Academy-Industry Cooperation: Towards A New Convenant For Indian Business Competitiveness

By

Chiranjib Sen

November 1999

Please address all correspondence to:

Chiranjib Sen
Professor
Indian Institute of Management
Bangalore-560 076.
India

Phone : 6632450
Fax : 080 - 644050
E-mail: sen@iimb.ernet.in

Indian Institute of Management Bangalore

ACADEMY-INDUSTRY COOPERATION: TOWARDS A NEW COVENANT FOR INDIAN BUSINESS COMPETITIVENESS

Chiranjib Sen

Introduction:

The role that knowledge plays in competitiveness in the market place, has increased dramatically over the last two decades. This has been arguably one of the most significant economic trends of the late 20th century—a process linked closely with the rapid internationalization of business and finance, and the emerging dominance of knowledge-intensive companies in the global economy. In India, the business leadership has now recognized the need for knowledge, mainly because the economic liberalization policies of the 1990s have exposed Indian companies to the threat of competition. The competitiveness-enhancing knowledge that business firms require is mainly of two types—*organizational* and *technological*. The first category of knowledge is that embodied in managerial, organizational and strategic skills, while the other is technological knowledge. On both these dimensions, Indian companies find themselves confronted by the need to change, in order to adapt better to the altered "rules of the game". From where will Indian companies source their new requirements of knowledge? By virtue of their charter and mission, the activities of Indian management institutes or institutes of technology are dominated by an applied orientation. Hence, one may expect that such institutions are most likely to be prepared to meet this need. Does it then make sense for Indian business organizations and such academic institutions in India to forge mutually beneficial cooperative arrangements? Answers to these questions, focusing on management institutes, are explored in this paper.

As far as Indian academic institutions dealing with management and technology are concerned, they too are confronting a vastly changed scenario, and are reorienting their focus of activity.[1] Increased costs, together with constrained support from the government, have made these institutions much more attuned to market demands. Their response to the changed situation is reflected in the pattern of their teaching, research and training activities. In the leading management institutes for example, there has been a conscious effort to increase market relevance via more and varied executive training programmes. The quality of their core post- graduate (MBA level) degree/diploma programmes is increasingly

* Professor of Economics & Social Sciences, Indian Institute of Management Bangalore

judged, internally and externally, by the salaries that their graduates command in the job market. Many management institutes have sought, in other ways as well, to move closer to business and industry. This trend is exemplified by the presence of leading industrialists on campuses, as guest speakers and more prominently, as Chairmen of the governing boards of these institutions. From these synergic trends, one may be tempted to conclude that the pattern and prospects of cooperation between Indian business and management academia are on an optimal trajectory. As we argue below, such a conclusion is unwarranted. Much more progress needs to be made, if the full potential of mutual gains is to be realized.

To assess the trends in terms of their significance and long term implications, it is necessary to examine this issue from a strategic perspective. The context is given by the twin processes of liberalization and globalization, and we need to ask in what way the institutional objectives of business and academic organizations can be served by deeper levels of cooperation. This is attempted in this paper.

The remainder of the paper is organized as follows: The next section takes the question of why academy and industry should cooperate. The discussion in the section is in two parts. Part I examines the industry perspective with particular reference to its current demand for knowledge. Part II considers the issue in relation to the need for strategic knowledge. It focuses on the knowledge that management institutions currently provide to industry. It goes on to examine how the present may change towards greater collaboration. The paper ends with a brief conclusion.

Why Should Academy and Industry Cooperate?

The need for competitiveness in the marketplace has assumed new significance as the basic criterion for economic survival and success since 1991. Though the change has been gradual, the trend has been unmistakable, and the process has survived the threat of reversal through several changes of government at the Centre. While from a macro-perspective, it might be efficient for Indian business and academic organizations to form synergistic partnerships, whether or not this actually would occur is unclear. It depends on the underlying calculus of mutual benefits, at the micro-level. Both types of organizations must regard the partnership in their long-term strategic interest. We therefore examine, in turn, the possibility of a "strategic fit" from the both the perspectives of industry as well as of management institutes, in terms of what these organizations require to enhance their competitive strength.

I. The Industry Perspective

The current strategic predicament of Indian industry is such that old ways of managing business may no longer be adequate. As mentioned earlier, the driver behind the changing strategic environment is the policy change associated with the ongoing economic reforms. While many management experts, economists and journalists have expressed diverse views on the impact of the market reforms on Indian business, how does industry itself perceive the situation? Recently, the Indian Institute of Management Bangalore hosted a Round Table discussion on "Indian Business Houses in 2020", in which several leading industrialists participated alongside academics.[2] While not fully representative of Indian industry, Indian Business Houses constitute a dominant component of the private industrial sector. A content analysis of the discussion yields the major features of perceived conditions, which could be classified as (1) *external* environmental characteristics and (2) challenges *internal* to the large firm. These are summarized in Table 1.

A close examination of Table 1suggests that in the perception of many industrial leaders and management academics, both the external business environment and the internal organizational tasks facing Indian business pose formidable challenges for the future. Externally, the top management faces business uncertainty and possible threats to continued control. At the same time, there is no expectation that the government may play a leading or visionary role in helping the national industry gain international competitiveness. Supportive actions by government as witnessed in Japan for example, in areas such as the development of new technology, or in the provision of information, or in the promotion of social consensus on economic issues, is considered unlikely to be effective or adequate. By contrast, the policy process is expected to remain one that is characterized by contentious claims of different interest groups. Moreover, the social context presents major constraints because of the slow growth of a consumer market due to low average incomes, and wide inequalities. The labour market is such that drastic restructuring of firms by shedding of the labour force remains unlikely. Yet business cannot expect protectionist barriers to shield them from international competition much longer.

