

International Journal of Advance Research in Computer Science and Management Studies

Research Article / Survey Paper / Case Study

Available online at: www.ijarcsms.com

Managing Business Competitiveness among B-Schools in India through Big Data

Dr. K. S. Srinivasa Rao¹

Dean (Academics)
IFIM Business School
Bangalore – India

Prof. Chowdari Prasad²

Dean (Planning and Development)
IFIM Business School
Bangalore – India

Abstract: Management Education in India has taken twists and turns in last six decades. MBA degree is offered by the Universities but the game changed when PGDM was introduced. When several private institutions started offering PGDM program in past three decades, the real and competitive business started, as focus shifted mainly to Placements. B-Schools mushroomed and regulatory authorities were unable to control the market. When quality took a back-seat, Input (Intake of students), Process (Teaching & Learning) and Output (Placements) affected the Performance of B-Schools as a whole. Environmental changes like, Governmental Policies, Revised Norms laid down by Regulatory Authorities, Media intervention through B-School Rankings, flourishing Coaching Centres and their influence, Technology Platforms, Accreditations by domestic and global agencies, Agencies acting as Admission Agents, etc., brought in cut-throat competition. With primary concern on ROI, managements of B-Schools resorted to 'cost-cutting' instead of on 'developmental activities'. Employee Loyalty diminished and Faculty Attrition has increased in B-Schools. Assurance of Contemporary Curriculum, Research and Case Study Teaching/Writing etc., has taken a beating. Institutions are depending more on outsiders' opinions (Key Performance Indicators) rather than insiders' view point, which created dissatisfaction among the employees. The authors, by using secondary data, identified several KPIs in this paper. Using Data Analytics tools, they suggested various workable solutions for the sustainability of B-Schools. They have suggested possible benchmarking for B-Schools and indicated how the improvement should happen systematically. They have reiterated on the usage of 'Bell Curve' for assessing Employee Performance as well as the Student Performance for development of the Institutions.

Keywords: Bell Curve, Big Data, B-School, Business Competition, Data Analytics, Sustainability.

I. INTRODUCTION: ABOUT MANAGEMENT EDUCATION IN INDIA

Management Education in India has taken different routes and shapes in the last six decades. Andhra University, Visakhapatnam started its Management Department in India as the first public university to offer MBA degrees with more on knowledge dissemination to students whereas the first generation of IIMs (Calcutta, Ahmedabad and Bangalore) along with Xavier Labour Relations Institute (XLRI, Jamshedpur) and Indian Institute of Social Welfare & Business Management (IISWBM, Kolkata) started their Post Graduate Diploma in Management (PGDM) Programs in order to give practical exposure in addition to knowledge sharing. Faculty from IIM-A have come all the way to interior villages of Karnataka and spent time to understand the various issues of farmers and developed Case Studies on Management principles which are still used as classical cases in all B-Schools even today.

Due to LPG (Liberalisation, Privatisation and Globalisation) in late eighties and early nineties, Technical Education, mainly, Engineering and Management Programs were offered by several Institutions without having even the basic facilities. All public universities gave approvals to offer these courses by their affiliated colleges. Private and Autonomous Institutions took advantage of the situation and offered variety of the courses to attract more students. While the economy of the country

got opened, more job opportunities have come and pushed these Institutions for larger enrolment of students in last two decades. Coaching Centres started encashing the situation by offering long-term and short-term courses and led to a situation whereby 3 lakh candidates competing for 1 lakh MBA seats through these national level entrance tests like CAT, XAT, MAT, etc. Host Institutions took support from the technical organisations in order to conduct these tests as well as declaring the results, as handling such a “Big Data” led to several technical issues which caused many concerns to parents and students. There were situations where it was not very clear on how many Institutions were offering different types of Management Programs in India, sometimes even without necessary approvals and permissions.

The following Tables (Table-1 and Table-2) give information on various aspects like no. of Institutions, their student enrolment, Fees charged and Placement Status, along with Pay offer etc. from Recruiters that differentiates the Tier-I to other B-Schools:

Category	No. (in %)	Enrolment (in %)	Fees (Average, in Rs. Lakhs)	No. of Students Placed (in %)	Pay Offered (Average CTC in Rs. Lakhs)
Tier-I (Top B-Schools)	1	95-100	12-15	98-100	9 +
Tier-II	10	80-95	8-12	80-98	5-9
Tier-III	52	70-80	5-8	60-80	3-5
Tier-IV	37	0-70	0-5	0-60	0-3

Year	No. of B-Schools	Status of B-Schools	MBA Intake	Status of Intake
2013-14	3364	-107	354421	+5052
2012-13	3471	-70	349369	14504
2011-12	3541	+72	334865	6808
2010-11	3469	+179	328057	16928
2009-10	3290	+170	311129	16077
2008-09	3120	+205	295052	19386
2007-08	2915	+301	275666	28465

The information in the above tables (Table-1 and Table-2) also raises doubts about the sustainability of some B-Schools, as these lower tier B-Schools may slowly disappear in long-term. Government was also not very keen for regulating such a mushrooming business till some major issues cropped up like abnormal fees, lack of quality in Teaching, increase in un-employability, etc. which reflected on poor enrolment as well as moderate placements of MBA students.

