real world experience (Shahaida, Rajashekar and Nargundkar, 2006).

While considering Quality of B-school education, it is necessary to incorporate the expectations of many stakeholders, students, faculty, government, employers, board of directors and society etc. The TQM philosophy centers on continuously exceeding customers' expectations. In higher education, specifically in B-schools, which have many stakeholders to satisfy, applying TQM like processes (like in manufacturing industry) seems impractical. "The number of institutions that have actually implemented TQM successfully in any meaningful way is comparatively small, and the gains generated in these institutions often appear to be overshadowed by the time and effort" (Koch and Fisher, 1998)

The Purpose of Education

The government, students and industry consider different attributes as the purpose of education. Montmore and Stone (1990) opine that industry's view about purpose of education is to produce graduates who can communicate, cooperate, solve problems and work in a team effectively. The student views purpose of education as a means to improve earnings and further career prospects. The government's perspective about purpose of education may be to enhance student achievement in the aggregate. Wicks (1992) proposes other purposes of education such as, acquisition of knowledge, building a value system in the individual, against which to make personal, social and moral judgments etc. Faculty may perceive imparting subject knowledge and honing the conceptual skills of the students as the purpose of education. The board of directors' viewpoint of purpose of education could be three fold : to instill a sense of discipline, to impart effective teaching and to provide good infrastructure etc. The opinions of various stakeholders are diverse and also highly subjective. Different stakeholders of a B-school also perceive quality of education differently. Montmore and Stone (1990) suggest that there is no uni-dimensinal measure of quality and it is possible to discuss the quality of different components of education.

Adam smith referred to quality of teaching as quality of education. Smith's notion of educational quality adheres to consumer's perception of quality, J. S. Mill contested this opinion by pointing out that consumers of educational service are often unaware about the quality of the service they are buying.

Bose (2006) raises another major concern with respect to the quality of education provided by `for-profit' and `non-profit' providers of education. The resources available at an institute can also be a measure for quality of education. Whether the institute is government funded or private funded has an impact on both, the quality of education and the tuition fees charged. For government-funded institutions, the pressure to increase number of students and satisfy the preferences of the median voter is less intense (Bose, 2006). Students' achievements during the course (ranks, awards) and after the course (placements, professional success) may also be considered as another indicator of quality of education rendered in the institute.

Epple and Romano (1998) and Basu (1989), propose that a better peer quality implies superior quality as assured by 'students' achievements. Profit maximizing behavior determines quality of a school as assessed by its peer quality (Basu, 1989). A profit maximizing school chooses the quality of students, to maximize profit. Consumers should be willing to pay a higher price if a school is offering better quality. The school would like to fill-in as many seats as possible so long as the number is less than or equal to the 'size' of the school, or governed by government rules. A profit seeking school would like to fill in all seats with students who are both rich and clever. If the number falls short, then the rest of the seats can be filled by (a) some clever- poor students or, (b) some mediocre rich students or, (c) some of both (Bose, 2006). The presence of clever-rich and clever- poor students will enhance quality, there by raising the willingness to pay by all students and hence the profit. The price that the mediocre rich are willing to pay will compensate for the lower price that the clever yet poor students pay. Rothschild and White (1995) state that this kind of price discrimination internalizes the externality that clever-poor and mediocre- rich students create within the school. Assuming that public schools admit all students, hence government is not concerned about the quality of public schools, as long as they provide education, Epple and Romano (1998) assert that profit maximizing schools will be of better quality.

However, this assumption is not true in the B-school scenario in India. The most sought after MBA program, regarded as having the best quality, is from the IIMs, which are government funded. However, with the spurt in the number of private B-schools, there is an increasing difference in the quality of business education provided by different providers. Gupta, Gollakota and Sreekumar (2003) cite various reasons for the existence of wide differences in quality such as there is no uniform entrance test for admission to an MBA program, CAT,