TABLE 1:
PERCEIVED STRATEGIC CONTEXT OF LARGE INDIAN BUSINESS HOUSES

Business Environment External to Firm	Internal Organizational Challenges
⇨ *Rapid change* of business conditions	⇨ Need to *reorient "business portfolio"* by Family Business Conglomerates
⇨ Emergent possibility of a more active *market for corporate control*, (i.e. higher probability of management changes)	⇨ Need to *switch the "business model"* from traditional "trading firm" or "manufacturing firm" to new "intellectual capital intensive firm"
⇨ *Low labour productivity*, plus political *unfeasibility* of *downsizing* of labour force	⇨ Need for *institutionalizing "mindset change"* towards acceptance of competition as opportunity, and new business ethics
⇨ *Low per capita income*, with high disparity in income distribution	⇨ Need to change the *"governance mechanism"* of Business Houses with primacy of business interest over family interests
⇨ *Lack of visionary political leadership*	⇨ For more widely held firms, need to give greater attention to *"shareholder value"*
⇨ *Absence of national cohesion in interest articulation* by the 5 major stakeholder groups(politicians, industrialists, bureaucrats, trade unions and consumer groups), leading to incoherent policy (i.e., *the impossibility of "India Inc")*	⇨ Need for recognition that access *to human and intellectual capital is more decisive* for competitiveness than physical and finance capital; hence more attention to *"professional management"* and *"stakeholder value"*
⇨ *Low technology prospects*, (i.e., low probability of Indian indigenous capability to be near technology frontier in areas expected to dominate business, such as genetics, material science and environmental protection	
⇨ *Absence of discerning consumer base within the country*, which is capable of exerting pressure to upgrade product quality	
Source: Compiled from Round Table Discussion on " Indian Business Houses in 2020"(K.R.S. Murthy and R.T. Krishnan), *IIMB Management Review*, March 1999	

In response to this daunting scenario, Indian firms are gearing for basic changes in their mode of functioning. Here the picture is less clear, and a greater diversity of opinion exists on what needs to be done. Some business leaders emphasize the need to re-examine their business focus, and to reduce diversity in their activities. Other items seen to require change range from the need for changing the "mindset" or the implicit value system of the firm, to changing the internal corporate governance mechanism, to acquiring and retaining new professional management skills and talent. It is clear, however, that organizational change is high on the agenda of corporate'restructuring'.

The Rise of International Consulting Firms in India

Many of the changes deemed as necessary do require the leveraging of knowledge/embodied skills from sources external to the firm. Indian firms have indeed intensified their search for these assets in the marketplace. What has been the observed pattern thus far, and what role do academic institutions play in the ongoing scenario? Market trends indicate that there is a dualistic pattern in the process, reflecting an implicit division of labour between the two main types of "knowledge-supplying organizations". These organizations are of course, the Consulting Firms and Management Academic Institutions. The division of labour that appears to have developed has the following characteristics: Indian Business firms source their direct "knowledge inputs" primarily from Consulting Firms, while acquisition of new skilled personnel (embodied knowledge) is done via recruitment from the Management Institutes. Both these organizations provide high priced inputs, but it would seem that the Consulting Firms have positioned themselves more advantageously. We shall argue that this pattern of market segmentation is sub-optimal, from the perspectives of both Indian business and the Management Institutes, and that it needs to be modified in their mutual strategic interest. There is also the market for executive education (skill-transfer), in which Management Institutes and some Consulting Firms compete. On balance, the Management Institutes have substantially enhanced their position in this market segment during the 1990s. But here too, we shall try to show that the situation is not optimal from a long-term perspective, and that it can be improved by closer academy-institute cooperation.

The rise of the Consulting Firms in India during the 1990s has been dramatic. Major international consulting firms are active in India, serving not only the private corporate sector, but also the public sector firms, and even State governments.[3] This clearly indicates the existence of a vigorous market for knowledge in the Indian economy. This is reflected in the recruitment practices of the Consulting Firms, who also recruit from among fresh "MBAs" of the Management Institutions. Recent salary trends show why they are among the most sought after prospective employers. The high market wages being paid by these firms outstrip by far those offered by firms in other businesses. See Table 2, which provides recent information on salaries received by entering MBA s from the top Indian business schools. These figures indicate the buoyant market for consulting jobs in India. The top 10 paymasters have a majority of consulting firms amongst them, and consulting tops the list of sectoral starting salaries.

TABLE 2; RANKING OF COMPANIES AND SECTORS BY AVERAGE SALARY TO MBA GRADUATES OF 1999

Table 2A: The Top 10 Companies Ranked by Average Salary Offered

RANK	COMPANY	AVERAGE ANNUAL SALARY (Rs. Lakhs)
1	GE Capital	8.9
2	The Boston Consulting Group	8.9
3	Booz-Allen & Hamilton	8.00
4	McKinsey & Co	7.50
5	Shivasoft	7.50
6	Arvind Mills	6.30
7	ICICI	5.20
8	Eicher Consultancy	5.16
9	Andersen Consulting	5.10
10	KPMG	4.50

Table 2B: Average Salaries Offered in Major Sectors to Entrants with MBA from the Top Indian Business Schools