II. REVIEW OF LITERATURE

K.S. Srinivasa Rao (2002) developed a Bermuda Triangle model with Student, B-School and Recruiting Company and indicated clearly that a student whose academic performance is not up to the mark during his/her MBA Program may disappear before getting proper career opportunities. Also, it was indicated that any B-School not performing well in terms of contemporary curriculum, may vanish without meeting its long term goals. Finally, it was pointed out that recruiting companies which are not performing well in business may also be disappearing from the placement scenario even though the students received their pre-placement offers with such companies.

K.S. Srinivasa Rao (2003) analyzed the situation on Indian Higher Education market when it opened to global market, expressed his doubt that Indian B-Schools may not withstand the competition as the B-Schools were not contemporary in curriculum, and having less autonomy in the academic administration.

I.M. Pandey (2004) suggested the governance model for Higher Education Institutions (HEIs) as a normative model — consciously created with specific mission and well-defined goals. By taking IIM-Ahmadabad as a reference, the author indicated that the real decision-making should be with the faculty members who will develop a culture of excellence. The author cautioned that the government's role should be to put an eminent board in place which will act as a sounding board for the decisions of the institutes. It was indicated that if the HEIs achieve excellence as determined by the users of teaching, research, consulting, etc., they would have made a tremendous contribution to the society and served their purpose. K.S. Srinivasa Rao (2004) explained the role of a teacher in influencing the student to choose his/her career under the autonomy by making the pedagogy such a way by making the course more interesting.

K.S. Srinivasa Rao and Chowdari Prasad (2005) analyzed various local issues and challenges of Indian B-Schools when they face global competition.

Dirgha Sampat (2008) took the side of Employers and mentioned that the key element of MBA education is value chain, as lakhs of graduates produced by these B-Schools are trained to drive that great big enterprise – Indian Inc. The author suggested that while education is all about learning from the best faculty in the business in an environment that stimulates and energizes young minds, there is more to B-Schools than academics. The author mentioned that the process of B-Schooling is also about turning raw talent into well rounded individuals. K.S. Srinivasa Rao (2008) discussed various issues and challenges in autonomous institutions offering Management Education at Post Graduate level with focus on curriculum, assessment and performance of the students in Campus Placements.

Thomas R. Guskey (2011) observed that educational improvement efforts over the past two decades focused primarily on articulating standards for student learning, refining the way we assess students' proficiency on those standards, and relating results to accountability. It was pointed that the one element still unaligned with these reforms is grading and reporting. Student Report Cards today look much like they looked a century ago, listing a single grade for each subject area or course. The author suggests that educators seeking to reform grading must combat five long-held traditions that stand as formidable obstacles to change. Although these traditions stem largely from misunderstandings about the goals of education and the purposes of grading, they remain ingrained in the social fabric of our society.

Yogesh. C. Joshi and Ashish. K. Makwana (2012) pointed out that in post WTO scenario, with the inclusion of education in GATS (General Agreement on Trade in Services), a discussion on free trade in education becomes imperative. The authors were under the opinion that in the race for globalization, it is the resource-rich universities and educational institutions of the developed nations, which will definitely have an upper edge over the resource-starved institutions of developing countries. The authors indicated that globalization and commercialization of education is becoming a reality and India being a prominent economy, in so far as the concern of human resources is concerned, cannot afford to ignore these changes. The authors through their research survey concluded that there was very less awareness, in general, regarding GATS provisions among university teachers across categories of Lecturers, Readers and Professors in the Universities. The authors indicated that the universities also face constraints of resources, undue interference from government and lack autonomy to compete in the wake of privatization of higher education. Therefore, universities require a great deal to transform and restructure themselves to compete successfully with foreign universities, owing to free trade and implementation of GATS in India. Beatriz Oriá (2012) indicated that Pedagogical research on higher education during the last decade has been mainly concerned with fostering an educational model in accordance with the recommendations of the Bologna Declaration of 1999. However, it was observed that despite remarkable progress that has been made so far, the students' future employability is still seriously curtailed by an excessively theoretical and/or content-based training, which does not cater effectively for the development of transversal skills. The author reported the results of a pilot experience carried out at the University of Zaragoza (Spain), in the joint program in Law and Business Administration and Management. The goal of this research project was to enhance students' employability by supplementing the subjects / syllabus with complementary activities and tasks meant to improve some of the competencies and

skills promulgated by the European Higher Education, thus improving the students' chances in today's competitive labour market, while enhancing the quality standards of the Degree.