MAT, XMAT, etc. The Government of India tried to introduce a common admission test for the B-schools but the Supreme Court of India rejected that attempt. The Court ruled, "Private educational institutions have a personality of their own, and in order to maintain their atmosphere and traditions, it is necessary that they have the right to choose and select the students who can be admitted" (Goswami, 2003). The entrance tests are in English, which handicaps, an otherwise brilliant student from a rural background. India does not have a body like AACSB (The American Assembly of Collegiate Schools of Business) in USA. The apex body, AICTE (All India Council for Technical Education) is responsible for defining the basic framework for quality of the business-education and approving entry and expansion of all institutions, there are in practice, many problems that undermine its effectiveness. (Gupta, Gollakota and Sreekumar, 2003)

There are many areas like, infrastructure, teacher-student ratio, number of Ph. D faculty in an institute, etc which feature only in plans, to get AICTE approval. It is reported that many business schools got AICTE approval on the basis of attractive project plans, which never got implemented, so that some of them operated "virtually from sheds and garages" (Raghunath, 1998). AICTE has launched NBA (National Board of Accreditation) using a benchmarking system with regard to factors such as physical infrastructure, quality of inputs, and faculty training. However, falling standards of schools approved by AICTE dropped its credibility (Gupta, Gollakota and Sreekumar, 2003). In 1998, All India Management Association (AIMA) used ISO 9000 to develop a quality assurance system, known as QBS 1000. QBS 1000 program determined and assessed B-school's quality and processes and certified their capacity across crucial and desirable parameters. The QBS 1000 system was intended to evaluate quality at 100-plus institutions associated with AIMA (Raghunath, 1998). Presently, there is no specific, universally accepted accreditation. India needs a professional body that provides accreditation to management institutes. The management schools could be classified under four distinct classes: Research based Schools, Specialized Schools, General MBA Schools and Practice Oriented and Industry linked. (Bowonder and Rao, 2005)

Many education professionals believe that TQM directed at academics is not the answer. They note that higher education is a very humanistic area where autonomy and academic freedom are highly valued, where specialized faculties avidly protect their turf (Satterlee, 1996). The meaning of quality is personal, strongly influenced by previous experiences, Students, faculty, university,

society, top management, and corporates could all have different perceptions and expectations about B-school quality. Quality has to be researched from the perspectives of all the different stakeholders.

Literature Review

Quality is difficult to implement and capture in a meaningful sense. Given the forces that place intense, sometimes conflicting pressures on the providers of MBA programs, it becomes incumbent upon us to reflect on what quality means in today's world. (Rapert et al, 2004).

Studies conducted in U. S higher education institutions have shown mixed response about the effectiveness of adopting TQM (Total Quality Management)-type quality processes. A study of 32 higher education institutions found that administrators believed that their TQM programs were making a great contribution to organizational effectiveness, and benefits were greater than costs (Elmutti, 1999). Out of the 32 higher education institutions, 12 institutions had given up on TQM programs after a 3years trial, citing reasons such as, detrimental effects on creativity, threats of standardization and uniformity and lack of appropriate rewards. Very few institutions have meaningfully made a success of in implementing TQM programs (Koch and Fischer, 1998).

Despite various issues involved in the implementation of TQM type programs, many higher education institutes are using it to improve academic administration, teaching and learning. The AACSB is supporting the use of continuous process improvement programs to improve teaching and learning (Vazzana, Elfrink and Bachmann, 2001). In 2001, Vazzana, Elfrink and Bachmann, carried out 2 surveys in 400 colleges and universities throughout U.S.A taken three years apart using the following typology- TQM in the curriculum, TQM in nonacademic functions, TQM in academic administration and TQM in the core learning process. The major findings were the percentage of schools that included TQM in the curriculum increased from 78% in 1995 to 86% in 1998. 38% in 1995 to 50% in 1998 was the increase in the use of TQM in administrative and academic activities. The use of TQM in core learning processes is increased from 52% in 1995 to 57% in 1998.

The major problems facing universities today relate to curriculum, experiential learning, funding, the allocation of faculty time, teaching versus research, faculty status and tenure, student access, distance learning and the use of technology, the pricing of higher education, restraining cost increases, relationships with business and government, governance and leadership

arrangements, faculty compensation and intercollegiate athletics (Koch and Fisher, 1998). Koch and Fisher (1998) state that TQM has little to contribute to the solution of fundamental questions of value, direction and resource allocation. TQM can be of assistance in improving administrative service areas (registration, mail service, maintenance, billing, etc.), and that it has been used to enhance certain quasi-academic areas such as library services.

