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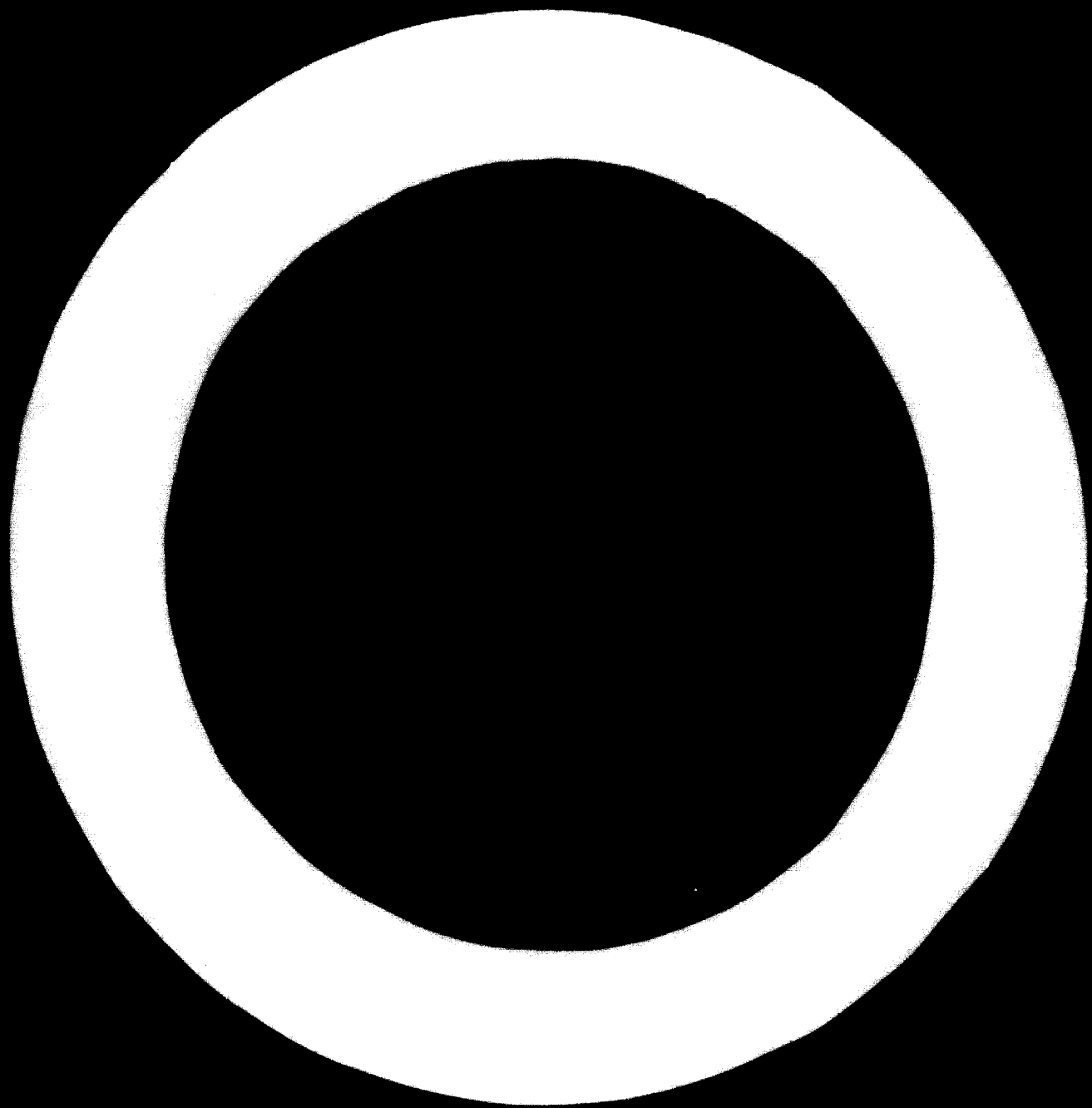
INDUSTRY-UNIVERSITY COOPERATION:
THE INDIAN EXPERIENCE ^{1/}

by

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An important pre-requisite for effective management development in any country is an active interaction between industry and the institutions engaged in management education. Schools or institutes of management are concerned with the development of practitioners and the improvement of management practices. To be isolated from the world of practice is therefore the worst that could happen to such institutions.