Howard Thomas, Peter Lorange and Jagdish Sheth (2013) questioned the status, identity, and legitimacy of Business Schools in the modern university system. They shared their critical insights on management education and new B-School models in the US, Europe and Asia. They looked at how the B-Schools are changing their focus in particular on emergent global challenges and innovation in curricula, professional roles, pedagogy, uses of technology and organisational delineations. Jamuna A.S. and K. S. Srinivasa Rao (2013) studied the need of effective communication and its impact on the professional life of students of management. It was observed that students, who may get better grades in written examinations, sometimes may not be effective in their oral communication which plays an important role while facing the Campus Interviews. Also, it was noticed that smart students who are able to communicate well during interviews may be getting better placements even though their academic grades are average.

B. Mahesh Sharma (2014) indicated that getting admission for an MBA is not a difficult proposition now-a-days, as many B-Schools are open for admission with not many takers for their seats. The author suggested that it is an indication of a buyer's market for MBA as AICTE officially accepted that 30% of seats remained vacant in 2012. As more than two lakhs apply for MBA every year, with limited seats in premier Institutions, the author mentioned that it is a big challenge for others to find a "Best-Fit" B-School. Parents and students think that Ranking is not the only criteria they have to see but they should also work on Campus Infrastructure, Hostel Facilities, Placement Records, Faculty Profile, Industry Interaction and other Activities on the Campus.

K.S. Srinivasa Rao, Chowdari Prasad and Jamuna A.S. (2014) focused on the academic autonomy in Indian B-Schools and discussed various issues and challenges involved in assessing the students as per the pedagogy. The authors suggested the need for normalisation using "bell curve" while assessing the students with a 'relative grading mechanism'.

SR Singhvi and Amit Agnihotri (2015) indicated that Indian Management Education is in crisis today facing different challenges at different sections of the pyramid of Programs and B-Schools. The authors mentioned that Indian top tier B-Schools are lagging behind not just the Western B-Schools but even behind Asian peers like those in China, Singapore and Hong Kong. They have mentioned that Indian mid-tier B-Schools are struggling for their survival and around 500 PGDM B-Schools were closed down during last seven years. The authors mentioned that the bottom-tier B-Schools, largely 3000+ low-cost MBA programs offered by affiliated colleges of public universities, where MBA is just another course that costs few thousands of rupees, have little direction and relevance.

Jamuna A.S. and K. S. Srinivasa Rao (2016) have analysed the qualities of Leadership to be developed among the MBA Students of a select B-School and identified that Communication is of high priority. The authors indicated several innovative ways of using Technology in Pedagogy while teaching Business Communication with an emphasis on English Language in a B-School.

III. ABOUT BIG DATA

Analytics is defined as the scientific process of transforming data into insight for making better decisions as per INFORMS, whereas Analytics is defined as the discovery and communication of meaningful patterns in data as per Wikipedia. Analytics relies on the simultaneous application of Statistics, Computer Programming and Operations Research to quantify performance. Also, Analytics often favors data visualization to communicate insight.

Basically the four levels of Analytics which works on Descriptive Analytics, Diagnostic Analytics, Predictive Analytics and Prescriptive Analytics in which the first two will give Information about given situation/system whereas the last two will be on optimization of the situation/system. The same can be viewed as Hindsight (perception towards the events already

happened), Insight (Understanding of the events with cause & effect in a specific context) and Foresight (Ability to plan for the future).

The authors have noticed through Literature Survey that B-Schools in India are not generally utilising the “Big Data” that they are having in terms of Student Admissions, Academic Progress, Faculty Activities and Placements in order to have growth and development of the Institutions. This gave an idea to utilise the Analytics of “Big Data” for various workable solutions for the sustainability of B-Schools.

IV. OBJECT OF THE STUDY

Following are the identified Research Objectives:

1. To analyse the performance of top B-Schools using Descriptive Analytics
2. To predict the future performance of the B-Schools using Predictive Analytics

V. METHODOLOGY

Several agencies conduct periodic Surveys on B-Schools on various parameters. Interestingly, the same agency will use a different (modified) methodology in subsequent years as other competitor rating agencies are measuring different aspects. This makes the stakeholders: students, parents, faculty, recruiters, alumni and even managements of the B-Schools into a state of confusion and puts them in dilemma on how to focus on these parameters for the next years to improve in their ranks. All survey reports declare the top 100 B-Schools and interestingly most of the B-Schools announce that they are in the top 100 list. But, within these top 100 B-Schools, one can find a lot of differences in performance over the years.

In order to study the behaviour of these B-Schools, the authors have considered one agency which maintained their assessment parameters same for long years. Interestingly, this agency considered only top 50 B-Schools while assessing their performance. Data was taken from their reports for three years using secondary sources from their published information on B-School Ranking survey.