Widrick, Mergen and Grant (2002) have measured three quality dimensions (quality of design, quality of conformance and quality of performance) in higher education. They have developed a set of measurement parameters used in evaluating the quality

of research and curriculum development and the tools/techniques necessary for evaluating them.

Scrabec (2000) has proposed attributes for performance measures of quality education, they are, standardized national tests, certification of educational institutions, student satisfaction measures, industry feedback, international text and quantitative measures, national indices such as patents, government of independent audits to set standards and student evaluations.

Vazzana, Elfrink and Bachmann (2001) have suggested the following framework of TQM use in educational institutions- TQM in the curriculum, TQM in nonacademic functions, such as administration, human resources management, support functions, maintenance etc. TQM in academic administration and TQM in the core learning process, treating classes as micro organizations proposed by Gilbert et al (1993), core competencies such as interpersonal skills, communication skills, decision making skills and the criteria used to measure them are identified (Mullin and Wilson, 1995)

Determinants of Quality of B-School Education in India

Extant literature review has revealed that applying industry-type, quality programs in education may be very difficult to implement and measure. TQM in academics has been found practical for processes like, admissions, quality of teaching-learning, administrative practices etc. There is a need for a holistic perspective for measuring quality of management education, which considers all aspects- academic, nonacademic, admissions process, placements, perspectives of different stakeholders, government, external bodies, etc.

Laha (2002) has identified the following determinants of management education

- Academic environment- library facilities, journals

available, computer facilities etc.

- Intellectual capital- number of faculty, books and journal articles published, seminars and conferences attended etc

- Physical infrastructure- classrooms, laboratories, campus, hostels etc

- Industry interface- number of MDPs (Management Development Programs), in-company programs, consultancy projects, industry professionals visiting campus etc

- Placements- percentage of students recruited through campus selection, average salary offered etc

- Stakeholder satisfaction and perception- Faculty, student and recruiter's perception and satisfaction

- Innovation- Courses modified, updated, new innovative courses launched etc

Gupta, Gollakota and Sreekumar, 2003 have proposed five yardsticks to measure quality of business education in India they are, (1) Quality of students including the admission process, (2) Pedagogy, (3) Placement (4) Faculty development and (5) Infrastructure.

Rao (2006) has proposed a model for achieving continuous quality enhancement and global standards for B-schools. The parameters of the proposed model are, (1) Academic curriculum- benchmarking, responsiveness and orientation to shifting corporate needs, (2) Internal branding (3) Leadership and institutional governance, (4) Forging international alliances and alignments (5) Global admissions and internships (6) Benchmarking for global accreditation.

Conceptual Framework of Quality for Management Education in India

The suggested conceptual framework (Fig-01) for measuring quality in a B-school has three constructs, quality in inputs, quality in processes and quality in outputs /outcomes. This framework represents 15 criteria; each one of the 15 criteria will lead to continual and sustained improvement towards building the quality of a B-school. The framework covers the 15 criteria and their relationships in an illustrative graphical perspective. Rather than just elucidating determinants of quality of B-school education, an attempt has been made to capture the inherent complexity of B-school education, and presents a meaningful, measurable structure that can be statistically tested for significance.

The 15 criteria have been drawn from literature review on quality in education (including higher education and MBA education), in-depth interviews with academicians,

students, faculty of B-schools and industry representatives.

Inputs are the first dimension, consisting of two levels. Level 1criteria are basic in nature, affecting the formation and continued existence of the B-school. Level 1 has three criteria, top management philosophy, competitive structure and external regulation.

Inputs Level 1

1.0 Top Management Philosophy- The vision and goals of the top management of B-schools will have a bearing on the entire process of imparting education. Effective leadership is essential for the success of any organization, including a B-school. In the case of Government funded institutions like IIMs, it could be the Director and Board of directors of the B-schools, In the case of universities; policy-making officials like Vice chancellor, heads of departments and other committees are involved. In private B-schools, the chairperson, board of directors, promoters are involved. Top management philosophy guides all practices in the B-school, degree of autonomy given to administrators and faculty, curriculum design, etc.