RANK	SECTOR	AVERAGE ANNUAL SALARY (Rs. Lakhs)
1	Consulting	3.81
2	Banking	3.53
3	Education	3.23
4	Infotech	3.21
5	Aviation	3.10
6	FMCG	2.91
7	Engineering	2.83
8	Petroleum	2.49
9	Textiles	2.39
10	General Management	2.33
11	Financial Services	2.30
12	Petrochemicals	2.25
13	Consumer Durables	2.21
14	Auto/Auto Ancillaries	2.20
15	Telecom	2.13

Source: *Business Today* (R. Sarkar, "Salaries 99"), August 7-21,1999. The BT database is based on placement information provided by the Top 30 Indian Business Schools (BT-Cosmode Ranking)

Knowledge is apparently in high demand, but what kind of knowledge? Dealing with proprietary knowledge, Consulting Firms are typically highly secretive about the information they supply or obtain, and hence it is not very easy for external observers to discern what precisely is the knowledge input that they provide to their clients.[4] Over time however, information does trickle through. A recent study by Khandwalla sheds very interesting light on the nature of the product being sold by so-called "Western International Management Consultants"(WIMC) with respect to restructuring of firms.[5] This study notes that restructuring is currently a major concern of the top 200 Indian companies, and that there is a "corporate run for the services" of international management consultants.[6] It is therefore worth examining what kinds of management knowledge Indian companies are actively seeking in the consulting market. Sifting through the available evidence, Khandwalla identifies the main characteristics of the "WIMC mode of Restructuring", in the form of nine dominant attributes of the process they commonly recommend. These are summarized in Table 3.In this paper, we shall borrow Khandwalla's term WIMC to refer to this group in a general sense, but as he himself notes, there are some exceptions among them. There are in fact several leading international consultants and experts whose recommendations differ from the mainstream patterns currently in vogue in India. Some of their works are cited below.

TABLE 3: THE INTERNATIONAL MANAGEMENT CONSULTANT MODE OF CORPORATE RESTRUCTURING IN INDIA

	ELEMENT OF RESTRUCTURING	OBJECTIVE
1	Internalize Business Goal of Higher Earnings	Establish Primacy of Rational Commercial Profit Calculus in the Firm's Decision Making
2	Focus on 'Core Competence'	Reduce Conglomerate Diversity and Concentrate on "What you do best"
3	Selective Divestiture	Exit from Identified Business Activities or Continue through Joint Ventures and Strategic Alliances in non core businesses
4	Vision, Strategy, Structure	Concretize and Quantify Business Targets Precisely
5	Pro-active Leadership	Top Management Should Reach out to junior employees
6	Empowerment	Delegation of Operating Authority and Skill Enhancement within the organization
7	Re-engineering Business Processes	Analyze and Streamline the Firm's 'Value Chain' for better rationalization of operations
8	Deregulation and Privatization	Get away from government and create conditions for better market valuation of firm's equity
9	Downsizing	Reduce the size of the workforce to raise labour productivity.

Source: Based on Pradip N. Khandwalla, " WIMC versus Innovative Self-help Mode of Restructuring and Revitalization", IIMA, WP 96-06-06.

Assessing the WIMC Mode of Restructuring:

These key elements of the "WIMC Mode" give us a better understanding of the type of knowledge that underlies the strategic response of Indian corporate houses in the 1990s. We would like to make the following observations by way of an overall assessment of the content and significance of the organizational knowledge being transferred by the WIMC.

(a) The WIMC as Vanguard of Global Capital

While the list in Table 3 is comprehensive, in practice, some of these elements appear to be more important than the rest. By and large, the first three elements listed in Table 3 are the dominant concerns in this form of restructuring. These are-- attention to higher earnings, the issue of focus vs. diversity, and the decisions regarding divestiture, joint ventures and alliances. This impression, quite apparent from the discussions in the financial press, is further confirmed by the analysis by Basant of the data compiled by the Indian Institute of Management Ahmedabad in its Corporate DataBase. [7] Basant observes that the most striking feature of the corporate restructuring which has been taking place since the economic reforms began is the unprecedented rise in the mergers and acquisition (M&A) activity. This phenomenon reflects the efforts by Indian firms to consolidate their position in the domestic market, as well as by MNC s to gain entry into the Indian market. The pattern of the M & A activity is also rather interesting. More than half of the mergers and 74 % of the number of acquisitions observed in this period are of the "horizontal "type, indicating that the attempted consolidation is taking place within the same line of business.[8] This is a clear indication of the practical significance of the "focus vs. diversification" debate in India. Some authors believe that the driver behind the emphasis received by this issue is the defensive response of Indian top management in corporate houses to increase the "controlling block" of shares in these companies to ward off possible take-over. [9] Meanwhile, the MNC s have also played a key role in the M & A activity. The temporal pattern of their involvement suggests that it has been a strategy of gradualist entry, by MNCs into the Indian market , through this route. The economic liberalization policy of the government has tended to set the parameters of the process. As entry is made easier, the MNC s are likely to move in for greater control in firms in which they have acquired minority stakes.

In this context, the close fit between emphasis by the WIMC on focus vs. diversification, and on divestiture in the restructuring of Indian companies, and the entry strategies of MNCs is not accidental, but rather significant. Indeed, it may be argued that these consulting firms are playing an *intermediary function* in the entire process, i.e. assisting in the globalization of Indian companies through facilitating the divestiture of some businesses, and also making their acquisition by global companies easier. The WIMC strategy is to serve as the vanguard of globalization. In this perspective, it is also easier to appreciate several other key ideas in the WIMC mode, such as those relating to privatization, deregulation and downsizing, which generally are aimed at facilitating the market valuation of equity of Indian companies, which would enhance the linkage with global capital markets.

