

Industry-Academia Collaboration in the Field of Economics and Management at the University of Tokyo

The Vision of Human Resource of the Advanced Management Program

After going against the general notion that industry-academia collaboration is a territory reserved for science and engineering, the author tells us the secret of how his group of scholars in economics and management successfully engaged in industry-academia collaborations by using the “Advanced Management Program.” For their next step, they chose to establish a non-profit organization to accommodate the industry-academia cooperative researches, but now, in the offing, they have plans to install a new graduate school.



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To begin with, most departments of liberal arts, including the Department of Economics, have been reluctant to engage in industry-academia collaborations. When we try to set sail towards this goal, sometimes the wind blowing against us is so strong that the ship nearly tips over. I myself, as a scholar of Business Management with many ties to the outside world, was not so thrilled, until quite recently, with the idea of associating with venture companies or NPOs, because most of my research targets had been larger companies. In the past, I intentionally distanced myself from them although there were many invitations from students and people related to such companies. So now I must ask myself if I am in a position to talk about industry-academia collaboration. I find it intriguing that I have somehow started my challenge, from within the Graduate School of Economics, to implement the “industry-academia collaboration in the field of liberal arts.”

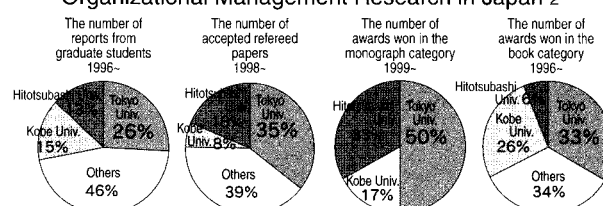
1. The starting-point was the “Advanced Management Program”

In 2001, some professors in business management studies of the Graduate School of Economics at the University of Tokyo (hereinafter called the “Business Management Group”) volunteered to open the “Advanced Management Program.” This program was for undergraduate students who had, by their third year, finished most of their required studies including

the five core business management courses: i.e. Business Administration, Business Organization, Strategic Management, Marketing, and Business History. After an interview examination, the accepted students start their master’s course from their senior year in order to obtain their degree in their first year of graduate school, which is an equivalent to skipping a year in studies.

Ever since the planning stages, which goes back a few years, the “Business Management Group” was quite confident about this Program. The reason for this was because of the following achievements. When people think of universities with “business” and “management” courses in Japan, Hitotsubashi or Kobe University is normally the first that comes to mind. However, in a questionnaire survey to the professors and assistant professors of the “Academic Association for Organizational Science,” which was conducted by Kawaijuku, a private educational institution in Japan, there were three professors from the University of Tokyo who were ranked among the top ten scholars of the “organizational science”; whereas, there were only one each from Hitotsubashi and Kobe University.

● Figure 1. The Presence of the University of Tokyo in Organizational Management Research in Japan²



●Figure 2. The Cycle of FBP: Field-Based Professional



(Bessatsu Takarajima vol.322 “Iron-men in Academic fields” published July 1997) From this it can be deduced that the Business Management Group of the University of Tokyo is in fact the leading figure in the field of organizational management and business administration in Japan.

The presence of the University of Tokyo has become more prominent especially after the evaluation and award systems of the Academic Association for Organizational Science were improved in the second half of the 1990s. As seen in Figure 1, the University of Tokyo's share in each diagram is outstanding. Compared to the one hundred combined staff members of the Department of Commerce at Hitotsubashi and the Department of Business Administration at Kobe University, it is surprising that it only took ten or so professors of the Business Management Group at the University of Tokyo to accomplish this. There is no doubt, of course, that the graduate students of the University of Tokyo are excellent material, which is quite fortunate for us, but it is also true that, over the last seven years, graduate studies under a certain university policy have contributed greatly in achieving these research results

2. What is needed is the ability to define problems

The Business Management Group calls this policy a nurture of the “Field Based Professional (FBP)”: a human resource of the twenty-first century; in other words, the education of highly professional individuals who can complete the following cycle for problem solving which is illustrated in Figure 2.

(1) Field : defining the essential problem in the field

(2) Logic : explaining and analyzing the problem logically

(3) Action : obtaining a concrete solution for the problem

This is a unique concept of our Business Management Group, which is quite original in its nature. For example, today's MBA education has been placing too much weight on (3); and because universities are making students solve prearranged problems, the students are not prepared for the actual world. It is far more important, in such cases, to be able to define the problems themselves. And likewise, the system for training researchers have been putting too much weight on (2); and the studies of business management, if it is only but an armchair theory, will result in a communication breakdown with the management staff in the field. What we need now is a “robust good thinker,” who does not get confused by vogue, who can find the problems in the field through well-tuned senses, and who can examine the situation logically. Otherwise, it is impossible to stand on one's own two feet in this era.