1.1 Competitive Structure - The global management education market is estimated to be US $22 billion (Friga, Bettis and Sullivan 2003). It is growing at about 10-12 percent per annum. US is the largest market. International competition in management education is very much a reality today. Harvard business school, Stanford and Yale University have set up research centers in India. Even India's elite institutions - the IITs and IIMs - will find it increasingly difficult to attract and retain excellent faculty members in the face of attractive offers from foreign universities, research institutes and multi-national corporations. So, there is a substantial risk that Indian universities and their students could end up as serious losers in the global higher education "game" (Arnold, 2001).The other side of the coin is the increasing number of students from India. About 2½ Indian graduates write MBA tests every year, but almost 2/3rd of them do not get any seats because of the paucity of seats. The number of Indian students studying in the U. S. grew by more than 46 percent from 1990 to 1999 (Arnold, 2001). In this highly competitive era, Indian B-schools have to face global and Indian competition (1400 B-schools) to retain both good faculty and match the standards of international B-schools.

1.2 External Regulation - AICTE is the formal body that gives recognition to management institutions except those institutions under universities. In India, recognition is given to institutions as a whole and not for specific courses. In other countries, accreditation is used most as a quality tool and is done for courses independently. Again, the recognition in India is based on facilities, faculty and infrastructure. Research and industry interaction do not find a place in recognition. The recognition is not sufficient to ensure that the quality norms are met with. India needs a professional body that provides accreditation to management institutes (Bowender and Rao, 2005).

AICTE requires at least 1,200 contact hours for the MBA program, in addition to 6-8 weeks of summer internship and field projects, divided over 2 years for the full-time format, and 3 years for the part-time and distance learning formats. The applicants are admitted based on a national or regional level written test to assess their aptitude and preparedness for learning of management, performance in group discussion and interview, behavioral and personality trait tests for professional aptitudes, and prior academic record and work experience. AICTE case studies, group and individual exercises, class assignments, project work and presentations, role-play, and management games. Each core faculty is expected to teach up to six courses a year, with an additional four course load equivalent time devoted to research, executive development programs, academic administration, and consulting. Recommended faculty-student ratio is 1:60. Each institution is required to have a minimum of 7 core full-time faculty, who then serve as anchors for the part-time, visiting or guest faculty equivalent to at least three additional full time faculty. There are other requirements such as library facilities, computer facilities, instructional technology and aids. Academicians have criticized these requirements. The parameters and their attendant weightages seem to "have frozen in time" and become anachronistic. They do not reflect the compulsions of the contemporary times in terms of needs, challenges, aspirations and realities (Rao, 2006).