(b) Strong Internal Focus

The main attention in the restructuring process is directed inwards within the firm. The WIMC mode is thus concerned with acquiring and utilizing *micro-level proprietary knowledge* about the firm. This type of knowledge is associated with items 2,3 7 and 9 in Table 3. By its very nature, such knowledge cannot be widely shared as it would affect the behaviour of the firm's competitors. This is a major difference between the WIMC and academic institutions. The latter must typically deal with knowledge, which is either already in the *public domain* or can quickly be placed, in the public domain. This aspect forms the basic divide between the knowledge creation and supply by the two types of organizations, and thus is the natural basis of the division of labour between them.

While such micro, firm based knowledge is very useful, consulting firms are not able to subject this knowledge to scientific scrutiny. They also find it difficult to form collaborative associations with academic institutions for the same reason. This is likely to have an impact on the quality of the knowledge that the consulting firms can produce and it renders their work vulnerable to criticism as being ad hoc and experimental. It is thus not surprising that the core 'codified knowledge base' in management studies resides in the leading business schools of the world, and the best known management experts are academics based in these institutions.

(c) Low Emphasis on External Business Context

The WIMC mode relegates to the background the external business context within which the firms are operating. This refers to the social and policy configurations, including conditions in the labour, capital and product markets, the level of overall development, the economic policy context, international business conditions, and so on. While these may not be among the immediate actionable items before the firm, they do form extremely important parameters for competition. In matters such as regulatory frameworks, privatization and so on, the positions generally associated with the WIMC are based on a rather broad pro-market viewpoint, rather than a nuanced position which is sensitive to specific national and regional conditions. Given their relative lack of experience in countries such as India, and without systematic study of local conditions, the WIMC are on weaker ground in supplying relevant knowledge and advice on such matters. It is not surprising that these aspects are generally absent from their current agenda in advising Indian firms.

It may also be argued that Indian business is itself not yet fully appreciative of the value of contextual, macro-level knowledge, which would be available in the public domain. Thus they have not sought it in the marketplace in the same way. This is perhaps attributable to the fact that traditionally, this kind of knowledge has not been important in the closed, tightly controlled regulatory environment. The current phase of liberalization has forced them toward inward oriented defensive strategies. Over the longer run, however, it is likely they would realize the strategic significance of contextual knowledge. This type of knowledge is useful in two ways. First, it helps in strategic planning at the *firm level*, by improving awareness of opportunities and constraints. Second, it strengthens the role that business can *collectively* play in the policy process, i.e., in influencing the formation of national and regional policies, as well as in shaping national negotiating positions at international forums such as the WTO.

Hamel and Prahalad emphasize the importance of the external context for corporate strategy.[10] Their position is sharply at odds with the WIMC mode summarized above. Though we mainly cite them in this paper, they are not isolated iconoclasts, but the articulate exponents of a view now quite influential in the strategy literature. They argue that it is vital for firms to "create the future", rather than being trapped in a competitive treadmill where the effort is devoted mainly to keep up with the competition. Restructuring, they suggest, is the painful lot of firms that have not been adequately prepared to meet the challenges of changing situations. For, " masquerading under names like refocusing, delayering, decluttering and rightsizing….restructuring has always the same result, fewer employees."[11] Not surprisingly, the restructuring process is frequently associated with low employee morale. Why then is restructuring attempted? Hamel and Prahalad make a significant observation about the motive behind the adoption of the restructuring mode, which is consistent with the pattern that we have observed above in the Indian case. Restructuring appeals to top management as a means to raise asset productivity ratios despite stagnant sales (so-called "denominator management"), in order to make the firm look good in the capital market. Thus the structural linkage, between restructuring and the market for corporate control –and associated mergers and acquisitions, has been observed in many countries. But according to Hamel and Prahalad, restructuring has proved to be a dead end for many US companies.[12] Similarly, another plank of the WIMC noted in Table 3, business process reengineering, while better than restructuring, also has its limitations. While reengineering has several benefits in the form of efficiency improving effects on the firm, the problem is that " in many companies, process reengineering and advantage-building efforts are more about catching up than getting out in front".[13]

Thus, strategic decision making, which is the *key to innovative competition and industry leadership*, demands something more. This ingredient is knowledge of a different kind, one that can help the firm to anticipate the future, and generate a strategy to meet it. The firm must have the following capabilities, according Hamel and Prahalad: (1) An understanding of competition for the future that is likely to be different; (2) a process for finding and gaining insight into tomorrow's opportunities; (3) the ability to transmit this knowledge throughout the organization and thus energize and mobilize the entire workforce; and (4) the capacity to position itself advantageously ahead of the competition, without taking undue risk. To the above list, one must add the capacity to anticipate and participate proactively in the policy process, particularly in countries like India where the principal driver behind changing business conditions has been policy change. In this latter aspect, an additional factor is involved—namely, the ability to work together with government and even with potential competitors towards a collective purpose. There are issues here that go well beyond the crude practice of merely lobbying for favours and concessions, which was the norm under a regime of economic controls. The policy tasks now include redesigning the rules of the competitive game in the economy, and establishing new modes of corporate and systemic governance.To attain these capabilities, the firm needs access to substantive, rigorous, and research based knowledge. Eventually, as Indian firms move beyond the current phase of restructuring, we should expect that they too would recognize the need for these capabilities. This brief assessment of some of the lacunae in the WIMC mode suggests that an alternative form of knowledge is needed for the long-term competitive ability of Indian industry.