A full fledged management institute is likely to have four different types of activities:

- 1) degree programmes (e.g., M.B.A., D.B.A.)
- 2) executive development programmes
- 3) research
- 4) consulting

The degree type programmes are meant to prepare young men and women for careers in management. Executive programmes are shorter in duration and are designed to meet the developmental needs of management practitioners at different levels. Research is concerned with the development and application of knowledge for solving management problems. Consulting contributes both to the improvement of management practices and the professional growth of the faculty. These activities are mutually reinforcing and provide the faculty an opportunity to view management development in a comprehensive perspective.

Industry-University Linkage

The nature and scope of interaction between industry and university will not be identical in the different activities listed above. For instance, industry-university cooperation will have to be much closer in relation to executive development programmes and consulting than, say, in the case of research. Some activities call for more direct linkages with industry than others. The areas in which linkages are warranted and the nature of such linkages vary with the type of activity. Thus in executive development programmes and consulting, the clients are industrial organizations and hence a direct linkage with industry is essential. In the case of degree programmes and research, the products and services are meant for industry and yet the degree and nature of interaction required will not be the same. The different activities of a management institute and the areas of industry-university interaction are summarized below.

Interaction vis-à-vis Activities

Activities Areas of inter- action	Degree pro- grammes	Exe.Devt. programmes	Research	Consulting
1. Sponsorship (as client)		x	x	x
2. Curriculum planning	x	x		
3. Teaching materials	x	x		
4. Faculty	x	x		x
5. Selection of candidates	x			
6. Project/field work	x		x	
7. Placement	x			
8. Feedback and evaluation	x	x		x
9. Financial support	x		x	

An analysis of the areas of interaction would indicate that industry could play three different roles in relation to the university. (1) It could act as a client and directly utilize the products and services of the management institutes. This is the role industry plays when it sponsors its employees to the institute's programmes, recruits its graduates and engages faculty as consultants. Industry receives direct benefits from these relationships. (2) Industry may offer academic advice and help to the university in areas in which it is competent. Industry's comments on the curriculum and its relevance, evaluation of programmes and seconding of able and experienced managers to the university to participate in teaching are examples of this role. (3) Industry may provide general support for management education through donations, institution of scholarships and chairs, by letting the faculty develop teaching materials based on company data and providing students opportunities for training and field work.

The roles outlined above are obviously interdependent and industry cooperation will not emerge unless it is sought and nurtured by the university. Thus, industry will not recruit management graduates or sponsor their managers to university programmes unless the usefulness and relevance of the programmes are established. This in turn will not happen unless industry's advice in programme and curriculum planning is sought and used. If all these things happen, the chances are that industry will provide more general support to education by way of funds and opportunities for faculty and students to use industry facilities. A major pre-requisite for industry-university cooperation is the credibility of the university's management development efforts in the eyes of leaders of the industry sector.

Experience in India

A brief account of our experience in India in the area of industry-university cooperation is given below. Though there are several management institutes in India, I have relied only on the

experience of the Indian Institute of Management, Ahmedabad (IIMA) partly because I know more about it than about other institutions and partly because it is the largest and perhaps the most well established institution of its kind in India.

IIMA was established in 1962 by the Government of India with support from industry and the Ford Foundation, and in collaboration with the Harvard Business School. Since its inception, IIMA has been engaged in management education, research and consulting. We have a two year post-graduate programme (equivalent to the MBA) to which 125 students are admitted every year. Three years ago, a doctoral programme in management was started with an annual intake of 15 students. Nearly 4000 executives from over 2000 organizations have participated in our executive development programmes. A total of 75 research projects and 80 consultancy projects have been undertaken by the Institute so far. The Institute has a sixty member faculty supported by a research staff of over a hundred.

IIPA Linkage with Industry

The active association of important leaders of industry in setting up the Institute was a major factor in developing useful linkages with industry. The strategy which was adopted by IIMA in its early years adequately reflects its approach towards cooperation with industry. The salient features of this approach were the following:

(1) Before the two year post-graduate programme was started, a detailed survey of the potential market for management graduates was conducted by the faculty. The survey probed into the nature of jobs likely to be available in industry, requirements of jobs in terms of knowledge and skills and the views of potential employers on the programme curriculum.