There are many instances where, institutions have not adhered to the norms prescribed by AICTE; some private institutions perceive that growth is hindered because of certain norms. The central government and various state governments have recognized the entrepreneurial efforts of the private B-schools, and have begun granting deemed or private university status to several private B-schools that have excellent brand names and resource infrastructure. These forces have created a very positive climate for the growth of B-schools, albeit heightening the challenges of ensuring a consistent quality of education at the national level (Gupta and Gollakota, 2004)
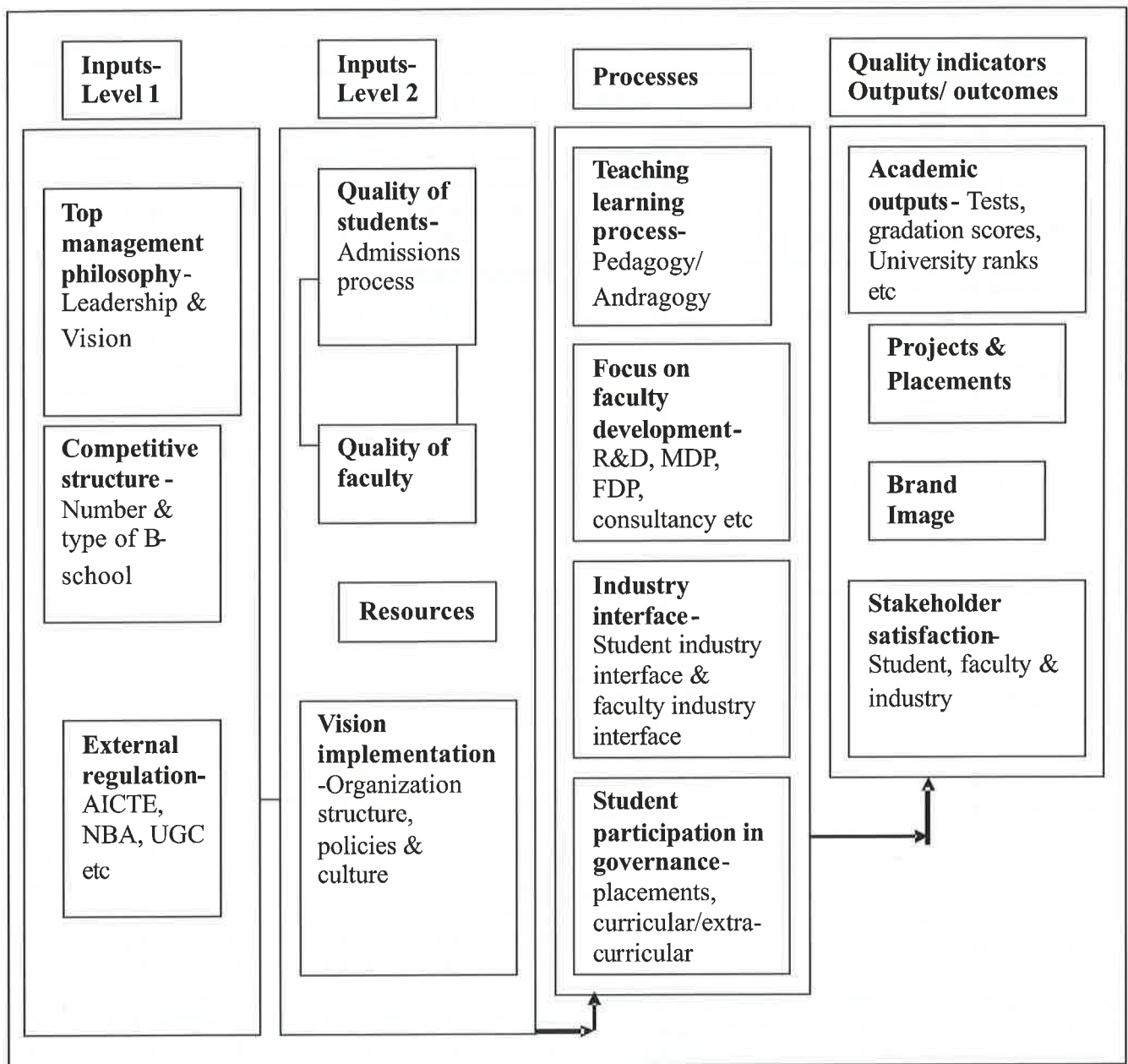
Figure I : Conceptual Framework of Quality for Management Education in India

Inputs Level 2 has four criteria, quality of students, quality of faculty, resources and vision implementation.

Inputs Level 2

2.0 Quality of students - Different institutions enroll students based on different entrance tests. This poses a problem for evaluating quality of students. The IIMs have been ranked at the top in several surveys in the Asia-Pacific region. The student quality is excellent as there are 1400 seats only, across all the IIMs. Apart from the IIMs, there are 15 other institutions, which are ranked in most surveys among the top 20, which retain high student quality such as, MDI, Gurgoan, ISB, Hyderabad, IMT,

Ghaziabad etc. The same does not hold true for all the B-schools. The demand for B-school degrees far outweighs the availability, and private players cash in on this demand. As a result, student quality across a cross section of B-schools fluctuates from excellent to very poor.