The following Table-3 gives the parameters the agency standardised for the three consecutive years:

IC	Intellectual Capital
II	Industry Interface
IF	Infrastructure & Facilities
PP	Placement Performance
ECA	Extra-Curricular Activities
IL	International Linkages
RS	Recruiters Satisfaction Score
SS	Students Satisfaction Score
FS	Faculty Satisfaction Score

The authors have given weighted ranks for each of the parameter in each year and categorised the B-Schools into four levels based on the cumulative rank score. In an Open Model where the system is like a Stochastic Markovian Birth-Death Process, 70 B-Schools were identified which are in top 50-position in any one of the three years (Refer: Annexure-I).

Past data was taken in order to see the effect of the predictions.

VI. DATA ANALYSIS

In a Closed Model, the authors have considered 30 B-Schools from these 70 B-Schools, which are consistent in all the three years of the study like a Steady-State Markovian Process given in the following Table-4:

Table-4: Top 30 B-Schools in the Closed Model		
S.No.	Business School	City
1	IIFT (Indian Institute of Foreign Trade)	New Delhi
2	IIM, Ahmedabad	Ahmedabad
3	IIM, Bangalore	Bangalore
4	IIM, Calcutta	Kolkata
5	S P Jain Institute of Management & Research	Mumbai
6	International Management Institute	New Delhi
7	Institute of Management Technology	Ghaziabad
8	ICFAI Business School	Hyderabad
9	T A Pai Management Institute (TAPMI)	Manipal
10	Amity Business School	Noida
11	Bharathidasan Institute of Management	Tiruchirappalli
12	Lal Bahadur Shastri Institute of Management	New Delhi
13	University Business School	Chandigarh
14	K J Somaiya Institute of Management Studies & Research	Mumbai
15	Alliance Business Academy	Bangalore
16	Christ College Institute of Management	Bangalore
17	NIILM Centre for Management Studies	New Delhi
18	Nirma Institute of Management	Ahmedabad
19	Birla Institute of Management Technology	New Delhi
20	Amrita Institute of Management	Coimbatore
21	Indian Institute of Modern Management	Pune
22	Jagan Institute of Management Studies	New Delhi
23	S.I.E.S. College of Management Studies	Navi Mumbai
24	Xavier Institute of Management & Entrepreneurship	Bangalore
25	Mount Carmel Institute of Management	Bangalore
26	PSG Institute of Management	Coimbatore
27	Jaipuria Institute of Management	Lucknow
28	Prestige Institute of Management & Research	Indore
29	Regional College of Management	Bhubaneswar
30	Rajgiri School of Management	Cochin

Out of these 30 B-Schools in the closed Model, one Institute is considered among the top 10 B-Schools as a Case Study and analysed by applying the four types of Data Analytics of “Big Data” as given in the following Table-5:

Table-5: Top 10 B-Schools in the Closed Model			
S.No.	Business School	City	Location
1	IIFT (Indian Institute of Foreign Trade)	New Delhi	North
2	IIM, Ahmedabad	Ahmedabad	West
3	IIM, Bangalore	Bangalore	South
4	IIM, Calcutta	Kolkata	East
5	S P Jain Institute of Management & Research	Mumbai	West
6	International Management Institute	New Delhi	North
7	Institute of Management Technology	Ghaziabad	North
8	ICFAI Business School	Hyderabad	South
9	T A Pai Management Institute (TAPMI)	Manipal	South
10	Amity Business School	Noida	North

The authors have considered the Bench-marked Institutions for the identified B-School from various regions – SP Jain from West, IIFT and IMI from North leaving IIMs which are of different nature by their status and functioning.

The following Table-6 gives positioning of the Selected B-School in three years of study on the identified parameters under Descriptive Analytics:

RANK	Name of the Institute	IC	II	I & F	PP	ECA	IL	RS	SS	FS	TOTAL
	Year -2003	250	230	200	385	80	150	200	60	60	1615
18	Case Study Institute	128.49	64.68	65.37	161	45.1	0	152	55	50	722
	Year -2004	250	230	200	385	80	150	200	60	60	1615
13	Case Study Institute	147.75	66.5	101.65	179.55	27.43	19.73	147	43	42	775
	Year -2005	280	230	210	325	80	210	200	60	60	1655
13	Case Study Institute	150.77	45.44	73.64	154.56	32.22	29.31	143	51	47	727

The following Table-7 gives the Diagnostic Analytics of the Selected B-School:

Strength	Placements, Faculty
Weakness	Infrastructure, Networking, Admissions & Delivery
Opportunity	Rank-wise, it can improve by following its Bench-marked Institutions
Threat	Other B-Schools also work on similar strategies and ranking is relative and also by merging with Parent Deemed University it may loose its Brand identity

The B-School had an Infrastructure problem due to a leased accommodation with a limited space with fewer ambiances. It had a separate centre for Industry Institute Interface and with a Chairman having more than 25 years Industry Experience. It had a separate cell for Admissions with a Chairman having 15 years' Experience. The B-School has a PGP Chairman of 3-year term on rotation.

