

Texas Instruments: Strategies To Sell Semiconductors

By Toshio Iwasaki

The Japanese semiconductor industry is searching for a way out of its slump as economic frictions continue between Japan and the United States. Texas Instruments Japan, wholly owned by leading U.S. semiconductor maker Texas Instruments, has plants in Oita, Saitama, Shizuoka and Ibaraki Prefectures. TI Japan has grown rapidly, eclipsing some of Japan's largest producers. Chairman Hideo Yoshizaki has led the company for the past 15 years. Recently, he shared his views on the semiconductor market and economic issues with the *Journal of Japanese Trade & Industry*.

Q: *It's 19 years since Texas Instruments Japan was established. What are some of the things that stick in your mind about the company's efforts to penetrate the Japanese market?*

A: TI Japan was incorporated back in 1968. But we started doing business here, in the form of Texas Instruments Asia, Ltd., a trading company, even earlier, in 1964. We set up a Japanese subsidiary because we realized it would be impossible to begin local production without one. But we ran into many problems when we tried to get into the manufacturing business.

At the time it was very difficult for a foreign company to start manufacturing in Japan. I understand our founders had to negotiate very hard with the Japanese government. I joined TI Japan in 1972, and as far as I am concerned, the deepest impressions I have are of the bad times rather than the good. I'm talking about our plan immediately after the 1973 oil crisis to build a large plant in Hiji, Oita Prefecture. We had a lot of difficulty dealing with local authorities and organizations because TI wanted to site the plant in a scenic location.

Q: *It sounds odd to choose a scenic place to build an industrial plant. Why did TI select such a place?*

A: We talked to some prefectural governors and other local government of-



Hideo Yoshizaki, chairman of Texas Instruments Japan

ficials who were interested in offering industrial sites to foreign businesses. When we told them that we wanted to build our plant in a beautiful location, they all seemed astonished. The fact is, TI has a corporate culture of its own, something that may well be called TI culture. The company wants its employees to work to the best of their ability in a good environment. The plants in Nice (France), Italy and West Germany, for example, are all surrounded by beautiful landscape.

Strong corporate identity

Q: *Judging from the way TI goes about selecting plant sites, it seems to me that the company must have a remarkably strong corporate identity.*

A: That's correct. TI now has a number of alliances with other companies. But at the time TI launched into Japan, it maintained the principle of not forming joint ventures. So we encountered various obstacles. But we succeeded with our wholly owned subsidiary because we held basic patents on semiconductors; Japanese makers could not produce chips without using our patents. So TI had its way, but we made headlines in Japanese dailies. One journal described us as a "Texas cowboy barging into Japan with two pistols at his side."

Q: *Did the "gap" between this Texas style of management and traditional Japanese feelings cause any problems when TI started producing chips here?*

A: No, it didn't. The start of production created new jobs for local people.

In the case of Japanese companies, employees in Tokyo are often better paid than those in provincial areas. At TI there is no such disparity. People working at the Hiji plant receive about the same pay as their colleagues elsewhere. In Hiji, however, we did get some complaints from local shop owners, who claimed their female employees were quitting to make more money at TI Japan.

We also had a request from the local authorities to build a dormitory for female workers from other towns. We turned that down because it is a policy of TI not to build such facilities. We feel it is better to put more money into production than to invest in ancillary facilities. I told local leaders at the time that townspeople could make money giving the women board and lodging.

After a few years, things changed in favor of our employment policy. They started asking us to hire more local people. I think problems between a foreign firm and the local community can be solved amicably through direct and frank talks.

True, some of our business practices do not conform with traditional Japanese customs. Take, for example, our practice of settling all transactions in cash instead of using promissory notes. Our contract terms are also more detailed than those in Japanese contracts. Yet despite these differences, our Japanese clients have the magnanimity to keep an open mind. In general, they accept the way we do business.

Q: *How has TI Japan done?*

A: It's hard to give precise figures because of the way business is done by our head office and our overseas subsidiaries. Discounting possible duplications, TI Japan sales peaked at ¥134.7 billion in 1984 and leveled off to ¥102.4 billion in 1986.

Consolidated sales for the TI group reached \$4,925 million in 1985 and remained almost flat at \$4,974 million in 1986. TI Japan accounted for nearly 14% of consolidated sales in 1986.

If you look just at sales, it's obvious

we have been hit by the slump in the semiconductor industry. Even so, TI has continued to expand R&D spending, which exceeded \$400 million in 1986, or nearly double what it was in 1982. I am confident this steady increase in R&D will bear fruit in the form of improved business performance.