The admissions process uses different admission tests and procedures by different business schools, unlike the US where GMAT is used as a standard test score. The Government of India tried to introduce a common admission test for the b-schools but the Supreme Court of India rejected that attempt. The merits of a common entrance test are debatable and proponents will feel

there is a need to develop some measures of equivalencies among scores of different admission tests, so that the quality of the inputs can be isolated from the quality of the academic process while making comparisons among different b-schools. While some tests (CAT), and selection processes (group discussion and personal interview) are very tough, some others are easy. Most of the MBA students in India are relatively young, and they enter the graduate program straight after their undergraduate education. Although many of the Indian institutions give some extra weight for work experience, a majority of students are without work experience. The situation same in both the top ranked and second tier schools.

2.1 Quality of Faculty - Although majorities of faculty in most Indian business schools do not have a Ph.D., many faculties in top ranking schools have Ph.Ds. There exists considerable gap between the desire for a comprehensive mission based on research and multi-functional multi-sectoral disciplinary education, and the ground realities (Gupta, Gollakota and Sreekumar, 2003). A survey showed that while 550 out of a total of 773 full-time faculty, or 73%, at the top 15 business schools in India had a Ph.D. degree, only 1,181 out of 2,361 full-time faculty, or 50%, at the top 100 business schools had a Ph.D. degree in 2003 (Cosmode Management Research Centre, 2003). About 70% of Indian business schools do not have even a seven-member faculty, and the faculty they have generally does not have a Ph.D. degree (Zachariahs, 2003). The estimated demand for Ph.D. faculty members at the nation's business schools is 7,200 (Cosmode Management Research Centre, 2003). Most B-schools have faculty with MBA or equivalent degree, a considerable majority in reputed B-schools have industry experience.

2.2 Resources - The term resources include physical and financial resources. If a B-school invests in excellent infrastructure, including residence dorms, state of art classrooms and library facilities, backed with initiatives for faculty development such as, statistical packages, online databases for research, etc the cost and resource limitations are quite high. The reputed B-schools do provide all these facilities, but there are many among the 1400 odd B-schools, which fall short in this area. Financial resources here, indicate the willingness of the top management to invest funds for physical resources and other initiatives to build the quality of B-school such as, offering remuneration to faculty and staff, on par with the best in the industry, providing healthcare and other benefits, implementing incentive linked salary packages etc.

2.3 Vision Implementation - leading, motivating and managing a group of highly qualified, talented and accomplished faculty present a unique and a formidable

HR challenge (Rao, 2006). This criterion includes organization structure adopted, policies, procedures, processes, governance systems and work culture developed in the organization. Emphasis has to be placed on aligning individual goals with organization goals to ensure shared vision. Considering the "mindsets" and overarching goals, faculty faculties have to be generally coaxed, motivated and cajoled in order to bring in cherished institutional reforms (Rao, 2006)

Processes

3.0 Teaching-Learning Process - Few business schools take an integrative approach to management education. Almost everything happens in terms of functions (marketing, finance, human resources management, operations, systems and so on), be it teaching, curriculum design, recruitment or for that matter research, in Indian B-schools (Kaul and Ahmed, 2005).

Most business schools claim a dual mission: to educate practitioners and to create knowledge through research. Historically, business has emphasized the former at the latter (Warren and O'Toole, 2005). Business schools embraced the scientific model of physicists and economists rather than the professional model of doctors and lawyers. Although few B school faculty members would admit it, professors like it that way. Business school professors using the scientific approach often begin with data that they use to test a hypothesis by applying such tools as regression analysis. Instead of entering the world of business, professors set up simulations (hypothetical portfolios of R&D projects, for instance) to see how people might behave in what amounts to a laboratory experiment. Those methods are useful, necessary, and enlightening. However, because they are at arm's length from actual practice, they often fail to reflect the way business works in real life. When applied to business essentially a human activity in which judgments are made with messy, incomplete, and incoherent data- statistical and methodological wizardry can blind rather than illuminate (Warren and O'Toole, 2005).