(2) The first programme offered by the Institute was a senior executive programme and not the two year post-graduate programme. This sequence was planned deliberately. The objective was in part to acquaint senior managers who are potential employers of the future graduates of the Institute with the Institute's approach and capabilities. In fact, the contacts thus established with numerous industrial enterprises and their top executives have resulted in a great deal of interaction between the Institute faculty and industry and contributed much to the success of the placement of the Institute graduates.

(3) Newly recruited faculty were never asked to teach right away. They were given nearly a year to prepare teaching materials relevant to the Indian environment. The faculty were encouraged to do field work and identify problem situations in industry based on which cases and notes were written for use in the classroom. Wherever necessary, the Institute provided the contacts with industry and travel funds and research assistance to the faculty to conduct studies. This provided an important and useful experience to the faculty and an opportunity to get acquainted with the faculty. The early programme of case development thus became a major instrument of industry-institute interaction and helped forge a very close relationship between the two.

(4) The faculty of the Institute were drawn from academia as well as industry. A faculty consisting solely of persons without any industry experience would have made industry-institute interaction more difficult. Attracting persons from industry who possessed conceptual skills and academic competence was by no means easy. On the whole, younger people were preferred in the hope that they would be more adaptable and trainable. To supplement the full time faculty, a limited number of senior executives were appointed to the faculty on a part time visiting basis. In addition to their participation in programmes and planning, these men provided a useful link for the Institute with industry.

This strategy of planned interaction with industry brought rich dividends to the Institute. IIMA's executive development programmes opened the doors of industry to its faculty. The cases and other teaching materials developed by the faculty increased the Institute's credibility in the eyes of practising managers. Programme participants felt that the topics, problems and materials discussed were relevant to their own and their organizations' needs. This no doubt was a factor in kindling their interest in the young graduates being trained at the Institute. Companies which participated in Institute programmes and had faculty do case research in their organizations took the initiative in giving consulting assignments to the Institute. Thus IIMA's initial strategy contributed significantly to the development of fairly close ties between industry and the Institute and prepared the ground for increased interaction between the two in relation to the newer activities started by IIMA.

Let us now take a closer look at the nature and areas of interaction that emerged in relation to specific activities of the Institute. The two year post-graduate programme (PGP) which is equivalent to the MBA programme is one which required interaction with industry at several points and in considerable measure. Let us therefore start with PGP.

PGP-Industry Interaction

There are six areas of interaction which deserve to be discussed in the PGP context. However, all are not equally important from the standpoint of the Institute.

1) There is considerable cooperation with industry in the development of teaching materials for PGP. Mention has already been made of the case research done by faculty in industry. Often consultancy reports prepared by the faculty also are adapted for classroom use. Industry as a source of teaching materials has been well established.

2) In the process of selecting candidates for admission, it has been our practice to invite senior managers and industrialists to serve on the interview panels along with the faculty in different parts of the country. The invited members obviously do not play a decisive role in the selection process. However, they do get an opportunity to see for themselves the kinds of young people likely to be admitted to the Institute and get acquainted with our admission procedures. This exposure and involvement tend to increase their receptivity to the programme and its products.

3) All students in PGP are required to work for two months in the summer in industry. Industry pays them a modest stipend for the assignment and plans ahead the projects to be taken up by them. IIMA's close ties with industry helped a great deal in lining up the 125 summer jobs required annually. We have now come to a stage where an excess supply of jobs exists and the offers of many companies have to be politely turned down. Summer jobs are treated as an integral part of the educational programme and the students gain significantly in terms of insights, maturity and confidence as a result of the experience. Industry gets an opportunity to look over our students and assess their capabilities. There are several cases where employers have made advance permanent job offers to students at the end of their summer assignment. The Placement Office of the Institute receives reports on the summer jobs both from the students as well as employers.

4) The placement of students upon completion of the two year programme is an important area in which industry-institute interaction takes place. Six months before the programme ends, industrial and other organizations receive a brochure from the Institute's Placement Office with full information about the graduating class and the procedures and facilities for recruiting them. The companies which respond with specific requests are then put in touch with interested students. Many companies visit the campus to interview students. As a result of this process,

practically all students in PGP are placed well before they graduate. As in summer placement, there are several companies which fail to get any graduate simply because there is an excess supply of job openings relative to the number of graduates available.

This satisfactory placement record is the result of a careful and painstaking campaign by the Institute in its early years to establish contacts with industry. Faculty members visited industrial organization, disseminated information about the programme and students and answered the numerous questions and doubts the potential employers had about our programme and the students. This interaction certainly helped develop better understanding between industry and the Institute and was a major influence in their positive response to our placement programme.