The following three Tables [Table-8 (a), 8(b) and 8(c)] of Correlation Matrix followed by Regression tables will give information on Predictive Analytics:

2003	IC	II	IF	PP	ECA	IL	RS	SS	FS
IC	1.0								
II	0.5	1.0							
IF	0.5	0.6	1.0						
PP	0.5	0.7	0.7	1.0					
ECA	0.4	0.5	0.2	0.4	1.0				
IL	0.5	0.6	0.6	0.7	0.3	1.0			
RS	0.6	0.8	0.7	0.7	0.3	0.6	1.0		
SS	0.3	0.6	0.6	0.5	0.2	0.4	0.7	1.0	
FS	0.1	0.2	0.2	0.1	-0.1	0.0	0.4	0.6	1.0

2004	IC	II	IF	PP	ECA	IL	RS	SS	FS
IC	1.0								
II	0.8	1.0							
IF	0.6	0.7	1.0						
PP	0.7	0.7	0.6	1.0					
ECA	0.7	0.8	0.5	0.8	1.0				
IL	0.8	0.8	0.7	0.8	0.8	1.0			
RS	0.8	0.8	0.7	0.8	0.8	0.8	1.0		
SS	0.7	0.7	0.7	0.7	0.6	0.8	0.8	1.0	
FS	0.6	0.5	0.5	0.5	0.5	0.5	0.7	0.8	1.0

2005	IC	II	IF	PP	ECA	IL	RS	SS	FS
IC	1.0								
II	0.9	1.0							
IF	0.6	0.8	1.0						
PP	0.9	0.8	0.7	1.0					
ECA	0.5	0.6	0.4	0.6	1.0				
IL	0.9	0.9	0.8	0.8	0.6	1.0			
RS	0.8	0.8	0.7	0.8	0.6	0.9	1.0		
SS	0.4	0.5	0.5	0.4	0.5	0.5	0.7	1.0	
FS	0.2	0.2	0.1	0.1	0.1	0.2	0.3	0.5	1.0

It is evident that all the parameters are correlated on an average, by having association with other parameters, except ECA got a negative association with FS for one year.

The following Table-9 gives information about the Total Scores of each of the B-Schools secured from all the parameters of assessment and their average score has computed (as we are focusing on one B-School in our Case Study, we have taken data of only top 15 B-Schools from the list in order to reach the future targets):

Rank	2003 Score	2004 Score	2005 Score	Average Score
1	1171.12	1342.69	1381.09	1298.30
2	1101.17	1285.78	1345.62	1244.19
3	1104.52	1278.39	1343.51	1242.14
4	992.9	1110.99	1241.58	1115.16
5	999.88	1110.6	912.94	1007.81
6	989.78	1104.64	882.69	992.37
7	971.32	1048.45	827.09	948.95
8	866.01	1046.89	807.62	906.84
9	837.63	925.82	807.42	856.96
10	854.67	875.39	801.11	843.72
11	837.93	858.72	790.9	829.18
12	800.02	858.52	784.09	814.21
13	775.21	855.66	756.57	795.81
14	774.99	810.05	726.94	770.66
15	763.37	809.91	726.84	766.71

The following Table-10 gives the Excel output of the Regression by considering the Average Score and Rank of the B-Schools:

Table 10: SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.954427
R Square	0.910931
Adjusted R Square	0.904079
Standard Error	1.385067
Observations	15

ANOVA					
	<i>Df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	255.0607	255.0607	132.9542	3.37E-08
Residual	13	24.93933	1.91841		
Total	14	280			

<i>Regression</i>	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	30.46832	1.981132	15.37925	1.01E-09
Score	-0.02335	0.002025	-11.5306	3.37E-08

As the correlation Coefficient between Ranking of a B-School and Total Score is positive and is 0.95 with a $R^2=91\%$ (only 8% other factors influencing), So, we can form the Regression Equation as $Y = a + b x$ (or) Rank = 30.46 – 0.02 * Expected Score.

Also, using the above Regression Equation, predictions were done for possible scores of 800, 900, 1000 (as currently the Case Study B-School scored around 700) and given below:

Rank (Y)	Total Score (X)
14	800
12	900
10	1000

Also, the forecasted Rank values are given as 14, 12, and 10 when the expected Total Score is 800, 900 and 1000 respectively. This means that when one unit change is there in the total score (100 points) there will be 2 units change in the Rank.