There is a need to bridge the gap between faculty needs vis a vis market needs (Business practice). Academics need to examine research frameworks to assess their relevancy in the face of the revolutionary changes now taking place. Academics must work to prepare students to be successful in the 21st century business reality. Indian business schools rely on textbooks that are used in the US and based on research done in an American context. The reason for this is the paucity of research in Indian business schools. (Gupta and Gollakota, 2005). Most B-schools in India have affiliations with the state universities. The syllabus and other norms imposed by most universities tend to be restrictive and degenerative,

as they do not allow flexibility to respond to the local conditions and do not build competencies for quality teaching, service, and scholarship (Gupta and Gollakota, 2005). The evaluation techniques adopted in a majority of B-schools still employ traditional grading methods by relying on term end examinations for awarding the degree. The teaching techniques, in most B-schools are lecture-based approaches, though there is increasing popularity of more experiential learning exercises like case study analysis, projects, internships etc. Business education has come under criticism for not training students to meet the needs of business (Doria et al., 2003). Many companies had to put "re-education" programs in place, to reorient the graduates to the industry they were recruited to (Gupta, Gollakota and Sreekumar, 2003). The entire MBA curriculum must be infused with multidisciplinary, practical and ethical questions and analyses reflecting the complex challenges business leaders face (Warren and O'Toole, 2005).

Teaching-learning criterion includes factors such as, andragogy versus pedagogy; focus on experiential learning, relevance to Indian context, and academic curriculum- responsiveness to changing market needs.

3.1 Focus on Faculty Development

- According to a joint survey conducted by COSMODE Management Research Center and Business World-India (COSMODE-B.W.), in 2002 there were only 3,600 Ph.D's in Indian B-schools. "What they really need is 11,000," the survey said. "The gap is not going to be closed anytime soon: the Top 100 B-schools produce around 110 doctorates annually while an additional 20-24 come from overseas every year Faculty in most B-schools do not have a doctorate degree. This criterion includes focus on Research and development, Management development programs, Faculty development programs, consultancy projects, articles published in National and International Journals, books authored, conferences and seminar paper presentations etc.

3.2 Industry Interface

- Literature review indicates that MBA programs have not met the requirements of industry. Student interface with industry in terms of projects, internships, guest lectures, seminars, conferences etc. Faculty interface in terms of R&D, consultancy etc. are not adequate.

3.3- Student Participation in Governance-

This criterion includes curricular and extra-curricular involvement of students such as placements, competitions, inputs for teaching-learning etc.

Quality Indicators- Outputs/ Outcomes

4.0 Academic Outputs

- This criterion includes number and rigors of tests, grading patterns, in terms of presentations, case study analysis, group projects, individual projects assignments, term papers, university ranks etc.

4.1 Non Academic Outcomes, Placements

- Consistently successful placement indicates that the school is meeting the needs of the industry (Gupta, Gollakota and Sreekumar, 2003). Many institutes emphasize on projects and internships for experiential learning. This criterion includes, number of students placed, average salary offered, effort taken by the B-school to help train students in attending placement interviews and facilitating placement opportunities.

4.2 Brand Image

- Opinion is divided regarding brand image of an educational service like a B-school. Certain institutionalized actions and initiatives sometimes visibly and at other times subtly impact the "brand equity" of a B-school (Rao, 2006). These actions could be, recognition from a body like AICTE, NBA, ratings and rankings in B-school surveys conducted by various magazines, international alliances, with American, British, Australian Universities, advertisements, unique courses offered, program offerings in the form of MDPs/ FDPs/ EDPs, collaborative research, consultancy projects etc. These actions collectively build the "Brand image" in the minds of prospective students, faculty, industry and society. This criterion includes both internal branding (students, faculty and staff) and external branding (industry, society and media)

4.3 Stakeholder Satisfaction

- Literature review indicates that the major stakeholders of a business school are students, faculty and industry. The expectations and perceptions of the major stakeholders are indicative of quality.

Conclusions

Quality in a B-school is multi dimensional, we have proposed a conceptual framework, which incorporates all the factors that act as inputs, drive processes and result in quality indicators. The 15 criteria proposed to measure quality of a B-school have been drawn from literature review and in-depth discussions with, the major stakeholders, students, faculty and industry professionals.

The authors propose to test the conceptual framework of quality in management education in India, using Structural equation modeling. We are in the process of developing an instrument to test and validate the relationships defined in the conceptual framework.