5) The Institute's ties with industry have had an impact on the faculty teaching in PGP also. It has been explained above that the faculty consist of persons with academic as well as industry backgrounds. The role of the visiting faculty drawn from industry is especially worthy of mention. In functional areas which are practice-oriented (e.g. marketing, finance, advertising), we have some very competent persons from industry who regularly offer courses in PGP. Very often, they work closely with the full time faculty. They not only bring valuable insights and experience from industry into the classroom but also arrange for students to work on projects involving industry problems.

In addition, we have a system of inviting guest speakers from industry to participate in on-going courses. These men are generally top industrialists or executives who spend a day or two at the Institute, lecture to the students and mix with them informally after class. This gives an opportunity to leaders of industry who are not available to teach regular courses to get to know our programmes and students at close quarters.

6) Yet another area of interaction with industry is the evaluation of PGP. Reference has been made above to the feedback we receive from industry on the students' summer jobs. Evaluation of the curriculum and

of the graduates is not so easy. We have an on-going research project on the performance of our graduates. Here the major source of feedback is the employer. The faculty involved in the project have interviewed employers and supervisors of our graduates and collected other relevant evidence from industry and the graduates on their performance. These studies constitute an important source of feedback from industry on PGP in the light of which admission procedures and criteria and curriculum could be revised.

EDP-Industry Interaction

Industry's role as a client of the Institute is more direct and clear in the case of executive development programmes. These programmes are designed for practising managers in industry. Since the programmes must be geared to meet the needs of industry, the faculty keep in touch with companies in the different stages of programme planning. More specifically, the points of interaction are:

- a) Survey of the needs of the market
- b) Curriculum design
- c) Programme selling
- d) Development of teaching materials
- e) Visiting faculty from industry

The first three items are self explanatory. Item (d) refers not only to the development of cases but also of other pedagogical devices. Thus in one of our recent programmes, a leading company provided all the relevant data pertaining to its strategic planning for study by the participants. The chief executive of the company made a special visit to listen to the discussion and comment on the presentation made by the participants. Other companies have also agreed to let such discussions be organized on their internal structure and planning process.

In all our programmes, at least one member of the faculty will be a practitioner. They are invited to stay with the participants and

work closely with the full-time faculty. Companies rely on their senior executives to serve on the faculty which is another example of the cooperation between industry and the Institute.

Executive development programmes constitute the most important medium of interaction between industry and the Institute. A very large number of organizations get to know about the Institute and its faculty through this activity. These programmes have often been the starting point for case research, consultancy, recruitment of graduates and the development of new ideas in management training. The participants who return to their organizations at the end of the programmes are an important source of contact and support for the Institute in industry circles.

It is pertinent to point out at this stage that IIMA discourages its faculty from conducting in-plant training programmes for individual organizations. Though such programmes will bring the faculty in close contact with many enterprises, we feel that it would be a better strategy to encourage them to participate in our executive development programmes. The faculty are permitted to organize special programmes for individual companies only where broader consultancy or research projects are sponsored by the latter which require a training component as part of the package. Alternatively, where the Institute feels that a company programme will provide an opportunity to try out new ideas or methodologies or result in the development of teaching materials, it would let such programmes be organized. Any relaxation of this policy would have led to the faculty being drawn into numerous repetitive programmes with only a marginal contribution to their professional growth.

Interaction in Research Programmes

While in case research there is considerable scope for industry-Institute cooperation, the same cannot be said about project research which may not necessarily have a micro level focus. The results of project research are of general interest to industry, but are unlikely to generate the same degree of interest that cases, consultancy or executive

programmes or to As a result, to have financial industry sponsorship of project research is difficult to obtain. that industrial organizations have been willing to do is to collaborate in data collection, interviews, Our major sources of research support are governmental agencies, and research foundations. The attitude of industry to research reflects their relative lack of interest in broad generalizations and their concern for results and ideas which they can directly and immediately use in their organizations.

Interaction in Consulting

At IIMA, the faculty are permitted to engage in consulting up to 52 days in a year. Consulting is seen as an effective tool for improving management practices in industry and as an aid to the professional growth of the faculty. It also provides an additional source of income to the faculty. However, the Institute does not solicit consulting. The initiative is always taken by industry. Normally, a client gets interested in sponsoring a study because of his contacts with the Institute through executive programmes, case research, visits to the campus or our graduates. When faculty undertake consulting for any organization, they do it on behalf of the Institute.