II Strategic Knowledge and the Potential for Academy-Industry Competition

Who can best supply this kind of knowledge to the firm? In our view, it is the academic institutions, the business schools, which have the natural advantage in the ability to generate this kind of knowledge. By long tradition and because of the needs of research and teaching in the normal course of their functioning, academic institutions deal with knowledge in the public domain. They carry out studies with long term, macro-level or industry level perspectives. They study policy and business contexts, and examine both domestic and international problems. Finally, they have a large pool of highly skilled human resources that can, in principle, be deployed to generate this knowledge.

It should be recognized, however, that the actual mode by which strategic knowledge is supplied depends on institutional factors, which can vary from one historical period to another, and from one country to another. As is well known, in Japan, the state has been a major supplier of this kind of knowledge and information for strategic planning by firms. The most significant role of MITI for example has been that of providing a vision for the future[14]. In the case of the United States, on the other hand, where such a role by government is ideologically circumscribed, the universities and research organizations provide the needed knowledge inputs. It is interesting to note also that some leading consulting firms recently become active in this field as well. For example, the management-consulting firm A.T. Kearny runs a Global Business Policy Council (GBPC), which has been in operation since 1992.[15] The GPBC is a "strategic service" whose mission is to "assist CEOs in identifying and capitalizing on the fundamental drivers of business environmental change." The GPBC is engaged in monitoring geopolitical, economic, regulatory, technological and social changes on a worldwide basis. As part of its activities, it carries out research and prepares analytical studies and special documents for its corporate members.

In the Indian case, a MITI type role for the government is highly unlikely in the near future, given the long history of controls, and the abrupt switch to market liberalization. There is considerable confusion about the proper role of government in the economy.[16] Neither the government nor the private business sector is prepared at this stage for a new kind of strategic partnership. Nor is it to be expected that private sector research organizations and consulting firms in the country would supply this knowledge adequately. In India, as we have seen above, the business strategy of the WIMC is quite different. In any case, firms like A.T. Kearny target services such as the GPBC to a very exclusive membership. Among several eligibility criteria for full corporate membership to the GPBC is the requirement that annual sales be at least $ 1 billion. Hence, availing of these services is not a practical proposition for Indian companies. Organizations such as the Centre for Monitoring India Economy (CMIE) do fulfil a useful function by providing smooth access to documentation and data, but there is still a very substantial unmet need for high quality knowledge inputs based on research and rigorous analysis. Thus, management academic institutions in India are in an excellent position in the current Indian context to meet the future demand for strategic knowledge in a cost-effective manner.

Assessing the Current State of Academy Industry Collaboration

In spite of this strong potential for co-operation, the reality is that the level of collaboration is rather low. Why is this the case? To understand this situation, we need to examine it from both the demand and supply side. In each case we shall comment on the implications of current trends for the long-term sustainability of academic institutions. Our argument runs as follows. This sustainability has two dimensions—financial and intellectual. Financial solvency, while extremely important, is not sufficient. For academic institutions must be able to regenerate themselves intellectually, in order to maintain their performance, reputation and to "move up the value chain" in academic production. Economic reforms and the government's fiscal crisis have changed the economic environment for academic institutions as well. With frozen/declining levels of public financial support, academic institutions have had to search out ways to increase earnings. Management institutions have been reasonably successful in this endeavour. They have been reasonably successful, however, only from a short run perspective. However, the process of intellectual regeneration, which is more vital for long run success, needs closer attention.

(a) The Demand Configuration

First, the demand side--what does industry demand from management institutions in terms of knowledge inputs? Academic institutions have two broad types of output: education and research. Education itself can have varied components, ranging from long duration degree and diploma programmes to short duration executive programmes. We shall argue that the nature of this demand is highly skewed in favour of training, but is rather little by way of research. The market for students graduating from management institutions has expanded rapidly, as companies recognise the need for inducting bright skilled young managers. This is a demand for embodied skills. To some extent, it may also be that the leading management institutes serve more as a filtering or screening device, since they attract very bright students and have rigorous selection processes for admission. As is well known, the high salaries received by management graduates have become quite marked since 1991, and is an indicator of the keen interest shown by prospective employers. But this is a rather indirect and arm's length form of collaboration between industry and academy. As compared to countries such as the U.S., industry typically plays little or no role in financing higher education in India, nor is it involved in articulating the requirements of industry and communicating this to management institutions to any significant degree.[17] Thus, strictly speaking this relationship is really one of structural synergy, rather than of collaboration.

A more direct type of collaborative relationship between management institutes and industry has attracted considerable efforts of management institutes during the 1990s. This is the area of executive education. Though management institutes have placed greater emphasis on these activities, and in spite of a number of innovative programmes, the overall trend remains uncertain. Data about executive management programmes are given in Table 4. The table confirms the views expressed by IIM Directors to the effect that the Management Institutes find it difficult to sustain high registrations. In most institutes the average registration per programme has fallen in the 1990s. This pattern is reinforced by a trend towards many companies trying to internalise their executive education programmes, and thus moving away from management institutes. There is also a resistance from companies to paying higher prices for such programmes, as well as to sponsoring executives for longer duration programmes.[18] In spite of such uncertain and negative trends, we should note that there have been some important new initiatives, which involve partnership with industry. An example of this is the Centre for Software Management (CSM) at IIM Bangalore, which has been established with financial support from and close collaboration with a consortium of leading software companies.[19] The Centre offers a post graduate diploma in software management for practising executives in the software industry. In such partnership- based activities, we do observe a greater level of collaborative involvement of industry in programme design. To summarise, management institutes have not experienced a sustained boom in demand for executive education from industry. However, there are some indications of change in the form of greater demand for customised and partnership- based programmes. What has been the contribution of executive education to the financial and intellectual sustainability of management institutions? There is no doubt that income from executive education has been important in bolstering the financial position of management institutions in the 1990s. However, the level of demand from Indian industry has not been as high as might be hoped for. In fact, it is *international* executive training programmes that have been the major source of new revenue for some management institutes. With regard to intellectual capacity building via executive education, there is no systematic information or empirical study available. It seems likely that the partnership- based programmes have provided opportunities for observation and learning about the companies to the faculty. But since the overall demand has grown slowly, the contribution of such programmes to intellectual capacity building is unlikely to have reached significant proportions.