Q: *It can't have been easy achieving such growth. It's as good as the performance of Japanese makers.*

A: Initially we enjoyed a kind of monopoly because of our patents. So in a way it was easy. But it's product quality that counts most here. Some say Japanese customers are too sensitive and demanding about quality. Nonetheless, we tried hard to improve quality, and in 1985 we had the honor of receiving the Deming Prize, which is awarded to manufacturing plants that excel in quality control—in our case, the Hiji plant. If a foreign firm wants to do business in Japan, its products have to be of higher quality than those of its Japanese competitors. That is really a difficult job which some third parties may find hard to understand.

Inadequate investigation

Q: *The semiconductor industry is in a recession, and on top of that, exports from Japan to the United States have become a major trade issue. How would you deal with this situation?*

A: I was with the Ministry of International Trade and Industry before I joined TI Japan. I handled various trade problems, including the textile negotiations between Japan and the United States. From my experience at MITI, I know that all such problems—textiles, steel and autos—were really trilateral problems between the United States, Japan and Europe. In the case of semiconductors, however, the European share is extremely small, and the problem is essentially bilateral between Japan and the United States. When all three parties were involved, it was relatively easy to control the problems involved. But it is harder when there are only Japan and America.

I also feel that the problems in bilateral semiconductor trade should have been investigated more carefully. The biggest difference between Japanese and American chipmakers is that Japanese makers produce other products as well. Chip sales account for only 25–30% at most in Japanese companies. In contrast, most U.S. makers, with a few exceptions like Texas Instruments, are small companies specializing in semiconductors. The biggest problem of all, however, may have

been that Japanese makers expanded production too fast.

Q: *Thus softening the market and triggering a slump in the industry?*

A: Yes. The slump exposed the differences between the Japanese and American semiconductor industries. Price drops hit specialized chipmakers in the United States full on, but Japanese makers could make up their losses with profits from sales of other products. I think that's why Japanese and American behavior patterns have been so different.

Japanese makers are now trying to change their approach. They are putting less emphasis on market share and giving greater consideration to costs. In fact, MITI is encouraging them to take costs into account when selling their chips.

Q: *How has the appreciation of the yen affected business?*

A: TI is in a better position than Japanese makers, because it has plants around the world. We phased out assembly in the United States starting in the early 1960s, and moved production to low-wage countries like Singapore and Malaysia. If production in Japan does not pay off, it could be moved to a low-cost country—Singapore, for example. This would be considered in the broad context of TI's operations as a whole. So it's relatively easy for us to cope with the strong yen.

Q: *But as far as TI Japan is concerned, doesn't a strong yen hurt performance?*

A: If assembly doesn't pay off, we work harder on R&D. Normally we build our plants close to our customers, but that's not always possible. What we are trying to do is supply products from TI's worldwide production network that best meet customer needs.

The 'market-in' strategy

Q: *TI is a world enterprise with subsidiaries in many countries. What is the company's global strategy?*

A: We emphasize the "market-in" approach, not the "product-out" approach. In other words, we make products only after confirming what customers want. It's not our policy to mass-produce goods without listening carefully to customers, and then have them choose the products they like. It's necessary to find out what the customers have in mind and what kind of products they want first. This means learning about our clients' business so we can pinpoint their needs. It's important to train employees who have such knowledge.

Q: *In the case of TI Japan, how much production is exported? Are foreign sales important?*



Texas Instruments' Hiji plant. The company went through difficult negotiations with local authorities before getting permission to site it in this scenic location.

A: Normally we don't export much, because we have plants in various regions of the world to meet the different needs of customers there. When total demand for a given product is small, it must be produced at a single plant and then exported. Otherwise it doesn't pay. So if an overseas plant produces a product that best meets the needs of our customers here in Japan, that particular product may be imported. Of course, circumstances do change.

Q: *Considering the problem of production costs, it must be hard to decide whether TI Japan should build new facilities here or rely on overseas plants.*

A: It is. We have some idle plots of land at our Hiji site. We've also acquired land in Tsukuba for research and production facilities. But we have no immediate plans to build them. We'll have to wait and see.

As for overseas production, I expect production-sharing among companies of various countries will gain greater acceptance in the future. For example, if demand for microprocessors is so large that we can't meet all orders for memory chips, we can ask a Korean company to make some of these chips and sell them under our own brand name.

Q: *TI Japan has a long history, and is an outstanding example of a foreign firm that has succeeded in this country. Do you have any advice to give other foreign enterprises planning to expand into Japan.*

A: It's difficult to generalize because of the diversity of businesses involved. But if a company is interested in mass production, it has no alternative but to go the Japanese way. This is because this type of production requires a great many people. It must also recruit engineers. The most important step is to hire a talented Japanese manager during the start-up. These days, it is getting easier to change jobs in Japan. When TI Japan started operations here, it was hard to hire Japanese managers away from their companies. But there were still a few people with the courage to try their luck with the world's No. 1 semiconductor maker. It is those people who laid the foundations of TI Japan as it exists today. ●