VII. SUMMARY

So, any Institute which was at 15th Rank last year and moved to 10th Rank this year can be taken as benchmarking. The following are such Institutes:

- International Management Institute, New Delhi (16th to 11th Rank) - North
- Indian Institute of Foreign Trade, Delhi (8th to 6th Rank) -North
- S.P. Jain Institute of Management & Research, Mumbai (9th to 5th Rank) -West

The following is the action plan under Prescriptive Analytics:

Action Plan-I:

- Task Force (with internal Faculty) on Delivery -Curriculum Restructuring and change of Pedagogy
- Brainstorming with stakeholders – Recruiters, Alumni, Students, Faculty and Staff
- Study the three Institutes – IMI, IIFT, SPJIMR

Action Plan-II:

- Giving targets for each Department: Placements, Faculty, Admissions
- Planning for Consultancy with Industry
- Launching of Institutional Journal of Management
- Plan to conduct and earmark Conferences on Management
- Conducting Admission Interviews at different locations and deputing faculty

Action Plan-III:

- Plan to Introduce different Programs like Entrepreneurship, Supply Chain Management, Healthcare to have USP
- Introducing the concept of rotation of Chairmanship for Industry Institute Interface Centre and Admissions Department where each person contributes with new energies
- Develop Networking by MOU with Foreign Universities for Exchange Programs due to globalization
- Applying for International Accreditations like AACSB
- Planning to have their own campus in next 5 years with a world class Infrastructure

VIII. CONCLUSION

The Institute under Case Study has moved to its own large campus later in 2009 and got its International Accreditation. It is conducting Research Conference periodically and also conducting its admissions at different locations. It revised its curriculum to modular approach and started two new Programs one in Healthcare Management and the other is in Banking & Financial Services. This made the Institute under Case Study to move to a better position in recent years under stiff business competition.

IX. RECOMMENDATIONS

In India now the Regulatory Agencies like AICTE, UGC are insisting accreditation by the NBA, NAAC, etc., in order to get Quality in the Management Programs. Very few Institutions have International accreditations like ACBSP, IACBE, IAO, EQUIS, AMBA and AACSB, etc. Autonomous Institutions are working on quality in order to sustain their business. Students should understand that two years hard work will give 40-50 years of a good career, if they involve in all the activities of a B-School. Faculty should be unbiased while assessing the students in terms of awarding grades. One should use bell curve while normalising the grades in each course. The Faculty in B-Schools should take up the Five responsibilities as KPIs (Key Performance Indicators) –Teaching, Administration, Research, Training, and Consultancy. HR Departments of B-Schools should take these parameters while doing the performance appraisal along with bell curve. Agencies that are working on B-School ranking should also consider on the above factors in addition to the Student Intake and their Placement Offers. Alumni Database should be taken for betterment of the B-Schools and Institutions should use Alumni from Admissions to Placements.

The B-Schools should continuously engage themselves in research using their own past “Big Data” by maintaining their MIS reports. Similarly, they should compare themselves with the peer level institutions and change the Bench-marking Institutions time to time. B-Schools should work on their strategies using the tools of Big Data pertaining to the Management Education in the country.

References

1. Baroness Perry (1998), “The future for Universities: A Public-Private Partnership?”, IEA Economic Affairs, September, pp.36-41
2. Beatriz Oria (2012), “Enhancing Higher Education Students’ Employability: A Spanish Case Study”, International Journal of Technology Management & Sustainable Development, Vol.11 No.3, pp.217-230
3. B. Mahesh Sharma (2014), “2014 B-School Almanac”, Careers360.Com, Pathfinder Publishing Pvt. Ltd., New Delhi, Dirgha Sampat, “The A-List of B-Schools”, Network18 Publications Pvt. Ltd. of CNBC TV18, New Delhi, 2008, ISBN:987-81-906479-3-9
4. Howard Thomas, Peter Lorange, and Jagdish Sheth (2013), “The Business School: in the Twenty-First Century”, Cambridge University Press, Delhi, ISBN:13-978-1-107-69226-8
5. <https://www.crisil.com/ratings/bschool-school-grading-list.html>
6. I M Pandey (2004), “Governance of Higher Education Institutions”, VIKALPA, VOL. 29, NO 2, APRIL - JUNE, pp.79-84
7. Jamuna A.S. and K. S. Srinivasa Rao (2013), “Communication And its Impact on Management Students’ Professional Life”, Intercontinental Journal of Human Resource Research Review (IJHRRR), ISSN: 2320 -9704, July, Volume 1, Issue 5, pp.7-21