TABLE 4: TRENDS IN EXECUTIVE EDUCATION IN SELECTED INDIAN INSTITUTES OF MANAGEMENT

Institution and Year	Total No. of Participants	Range of No Participants in Individual Programmes	Total No. of Programme Days per year
IIM Ahmedabad			
1993-94	1056	9-56	217
1994-95	1171	13-77	285
1995-96	1116	8-59	268
1996-97	990	12-56	315
IIM Bangalore			
1993-94	317	9-50	65
1994-95	512	10-48	108
1995-96	588	7-39	116
1996-97	615	8-36	236
IIM Calcutta			
1993-94	457	5-49	119
1994-95	381	7-48	98
1995-96	377	7-45	114
1996-97	NA	NA	NA

Source: Table 2, S.Venkatesh, op cit. Compiled from Annual Reports of the IIMs.

In the case of research, however, the industry demand from management institutions is minimal. Neither with respect to public domain knowledge, nor with proprietary consulting services is the level of demand from Indian companies significant. A large proportion of sponsored research and consultancy demand in the management institutions comes from non-business organisations, such as multilateral organisations (UN agencies) and government. Meanwhile, Indian companies have turned to the international consulting companies to meet their requirements. There has in fact been a sharp drop in consultancy requests from industry, as management institutes are edged out of the consulting market.[20] With respect to the public domain strategic knowledge, Indian companies have a low demand in general. In part this is because such knowledge is used mainly to collectively influence government policy, rather than for strategy at the firm level. The participation of companies in the policy process is mediated through industry associations, such as CII, FICCI and ASSOCHAM. Traditionally, the mode of influencing policy has been lobbying. The research intensity of such activities in India generally still remains low. The industry associations have also tended to ignore the management institutions in meeting demand for policy related research. They have preferred to do the research in-house, and in rare cases when they have looked outside, they have sought the help of international experts.[21] It is thus difficult to escape the conclusion that Indian companies, singly or collectively, do not have much interest in the research/consulting services of Indian management institutions. This pattern may be the result of several factors. As we saw in the preceding section, in part, this can be explained by the current strategic response of companies to market liberalisation, and the expertise which the WIMC possess in restructuring and business process reengineering. In part, however, it probably reflects the assessment of Indian business of the research capabilities of Indian management institutions.

(b) What the Academy's Strategic Response Should be

This leads us to the supply side of the relationship. We shall focus here mainly on the research function, as this is the area in which the level of cooperation has been the least impressive.[22] In the other activities, the management institutes have responded positively. We shall argue that it is vital for management institutes to refocus their efforts in research, as this holds the key for their long-term success. It is possible to contend that most Indian management institutions have placed a lower emphasis on research in their activity planning, as compared to education. The key reason is that education yields quicker financial returns in the market place. But in the case of research, some initial investment is essential, and research is often seen as a sink into which resources have to be poured, with rather uncertain returns. The perceived opportunity cost of research is high. The commercial logic that we have applied to academic institutions might have shocked readers a decade ago. But in the changed context of the Indian economy, it is not too far from the truth. Our contention here is that the implicit trade off between research and education is not sound from a strategic viewpoint. And this is because research is an input as well as an output. Its value as input into the other functions of the academic institution is more significant, because it is the major means to improve the quality of education and training services provided by them.

Some people like to draw a subtle distinction between education and training. Training, in this context, refers to the transference of knowledge, typically of knowledge that is not original, but standardised. But education denotes something more—with more originality, perspective, and innovative content. The dynamic element in education is what equips the student to meet a changing environment. Hence, the quality of education derives not so much from communication skills, as it does from its new knowledge content. Education is therefore intimately connected with research, and is strengthened by research. In the absence of renewal via research, education degenerates into training. Another feature of training is that it is relatively easy to imitate. Entry is easier in the training market. This is significant in the current competitive environment for management education in India. The number of institutions offering MBA and other types of management training has grown dramatically. Some of these institutions are privileged with access to company information, being in-house training centres of companies. Thus a key element of the strategy of each academic management institution should be to build a distinctive set of educational programmes, which is constantly strengthened and renewed by research. In this way a virtuous cycle of competition and improvement can be initiated.

Apart from its salutary impact on quality of education, research has another important function. It leads to the enhancement of reputation. Reputation is of high strategic significance. In Itami's terminology, it is a key "invisible asset".[23] We have already alluded to the reputation effect in keeping Indian companies from demanding research outputs from the management institutions. As Itami observes, invisible assets "are unattainable with money alone, are time - consuming to develop, are capable of multiple simultaneous use, and yield multiple, simultaneous benefits". Reputation has all the above characteristics of an invisible asset. The impact of reputation for a firm is such that once acquired, it makes the accessing of other resources, or the promotion of other products much easier. The same holds for academic organisations. It helps the management institutions to attract better faculty resources at the same pay, attract better students, enable collaborative arrangements with other leading institutions, facilitate the internationalisation of its programmes, and so on. Academic institutions should therefore have a conscious strategy for accumulating this asset.