The client-consultant relationship is a close and sensitive relationship. When requests for consultancy reach the Director of the Institute, he is careful in ensuring that the most appropriate faculty member or members are assigned to do the job. Faculty are encouraged to be in touch with the client in the implementation phase also so that acting on the recommendations is not unduly impeded for lack of advice and support from experts.

Apart from keeping the faculty in touch with the problems of the real world, and facilitating close interaction with industry, consulting has resulted in several other benefits to the Institute. The faculty have utilized consultancy reports for the development of teaching materials such as cases with the permission of the clients. New research ideas and projects

have earned from consulting work and IMA has often been encouraged to recruit our graduates to IMA on the confidence and understanding they have gained about the Institute through consulting. The educational programmes of the Institute have been enriched by the faculty bringing into the classroom the new insights and experiences they have gained through consulting. Most consulting jobs require inter-disciplinary teams. Faculty belonging to different backgrounds and disciplines are drawn together in the accomplishment of a task, a phenomenon which seldom takes place normally in a university setting. Inter-disciplinary research and programmes are thus facilitated by consulting experience.

Faculty are discouraged from taking up repetitive studies in the name of consulting. Though such jobs are important for industry, we have felt that the pay off in terms of the professional growth of the faculty is low where no new learning experience is involved.

Some Limitations and Gaps

There are several areas in which IIMA has not been able to take advantage of industry cooperation. Let me briefly refer to some of them below:

1) An important means of exposing new faculty who have no industry experience to industry is by deputing them to spend six months to a year in industry. We have not been able to organize a programme of this sort mainly because of our continuing shortage of faculty. Because an increasing number of new faculty come straight from academia, there is a danger that we might lose touch with the world of practice and tend to become unduly theoretical.

2) In terms of visiting faculty from industry, we have so far been able to persuade senior executives to come and spend only a few days in a term to teach courses on the campus. Our salaries and other terms of service are not attractive enough for them to come and spend a whole term or a year or two with us.

3) We have not been able to persuade industry and industry associations to sponsor and support any of our research. They have generally very narrow and short term interests in terms of research which are better met through consultancy projects. Perhaps this is a characteristic of enterprises in the developing countries which are not willing to invest their resources for the general benefit of society.

4) It is the larger and more progressive enterprises in the country which have been closer to the Institute. We have not been able to achieve a similar degree of interaction with the smaller industrial units nor with the public sector enterprises. But the latter represents a major segment of industry. We have made some beginnings in this direction, but still have a long way to go.

Some Guidelines on Industry-University Cooperation

Our experience at IIMA may or may not be relevant to other institutions represented at this meeting. Even so, let me put down some guidelines and lessons which seem to follow from our experience. At least they could form a basis for discussion.

1) Every academic institution should evolve a conscious strategy for interaction with industry. The initiative must be taken by the academic institution.

2) Interaction with industry will develop on healthy lines only if the faculty include persons with industry experience, direct or indirect. Cooperation cannot be brought about solely by setting up committees or chambers of commerce or other industry associations to facilitate interaction. The internal strength and outlook of the academic faculty are important pre-conditions for the establishment of linkages with industry.

3) Managers or leaders of industry should be used by the university in areas in which they are competent. For instance, they could give feedback on the performance of graduates or on the relevance of a curriculum.