8. Jamuna A.S. and K.S Srinivasa Rao (2016), "Role of Faculty in a B-School: An Intrapreneur in Developing Future Entrepreneurs", International Journal of Management, 7(5), July–Aug, pp.154–163. <http://www.iaeme.com/IJM/issues.asp?JType=IJM&VType=7&ITType=5>, Journal Impact Factor (2016): 8.1920 (Calculated by GISI) www.jifactor.com, ISSN Print: 0976-6502 and ISSN Online: 0976-6510 © IAEME Publication
9. K.S. Srinivasa Rao (2008), "Indian Management Education: Issues and Challenges", the MBA Review, Magazine of ICFAI Press, SPECIAL ISSUE: Management Education, Apr., pp. 54-56, <http://www.iupindia.org/408/mba.asp>
10. K.S. Srinivasa Rao (2004), "Interest of a Student in a Course and Influence of the Teacher – A Statistical Analysis", Proceedings of the First International Conference on School Education conducted by Litter Rock Indian School, Brahmavara, Karnataka during 05-08, April, pp. 85-95
11. K.S. Srinivasa Rao (2003), "Is there a place for Indian B-schools in the Global Village? A Review", e-Proceedings of the First AIMS International Conference on Management Scholars in a Global Village: Challenges and Opportunities, edited by Dr.Omprakash K. Gupta, Dec., pp. 33-42
12. K.S. Srinivasa Rao (2002), "Student – B-School – Recruiting Company: A Bermuda Triangle", Competing in the New Global Age, Proceeding of the International Conference of Global Business Development Institute (GBDI), Edited by Prof.P.Rama Ramalingam & Prof.Kazem Darbandi, Publication of GBDI, Technology & Operations Department, College of Business Administration, California State Polytechnic University, Pomona, CA 91768, USA, Jan., pp. 96-106.
13. K.S. Srinivasa Rao and Chowdari Prasad (2005), "Indian B-Schools in the Global Context", GITAM Journal of Management, Jan-July, pp. 217-227.
14. K.S. Srinivasa Rao, Chowdari Prasad and Jamuna A.S. (2014), "Autonomy in Higher Education: A Boon or Bane? - A Statistical Analysis on Assessment and Grading", Avant Garde-2015, Proceedings of International Conference on Global Paradigm Shifts in Management, Information and Communication Technology (ICT), English Language Teaching (ELT), and Higher Education (HE), Editor: Dr. M. Prakash, Seshadripuram First Grade College, Bangalore ISBN: 978-93-5202-254-0, pp.84-95.
15. Department of Secondary and Higher Education, 'Report of the CABE Committee on Autonomy of Higher Education Institutions', Ministry of HRD, , Govt. of India, 2005.
16. SR Singhvi and Amit Agnihotri (2015), "Envisioning the Future of Indian Management Education", 6th Indian Management Conclave by MBA Universe.Com, Mc Graw Hill Education, New Delhi, ISBN-13: 978-93-392-1829-4, ISBN-10:93-392-1829-2
17. Thomas R. Guskey (2011), "Five Obstacles to Grading Reform", Effective Grading Practices, Educational Leadership, ASCD, Vol.69, No.3, November, pp.16-21.
18. Yogesh. C. Joshi and Ashish. K. Makwana (2012), " A Study of GATS Provisions, Higher Education and Understanding among the University Teachers", BVIMR Management Edge, Vol. 5, No. 1, pp. 9-19.

Annexure-I

S.No.	Business School	City	2003 W.Rank	2003 R.Score	2004 W.Rank	2004 R.Score	2005 W.Rank	2005 R.Score	R. Score Total	B- School Grade
1	IIFT (Indian Institute of Foreign Trade)	New Delhi	8	1	9	1	5	1	3	A
2	IIM, Ahmedabad	Ahmedabad	1	1	1	1	1	1	3	A
3	IIM, Bangalore	Bangalore	2	1	3	1	4	1	3	A
4	IIM, Calcutta	Kolkata	3	1	2	1	2	1	3	A
5	S P Jain Institute of Management & Research	Mumbai	10	1	12	2	6	1	4	A
6	International Management Institute	New Delhi	16	2	14	2	10	1	5	A
7	Institute of Management Technology	Ghaziabad	11	2	11	2	8	1	5	A
8	ICFAI Business School	Hyderabad	18	2	16	2	12	2	6	A
9	T A Pai Management Institute	Manipal	17	2	15	2	14	2	6	A
10	Amity Business School	Noida	24	3	20	2	16	2	7	A
11	Bharathidasan Institute of Management	Tiruchirappalli	20	2	23	3	20	2	7	A
12	Lal Bahadur Shastri Institute of Management	New Delhi	19	2	22	3	19	2	7	A
13	University Business School	Chandigarh	23	3	18	2	11	2	7	A
14	K J Somaiya Institute of Management Studies & Research	Mumbai	25	3	29	3	18	2	8	A
15	Alliance Business Academy	Bangalore	32	4	25	3	15	2	9	A
16	Christ College Institute of management	Bangalore	28	3	26	3	25	3	9	A
17	NIILM Centre for Management Studies	New Delhi	26	3	28	3	27	3	9	A
18	Nirma Institute of Management	Ahmedabad	29	3	27	3	21	3	9	A
19	Birla Institute of Management Technology	New Delhi	39	4	32	4	23	3	11	B