It is useful to keep in mind that the relationship between in research capacity and reputation is two-way. They reinforce each other. Research capability is a vital, indispensable component of academic reputation, perhaps more than training. In management research, access to current empirical information is a vital ingredient. Researchers are greatly advantaged if they have direct contact with emergent information, both directly via observation, and indirectly through feedback from practitioners. This kind of raw material is essential to innovative work, and for the formulation and testing of original ideas. The contribution of first hand knowledge to research excellence can be illustrated with an example. Thus Michael Porter can in the preface of his major academic work *The Competitive Advantage of Nations* acknowledge "literally hundreds of other business executives, labor leaders, academics, consultants, industry experts, bankers, and policy makers (who) gave freely of their time. They consented to interviews and provided valuable insights into their industries and countries. Some provided extensive comments on individual case studies or country write-ups. This project could not have been carried out without their help and co-operation." In turn, Porter's reputation as an expert on competitiveness, built on the foundations of academic research work such as this, no doubt contributed to the decision of the CII to turn to him, even though at the time, he had little experience with India. It is therefore crucial for management institutions to find the means to leverage external knowledge from business, and build their reputation based on original research.

Business schools are aware of this need, and also of the fact that this information is often not available easily to academics. This is a general problem having to do with the business firms' concerns about confidentiality, and is faced by business schools world- wide.[24] Lack of space precludes a full discussion here of the specific strategies being pursued by academic institutions. Much of this centres on activities that might help build institutional mechanisms to build bridges with business. Examples of such mechanisms are business case studies, student projects on companies, inducting executives as visiting associates for research at the institutes. Yet the experiments have not been as successful as might have been hoped.[25] The basic reason is the reluctance of business to cooperate. Our suggestion can be summarized as follows. In order to break through this barrier, Indian management schools will need to make *strategic investments* in building a research- based reputation. In order to set their own directions, they should be prepared to support research more substantively with internal funds, and with some clear objectives in mind. This is necessary because often externally sponsored research has to respond to varied needs of the sponsors, and may lead to fragmentation of effort. This may not allow the consolidation of research into a powerful coherent body of knowledge. It is the latter type, however, which enhances research reputation, and which can also be most useful in facilitating distinctive branding in the complementary educational programmes. Like all investments, this will carry risks, and will not bear fruit immediately.

The willingness of so many business executives and others to collaborate with Michael Porter was no doubt facilitated by his reputation. But it is revealing to continue further with his case as an example. Porter's work from we quoted above was published in 1990, but this represented another step in his research on competition and strategy which had begun more than a decade before. His early research was published in a book *Competitive Strategy* in 1980. Two observations can be made about the first book. First, it was supported mainly by grants from the Division of Research of the Harvard Business School where he worked, and second, Porter does not acknowledge any informational help from industry (other than feedback of a few management consultants) in writing this book. This illustrates our argument, that once research reputation is established through in-house investment, it leads to a situation when accessing business information is not that difficult. As management institutions move along this path, it should find is easier to follow their research strategy, and a different kind of informational flow would be established between industry and academy. These knowledge flows would be two-way. A new trajectory of mutually beneficial and strategically reinforcing co-operation would be established.

Conclusion

In this paper, we have argued that the present level of collaboration between Indian business and management institutions is below optimum, and needs to be improved. Adopting a strategic approach, we have also suggested that there is a real possibility of long-term mutual benefit from enhanced cooperation. Reviewing the current sourcing pattern of organizational knowledge inputs into Indian business firms, we have noted the dominant position of international management consulting firms. This is explained in terms of the present pre-occupation of Indian businesses with restructuring, having been jolted by market liberalization, and especially by the perceived threat to corporate control from international companies. There are, however, other more forward looking strategic options to restructuring which business firms could choose to pursue. These strategic approaches, such as that advocated by Hamel and Prahalad, are superior to the restructuring and reengineering approaches. We may expect that within a few years, Indian companies are likely to move beyond the latter approaches, and towards those, which provide a greater chance for business leadership. As they shift their approach, a different kind of knowledge base will become necessary, which will include a bigger proportion of contextual knowledge. In providing this latter kind of knowledge, we argue that academic management institutions have a competitive edge.

Next, we examined the configuration of demand and supply of knowledge from the perspective of management institutions. Our argument here is that management institutions would also benefit from a strategic reordering of their activity profiles. The current emphasis on education has been only with a short run orientation, and there needs to be greater attention given to the long-term sustainability of educational quality. The role of original research is vital, not only for its own sake, but also for the benefits it leverages. Research as an input into education programmes, enhances their quality directly, and makes it difficult to imitate by others. Research investments lead to the accumulation of "invisible assets" like reputation, which enhances the ability to access information from industry. Thus the process can build on itself, as more cooperation from industry yields better research and better education and higher reputation. For management institutions to move on this path would, however, require conscious investment in research.

The potential for enhanced industry-academy cooperation is high, but it can be realized only through a strategic realignment on the part of both industry as well as management institutions. Since strategic realignment does not happen automatically, but is the result of conscious, considered decision, much depends on the vision of the leaders of both types of organizations.