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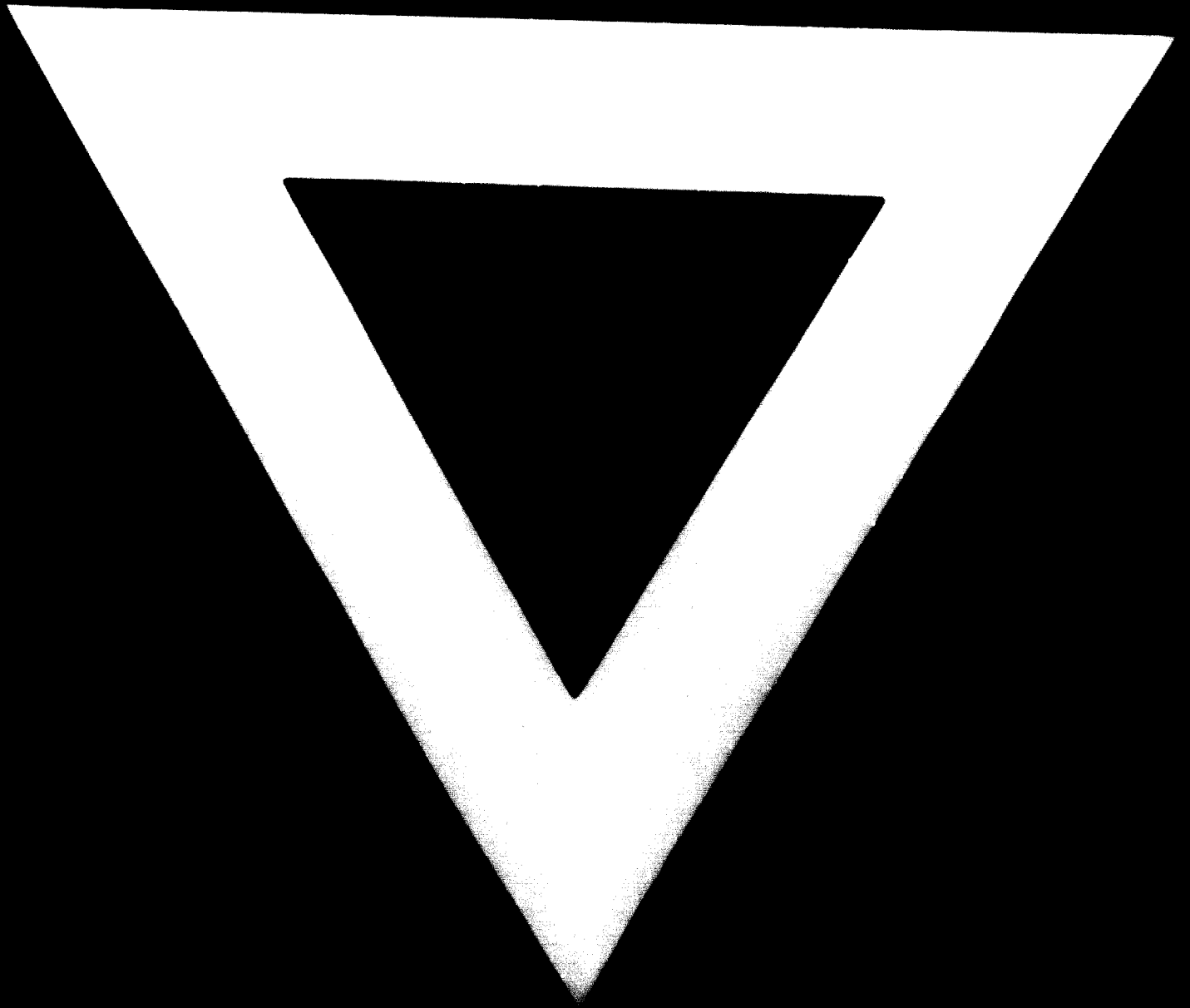
The university should not be content with a curriculum which is an outgrowth of a general education. It should be designed to meet the needs of the industry and development in the area of the discipline.

4) Faculty should be given freedom of initiative and freedom in developing industry contacts. They should be supported financially in order that they be enabled to go on travel abroad to establish productive relationships. The evaluation system should be such that it rewards persons who succeed in these efforts.

5) The university or institute should plan its mix of activities such that each reinforces the other and reaps the maximum out of interaction with industry. If the university offers only a degree type programme, it is limiting itself in terms of the interaction it could have had with industry which in turn would have made the degree programme even more effective. Thus executive development programmes would have made industry more receptive to the graduates of the degree programme and provided opportunities for the faculty to get a closer understanding of industry. If consulting were encouraged, the faculty would have been able to bring new insights and experience into the classroom. The university may therefore stand to gain more by undertaking a mix of programmes which reinforce each other rather than by taking up only one activity such as a degree programme.

6) The university should treat management as a field of professional education and industry as its major client in relation to management programmes. Many areas of interaction such as consultation on curriculum, development of teaching materials using industry as a source of data, placement service, visiting faculty from industry, executive development programmes, and consultancy make sense only as part of an effort to meet the client's needs most effectively. Unless a perspective of this kind exists in the university, it will be exceedingly difficult for it to establish a meaningful relationship with industry.





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