Once the degrees are obtained, the alumni, as field-based professionals (FBP), can either (a) finish their second half of the doctorate course and become able researchers who will lead the academic world in the next century, or (b) join a think-tank or a consulting firm or a manufacturing company to further their careers. Nevertheless, the fundamentals for academic research in business management is based on the field surveys that are conducted at corporate field levels and so it can be deduced that the necessary intellectual training for researchers is substantially the same as that of the practical world. The ability to define problems in such training is in great need: a fact that our Business Management Group was already aware of.

Furthermore, we also knew that writing a thesis and not just following course work gave students the basic ability needed in becoming field-based professionals (FBPs). This is the reason why we instruct the graduate students to write their theses vividly so as to logically explain and analyze the substance they found in the field. However, in order to finish the master's degree in one year, there lay before them a difficult task of finding suitable fields of study within the given time. So, for the participants of the Advanced Management

Program, we built connections with industry (or the society at large) and made a system that would supply them with a theme for their graduate or master's thesis. Of course, it is the task of the university and the students themselves to look for the problems to pursue. This is where the "industry-academia collaboration in the field of Economics and Management" all began, and I shall illustrate, in the following, the three collaboration methods that are quite unique.

3. The supplying systems for obtaining researching themes

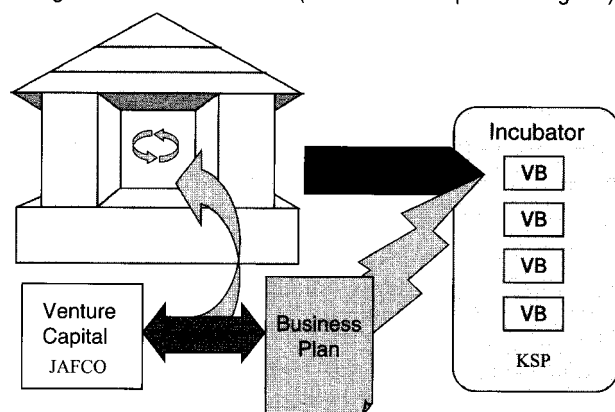
1) An internship working with society in this era of venture companies and NPOs

From FY2002, the Advanced Management Program will start providing a new internship program equivalent to a two-unit subject. This program gives the graduate student, who has received professional education, an opportunity to work as either a consultant, a venture capitalist, or a researcher, which is completely different from today's so-called "students' job experience" in terms of expectation and responsibility. For the time being, in the FY2002, the following two programs will begin.

(A) VDP (Venture Development Program)

In this program the student will contrive a "business plan" while working as an intern in a venture company located in the Kanagawa Science Park (KSP), the largest hi-tech incubator in Japan. The intern, who is placed mainly in the field during this program, will be

● Figure 3. The Flow of VDP (Venture Development Program)



deeply involved in management and technology. And before going into the field, the intern will receive from KSP the same course on how to make business plans that has already been taken by the venture company management; thus this common interface linking the intern and the management will help facilitate the intern's tasks. Furthermore, this business plan will occasionally be evaluated by the venture capitalists of JAFSCO Co., Ltd., the largest venture capital in Japan. Figure 3 illustrates the overall flow of this VDP, which has, from its planning stage, been introduced in the articles of the Nihon Keizai Shimbun and the Japan Industrial Journal as an example of "industry-academia collaboration in the field of Liberal Arts."

(B) NAP (NPO Assessment Program)

In this program the student will work as an intern in a volunteer supporting section of the Nippon Foundation, one of the largest grant-aid foundations in the world. Here they will be put in charge of the evaluation process of about ten grant-seeking projects and after field-studies of NPOs and volunteer groups all over Japan, they will produce their "field survey reports." This program is not yet finalized, but because grant-aid foundations are to NPOs what venture capitals are to start-ups, it will probably be somewhat similar to the VDP.

2) Setting up an industrial-academia cooperative research NPO in the "Marunouchi Building" where top business schools from around the world are getting together

The new 37-story "Marunouchi Building" is currently under construction by the Mitsubishi Estate Co., Ltd. at the site just in front of the Tokyo Station where the former "Marunouchi Building" stood, and is scheduled to finish by September 2002. On the ninth floor, the (provisionally called) "Marunouchi Academic Suites" will be placed beside the offices of the top business school of the world, such as the Harvard Business School and the Stockholm School of Economics, with more schools to come. This news, to our surprise, appeared on the top page of the evening edition of the Asahi Shimbun, and it was thus

confirmed that the Business Management Group of the Graduate School of Economics at the University of Tokyo was the only school from Japan to establish an off-campus office, namely the “Marunouchi Satellite Office,” which would engage in daily communication with these world-class business schools.