---

[1] See S.Venkatesh, "A View from the Helm—IIM Directors' Perspective", in N. Balasubramanian (ed.) *Management Perspectives: Essays on Management Priorities and Management Education,* Macmillan India Ltd, 1999

[2] See K.R.S. Murthy and R.T. Krishnan, "Indian Business Houses in 2020:What they should Aim For and How to Get There", *IIMB Management Review,* Volume 11,Number 1, March 1999. The participants included J.J. Baxi, A.M. Bhat, Puneet Dalmia, Rajnish Karki, H.F. Khorakiwala, V.S. Krishnan, Rohan Narse, P.R. Venkataramana Raja, J.Ramachandran, S.L.Rao, U.V.Rao, S.C. Senapathy and N. Balasubramanian. Murthy and Krishnan anchored the discussion.

[3] This includes the Andhra Pradesh government under N. Chandrababu Naidu, where the long term vision document for the state's development has been developed by McKinsey. Even the West Bengal government under Left Front rule has engaged international consulting firms.

[4] Partly this is due to genuine needs of confidentiality with respect to clients. But it is also a part of conscious marketing of their image as purveyors of exclusive management wisdom.

[5] Pradip N. Khandwalla, "WIMC Versus Innovative and Self-Help Modes of Restructuring and Revitalization", Working Paper No. 99-06-06, Indian Institute of Management Ahmedabad, June 1999.

[6] " Consultants like Arthur D. Little, Andersen Consulting, A. T. Kearny, Booz-Allen & Hamilton, Boston Consulting Group, KPMG, McKinsey and Price Waterhouse have bagged such corporate clients as State Bank, ONGC, SAIL, Bharat Petroleum, L & T, Hindustan Lever, Dabur, BILT, United Phosphorus, Godrej Soaps, and the RPG, DCM, Kumaramangalam Birla and Murugappa Groups," Khandwalla, op. cit., p 3.

[7] See Rakesh Basant, " Corporate Response to Economic Reforms in India", Working Paper No. 99-06-04, Indian Institute of Management Ahmedabad, June 1999. See in particular, Tables 2 and 3.

[8] The sameness of the line of business refers to the 4-digit classification of the main product group of the active partner.

[9] See P L Beena, " Mergers and Amalgamations: An Analysis of Changing Structure of Indian Oligopoly", Doctoral Dissertation, Jawaharlal Nehru University, 1998. Cited in Basant, op.cit.
[10] Gary Hamel and C.K. Prahalad, *Competing for the Future*, Harvard Business School Press, Boston, 1994
[11] Ibid, p 7. They refer mainly to the American and British experience, but the essential logic of cost cutting is fairly universal under restructuring strategies.
[12] " Restructuring seldom results in fundamental improvements in the business. At best it buys time. One study of 16 large U.S. companies with at least three years of restructuring experience found that although restructuring although restructuring usually did improve a firm's share price, the improvement was almost always temporary." Ibid p 11.
[13] Ibid, p 14.
[14] All too often market ideologues discuss the role of MITI exclusively in relation to its intervention in the market and in "picking winners". More important than this, in our view, is its role along with the Economic Planning Agency to generate a strategic vision for the economy. For a balanced account of MITI's role with special reference to the high technology industries, see Daniel I Okimoto, *Between MITI and the Market*, Stanford University Press, 1989.
[15] Details about the GBPC can be found at the web site of A.T. Kearny, Inc.
[16] See Chiranjib Sen, " The Budget, Government Style and the Sustainability of Economic Reform in India", *Economic and Political Weekly*, Vol XXXIII, no.45, November 7, 1998.
[17] Hardly any business school in India could claim with justification, as the Wharton School of the University of Pennsylvania, does in its MBA brochure: " Hundreds of CEOs, alumni, corporate recruiters, and other executives were involved in helping Wharton define the essential skills for managers today and in the future."
[18] For the views of IIM current and former Directors on the experience of management institutes with management education, and related data, see S.Venkatesh, " A View from the Helm—IIM Directors' Perspective", op cit.
[19] The consortium partners include Wipro, Oracle India and Silicon Automation Systems. For a description of the CSM and its activities, see R.T. Krishnan, " A Programme in Software Enterprise Management", in N. Balasubramanian (ed.), op cit.
[20] " I think we have not yet realised how serious the problem is. You may have noticed the fall in our consultancies. Two or three years back, we could afford to say no to requests but today, we don't have that luxury" This is the assessment of P. Khandwalla, former Director of IIM Ahmedabad, in S.Venkatesh, ibid.
[21] In the early 1990s, the CII sought the services of Harvard Business School professors Michael Porter and Pankaj Ghemawat for a study of the competitiveness of Indian industry.
[22] See Shyamal Roy and Chiranjib Sen " The Role of Research in Management", in N. Balasubramanian (ed.) op cit., which draws lessons from the IIM Bangalore experience.
[23] See Hiroyuki Itami and Thomas Roehl, *Mobilising Invisible Assets*, Harvard University Press, 1987. Invisible Assets are distinct from conventional assets, and are information based. For business firms, they include technology, consumer trust, brand image, corporate culture and management skill.
[24] See the interview conducted with A. Borges, Dean,INSEAD, France, S.Watson, Dean, Management School, Lancaster University, UK, and M.R.Rao, Director,IIM Bangalore. N. Balasubramanian, " Collaborative Synergy Between Business Schools and Academia: In Conversation with A. Borges, S.Watson and M.R.Rao", *IIMB Management Review*, June 1999.
[25] For more discussion of these initiatives, see Shyamal Roy and Chiranjib Sen, op cit., and N.Balasubramanian, ibid.