20	Amrita Institute of Management	Coimbatore	44	5	34	4	28	3	12	B
21	Indian Institute of Modern Management	Pune	33	4	33	4	31	4	12	B
22	Jagan Institute of Management Studies	New Delhi	35	4	37	4	34	4	12	B
23	S.I.E.S. College of Management Studies	Navi Mumbai	43	5	36	4	26	3	12	B
24	Xavier Institute of Management & Entrepreneurship	Bangalore	41	5	31	4	30	3	12	B
25	Mount Carmel Institute of Management	Bangalore	47	5	40	4	36	4	13	B
26	PSG Institute of Management	Coimbatore	45	5	38	4	32	4	13	B
27	Jaipuria Institute of Management	Lucknow	38	4	43	5	43	5	14	B
28	Prestige Institute of Management & Research	Indore	36	4	49	5	48	5	14	B
29	Regional College of Management	Bhubaneswar	40	4	45	5	42	5	14	B
30	Rajagiri School of Management	Cochin	42	5	47	5	41	5	15	B
31	MDI, Gurgaon	Gurgaon		#N/A	5	1	3	1	#N/A	C
32	Narsee Monjee Institute of Management Studies (NIMS)	Mumbai		#N/A	10	1	7	1	#N/A	C
33	Xavier Institute of Management	Bhubaneswar		#N/A	13	2	9	1	#N/A	C
34	Department of Management Studies	Jammu		#N/A		#N/A	47	5	#N/A	C
35	Gitam Institute of Foreign Trade	Visakhapatnam		#N/A		#N/A	49	5	#N/A	C
36	IFMR, Chennai	Chennai		#N/A	19	2	17	2	#N/A	C
37	IMS, Ghaziabad	Ghaziabad		#N/A		#N/A	35	4	#N/A	C
38	Lal Bahadur Shastri Institute of Management & Technology	Bareilly		#N/A		#N/A	46	5	#N/A	C
39	Loyola Institute of Business Administration (LIBA)	Chennai		#N/A		#N/A	22	3	#N/A	C
40	PCTE, Ludhiana	Ludhiana		#N/A		#N/A	45	5	#N/A	C
41	SDM Institute for Management Development	Mysore		#N/A		#N/A	50	5	#N/A	C
42	St. Joseph's College of Business Administration	Bangalore		#N/A		#N/A	39	4	#N/A	C
43	Welingkar Institute of Management Development & Research	Mumbai	22	3		#N/A	13	2	#N/A	C
44	FMS, Varanasi	Varanasi		#N/A	35	4	33	4	#N/A	C
45	IIS WBM, Kolkata	Kolkata		#N/A	30	3	24	3	#N/A	C
46	IMS, DAU, Indore	Indore		#N/A	48	5	37	4	#N/A	C
47	Institute of Productivity & Management	Ghaziabad		#N/A	39	4	40	4	#N/A	C
48	Institute for Technology & Management	Navi Mumbai	27	3		#N/A	29	3	#N/A	C
49	N L Dalima Institute of Management Studies and Research	Mumbai		#N/A	44	5	38	4	#N/A	C
50	School of Communication & Management Studies	Cochin	31	4		#N/A	44	5	#N/A	C
51	FMS, Delhi	New Delhi	7	1	7	1		#N/A	#N/A	D
52	IIM, Kozhikode	Kozhikode	9	1		#N/A		#N/A	#N/A	D
53	IIM, Lucknow	Lucknow	5	1	4	1		#N/A	#N/A	D
54	NITIE	Mumbai	6	1	8	1		#N/A	#N/A	D
55	XLRI Jamshedpur	Jamshedpur	4	1	6	1		#N/A	#N/A	D
56	IIM, Indore	Indore	12	2		#N/A		#N/A	#N/A	D
57	IIT Delhi (Department of Management Studies)	New Delhi	15	2		#N/A		#N/A	#N/A	D
58	S J Mehta SoM, IIT Bombay	Mumbai		#N/A	17	2		#N/A	#N/A	D
59	Shailesh J Mehta SoM, IIT Bombay	Mumbai	14	2		#N/A		#N/A	#N/A	D
60	DMS, Pune	Pune		#N/A	46	5		#N/A	#N/A	D
61	IBAT (A business School of KIIT)	Bhubaneswar	50	5		#N/A		#N/A	#N/A	D

62	IILM, Institute for Integrated Learning In Management	New Delhi	30	3		#N/A		#N/A	#N/A	D
63	Kirloskar Institute of Advanced Management Studies	Harihar	49	5		#N/A		#N/A	#N/A	D
64	Rizvi Institute of Management	Mumbai	48	5		#N/A		#N/A	#N/A	D
65	Symbiosis Institute of International Business	Pune	34	4		#N/A		#N/A	#N/A	D
66	Xavier Institute of Social Service	Ranchi		#N/A	40	4		#N/A	#N/A	D
67	Vinod Gupta School of Management (IIT)	Kharagpur	13	2	24	3		#N/A	#N/A	D
68	National Institute of Technology, Tiruchirappalli (NITT)	Tiruchirappalli	37	4	42	5		#N/A	#N/A	D
69	Rourkela Institute of Management Studies	Rourkela	46	5	50	5		#N/A	#N/A	D
70	Symbiosis Institute of Business Management	Pune	21	3	21	3		#N/A	#N/A	D