Taking advantage of this perfect location, some professors of the Business Management Group got together and established the “Non-Profit Organization Global Business Research Center (GBRC)” in March 2002. The above “Marunouchi Satellite Office” will be managed under the GBRC, and to make the most out of this location, some industry-academia cooperative research projects will be started in order to develop human resources. Up until now, most companies have been farming out their surveys and researches to think-tanks or consultation firms, an act which will not improve the abilities of their own employees. At GBRC, however, industry-academia cooperative research teams will be put together, which will consist of university professors, graduate students, and the company personnel. This attempt being field-oriented will provide the company staff with an opportunity to train themselves in finding and solving new problems, and at the same time, will give graduate students a live theme for their research.

3) Business-Model Development Division-the technology transfer base for the Business-Model (Business Method Patents)

In March 2001, the “Business-Model Development Division” was set up on the first floor of the Department of Economics by using the Ministry of Education, Culture, Sports, Science and Technology’s supporting grants for the establishment of educational and research bases. As an exceptional case for a liberal arts department, CASTI - the University of Tokyo’s approved TLO (Technology Licensing Organization) - has placed one of its outer offices in this division. And surprisingly though this may seem, by working with CASTI, the “liberal arts-based” Business Management Group has already obtained several business method patents, licensing agreements and consultation contracts.

The main activity of the Business-Model

Development Division, however, is no longer the technology transfer of business-model (business method patents). By allowing undergraduate and graduate students free access to its state-of-the-art facilities, it has now shifted its weight to the distribution of Internet contents which have been created mostly by the students, which includes video contents, notes, and references of the interviews, and lectures that are related to business-models. This is an important exercise for the students in terms of the OJT (on-the-job training), which will be articulated later on in the “Field-Based Research Methods.” The pictures taken in the fields are, of course, bits and pieces of the whole picture, but it is still, in its own way, very fresh and timely. As a teacher, I was pleased to see the recording crews, mostly students armed with their video cameras and all, go excavating for “business models” that were being exercised at venture and small/medium-sized companies. These activities were also printed in the Japan Industrial Journal.

4) The key to liberal art's industry-academia collaboration is the training of human resources that are needed in society

The president of CASTI, Mr. Takafumi Yamamoto, told me one day that Mr. Niels Reimers, who played a main role in early stages of US TLOs, once wrote:

Universities in the United States are contributing largely to the competitiveness of industry by supplying graduate school level alumni who are trained in the most advanced research areas.

Coming from the person who brought tremendous wealth to Stanford University, these words carry much weight and are very intriguing to a person like myself who engages in university and graduate school education. I truly feel that this is where the key lies for “industry-academia collaboration in the field of liberal arts.” So how are we to supply the necessary human resources for industry and society at large? And what should the attributes of such human resources be? These are indeed very important issues of which we must ask ourselves: Do the popular business schools and MBA courses of today have clear visions for human resource education?

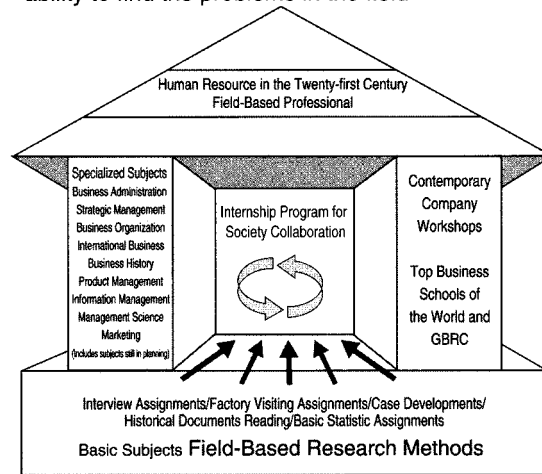
Under these circumstances, our Business

Management Group at the University of Tokyo capitalized on its experience and educational know-how, and placed the “Field-Based Professional (FBP)” as the vision for human resources of the twenty-first century. We felt that, in order to realize this human resource training, we needed some kind of method to employ industry-academia collaborations, and drew up the diagram in figure 4 in planning the curriculum of the “Advanced Course of Business Management.” Normally, when people are asked about curriculum, they would imagine the subjects listed on the left pillar of this diagram. It is true that classroom work is important and students want to know what can be learnt in universities and graduate schools; but opening a “further education school” for the general public is not a mission for the university. The true value of education can only be measured by the vision for human resource development. How much value is there in a skill or knowledge, which is merely ornamental and will soon be out-dated?