We believe that such a model will help define quality in a holistic perspective for B-schools in India; it could evolve as a quality measurement tool for self-assessment to aid continuous quality improvement.
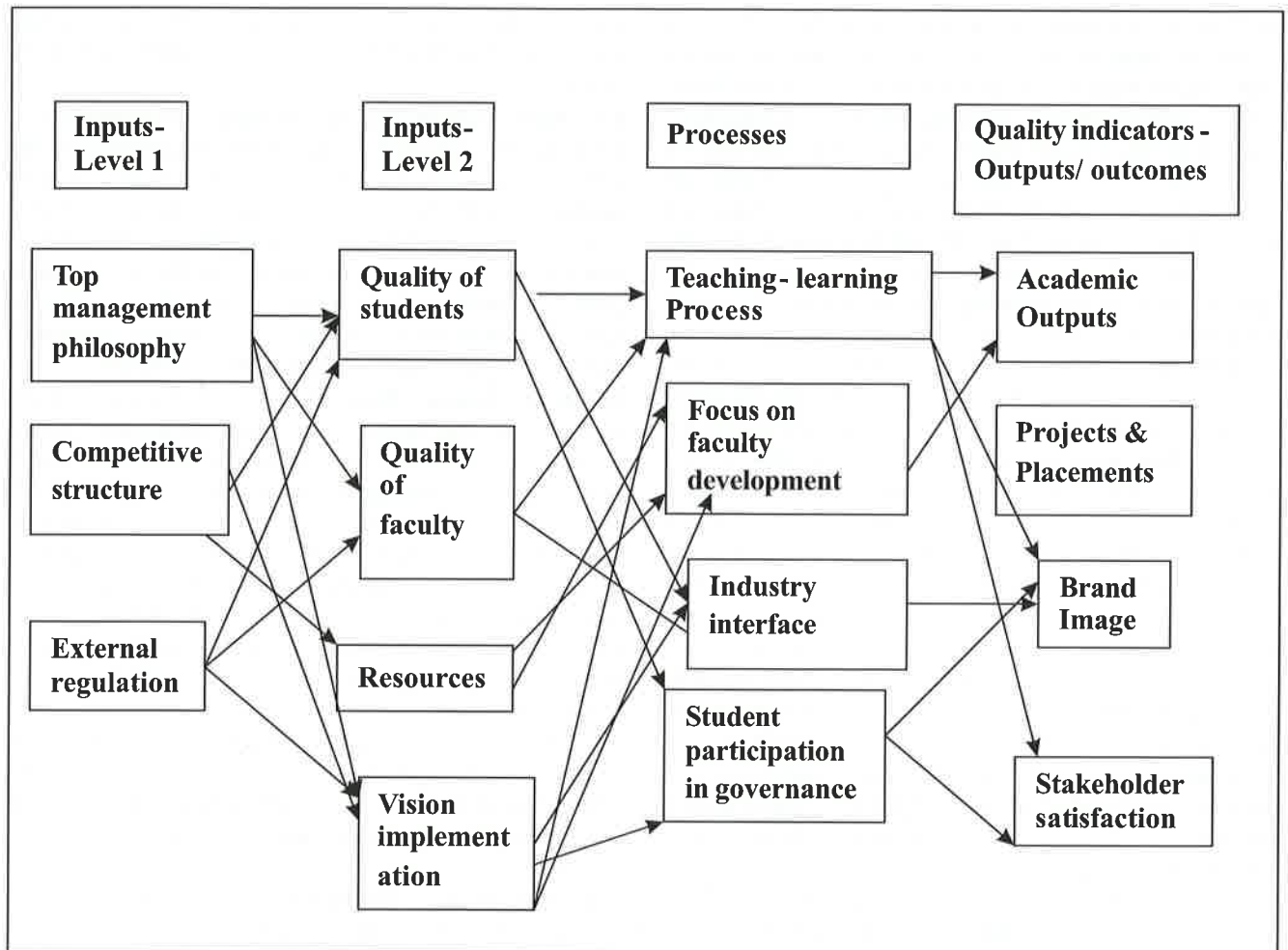
**Figure II : Conceptual Framework of Quality for Management Education in India
-Proposed Structural Equation Model**

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