THE CORPORATE SPONSORS: EXPECTATIONS AND REALITIES

Reasons for participating

Corporate sponsors participate in the JSTP internship program for several reasons. First, the program provides opportunities to learn about the Japanese research environment. For example, discussions with interns have given Motorola insights about Japan as a source and user of technology, according to David Metz, formerly the Motorola Corporate Director of University Relations. Sponsors see the program as a way for American engineers and scientists to learn about research and manufacturing processes and then communicate this to corporate management. "Working at IBM-Japan helps Americans understand how the Japanese operate, for example, how they obtain high quality control," said James McGroddy, Vice-President at IBM's General Technology Division, White Plains, NY. In addition, these interns build networks in their specialized areas.

Corporate sponsors also valued other JSTP program activities, such as seminars on Japanese culture and technology at MIT and at company sites. Leonard Morgan, Technical Resources General Manager at General Electric's Bridgeport, CT, Corporate Engineering and Manufacturing Group, said that ten years ago the company's concern about the inroads made by Japanese manufacturers led it to start a program called "Impact," for manufacturing managers. GE managers toured Japanese factories and discussed approaches to managing people and technology - a process which got GE interested in the MIT program. MIT-run workshops have helped prepare GE people going to Japan, and the JSTP research reports are disseminated throughout the company. Morgan remarked that the MIT program had "fully met expectations as an added source of information on Japan."

Hiring of interns

Program Director Richard Samuels emphasized that MIT does not, and will not, ask U.S. companies to sponsor specific individuals. "We keep an arm's-length relationship with the [Japanese] host companies. If an intern is in a private corporate Japanese lab, contacts between U.S. firms and the intern are not encouraged during the intern's work in Japan." Samuels noted that contacts with U.S. firms are encouraged if the intern is at a Japanese government or university lab. It is important for the program and for future interns that MIT remain a neutral actor, serving only as a broker between Japanese and American industry.

Information about returnees is made available to the corporate sponsors, who can hire the interns upon completion of their project. Of the 50-60 returned interns, 8-10 have been hired by the corporate sponsors. "IBM has tried to hire interns, but without success," said James McGroddy. General Electric has hired three interns. Motorola has made several offers, but employs only one program participant, who is now working in Scotland. Teradyne and Proctor and Gamble have hired one each.

There are several reasons for the low hiring rate. The program is still new and many of the interns returning from Japan go back to school for graduate work, some entering law

3

or business schools. These interns have not yet entered the job market. General Electric's Morgan and IBM's McGroddy remarked that some interns want to go back to Japan to work which presents problems. McGroddy said that it now costs up to **$500,000** a year to maintain an American IBM employee in Japan at **U.S.** living standards, and that it is IBM policy to so maintain its U.S. employees in Japan. Moreover, McGroddy stressed that new employees have to work in the United States initially, not only to absorb IBM's own corporate culture, but also to show they can perform technically. He implied that speaking Japanese and having Japanese research experience are not significant assets in the intern's first job, though these skills could be useful afterwards. Other corporate sponsors agreed that interns have to "get their heads down" and show they can produce in the United States first. Most of the MIT interns are interested in research but many only have a B.S. , which does not meet usual hiring requirements for researchers in U.S. corporations.

One corporate sponsor described a successful case of intern employment. General Electric hired an intern, Gontran Kenwood, who worked at Hitachi on a product that GE licenses from the Japanese firm. Larry Morgan stressed that GE pays for and abides by the terms of its license, but added that "it is very useful for GE to have someone who has spent time working on the same product at another firm, since engineers never write everything down."　Kenwood was brought directly into GE's corporate staff - an unusual step. His ability to speak Japanese has been helpful to General Electric in their negotiations with Japanese partners, especially Hitachi where his network with former colleagues has been very useful to both firms.

In most cases, the corporate sponsors do not differentiate between the interns and other new graduates of MIT science or engineering programs in their hiring policies. Interns are expected to fit into existing corporate behavior patterns and reward structures. Although Motorola's David Metz felt that the MIT interns and others like them would emerge as corporate leaders in twenty-five years, little evidence was given that the corporate sponsors were taking steps now to use and develop the Japanese skills and experience of the program's engineers and scientists.

Comparing American and Japanese practice

The corporate sponsors agreed that Japanese industry had progressed rapidly -- without necessarily conceding that their own companies had fallen behind. Thus, while the corporate sponsors praised the continuous workforce training (including English language instruction) in larger Japanese firms, they also noted the significant effort their own companies were now putting into training. Motorola's David Metz said his company managers spend about 1.5 percent of their budgets on ongoing employee training. But this level of investment in training is still below Japan's, Metz said, which emphasizes training young professionals by rotating them through a series of jobs in their first 8-10 years with a company.

One area where almost all of the sponsors saw problems was training mid-career engineers and scientists in Japanese and offering them work experience in Japan. General Electric's Morgan said that mid-career people can spend time in Japan if they want

to, but "many feel that it will do damage to their careers." The problem, observed David Metz of Motorola is that "success is defined as becoming the head of a division or business, which means staying on the job. Moreover, managers do not see it as being in their own interest to let people go, particularly if they are good people." Robert Gonzalez, also from Motorola added that he was skeptical that mid-career people would be able to make the commitment to language training.

A key area in U.S.-East Asian competition is manufacturing technology. McGroddy said that Japanese manufacturing facilities are organized differently than in the United States. "In Japan, things are done in manufacturing plants which would be seen as development in the United States and which would take place in labs." Corporate sponsors also compared the United States to other East Asian countries, specifically Korea and Taiwan. "The things to be learned from these other countries are not about technology, where the U.S. is still the leader - especially in design. The competition is in manufacturing," McGroddy said.