So, for more concrete measures, we opened a “hole” or a “window” at the center of this diagram and placed fieldwork and society-collaborating internship programs in the middle; and then at its foundation, we placed the “Field-Based Research Methods (FBRM),” as basic subjects to be taught by all the teachers of the Business Management Group. In their first year of studies, the students of the “Advanced Management Program” must take these basic subjects to train themselves in the basic maneuvers of the Field-Based Research. The basic subjects will include:

- (1) interview assignments : taking notes of the interviews with managers and proprietors
- (2) factory visiting assignments : visiting factories and taking notes
- (3) case developments : analyzing interviews, company's internal/external documents, related dissertations, and financial data
- (4) historical documents reading : contrasting company history and biographies with other documented historical facts
- (5) basic statistics assignments : making recommendations through consulting methods using the results of the analysis and assignments of basic statistic processing, which is conducted by inquiry sheets and statistic

●Figure 4. The large-boned curriculum to develop the ability to find the problems in the field



packages such as SAS and SPSS etc.

One of the main characteristics of this educational policy is that the education of such basic subjects will be provided through OJT (On-the-Job Training). In other words, for the purpose of transferring the teacher's know-how to the undergraduate and graduate students we need a working field for OJT, namely a framework for industry-academia collaborations.

The companies taking in the university students, whether using the society collaborating internships, the industry-academia cooperative research NPOs, or the Business Model Development Division, are not collaborating with the research and education of universities just for the fun of it. They expect some sort of positive effect in return for their cooperation. For example, if an intern with a high professional education fails to produce a business plan in the Venture Development Program as shown in figure 3, the incubators and venture capitals will keep their distances, and the system will not function properly as an organization. This effect is what I call the “human capital injection,” and what makes the “industry-academia collaboration in the field of liberal arts” a liberal arts maneuver is the usage of the university's vantage point to its fullest in establishing these systems and the training of personnel that have necessary managerial skills.

In order to train the “large-boned” personnel that are needed for industry and society, the Business Management Group intends to upgrade these programs into business management studies and to

improve on its organizational system for more effective collaborations. And in this direction we see that there is a plan gradually forming to make a new graduate school based on “industry-academia collaborations in the field of liberal arts,” and under a concept, which is completely different from the ones you see in the usual business schools.

*1 The fact that Kawaijuku chose, from the many academic societies, the Academic Association for Organizational Science gives us an idea how the power distribution is situated in the current academic world. The Academic Association for Organizational Science handles not only the so-called Organizational Theory but also all kinds of “business management studies” e.g. the Theory of Strategy and the Theory of Innovation.

*2 The categories are divided into three universities based on the student's current school or the alma mater if recently graduated. The “number of reports from graduate students” denotes the accumulated total at the Graduate Students' Session of the National Conference of Academic Association for Organizational Science for reports on research studies that were held from 1996-2001. The “number of accepted referee papers” is from the statistics in Organizational Science, the Association's periodical, after the new referee system was adopted, which was from 1998's No.3, vol. 31 to the most recent 2001's No.2, vol.35. The “number of awards won in the monograph category” shows the statistics of the Organizational Science after the new referee system was adopted up to 2001. The “number of awards won in the book category” is the statistics since the Association's foundation in 1985 to 2001, which is not so accurate because the winners were of old age and could only be categorized by their alma maters.

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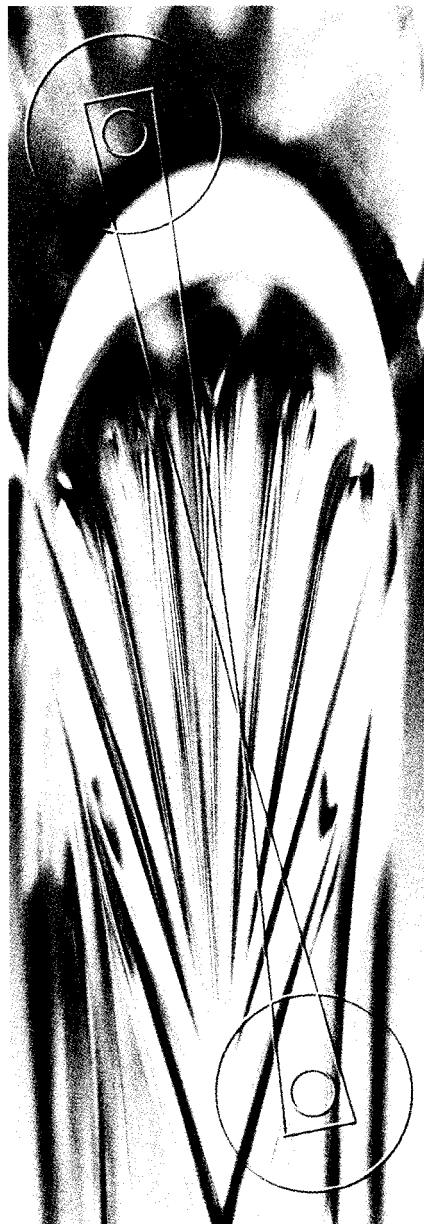
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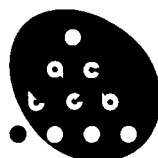
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