CHAPTER 12: COMPETING WITH JAPANESE SUPPLIERS*

In the next decade, Japanese companies will be increasingly influential in many sectors of the computer market. It is therefore important to understand the general behaviour of Japanese electronic companies, and the implications of their behaviour for Western computer suppliers. This chapter considers how product design, production, marketing, service, administration and general management are combined by some Japanese companies into a strategy which some Western companies find difficult to deal with.

THE GENERAL SITUATION

Many Western companies have problems in dealing with Japanese competition. In early 1983, the EEC asked Japan to restrain her exports of video tape recorders (VTRs), light vans, fork-lift trucks, cars, motorcycles, quartz watches, hi-fi, machine tools, colour TV tubes, and TV sets. Following closely upon the ‘Poitiers episode’, in which France dictated that all Japanese VTR imports to France should pass via Poitiers, this request showed the depth of feeling in Europe and the extent of the Japanese impact. In products where European industry was not traditionally strong (for instance, facsimile, calculators, SLR cameras, and plain paper copiers), Japanese producers already dominated the market, with shares of placements of 70 per cent plus. In other products (such as electronic typewriters, telephone sets, small telephone exchanges, floppy disc drives, computer printers, mainframe and personal computers, integrated circuits), a similar process was at work.

The request by the EEC smacked of desperation. The message to Japan seemed to be to restrain exports of anything they produced and marketed efficiently. Why did a mighty industrial bloc have to make such a request of a state which not so long before had the reputation of producing low quality goods?

The conventional story

Conventional explanations of the problem are often in terms of technology and culture. After years of importing Western technology, and learning the best technical (research, development and production) management practices from the West (and discarding the worst), Japan’s technical act came together in the 1970s, to good effect. The industrial development strategies of the Japanese Ministry for International Trade and Industry (MITI) involve the formation of consortia to develop key technologies, often backed by government investment. This is supported by the large groupings of companies (Zaibatsu), using an extensive worldwide technical and commercial intelligence network to provide the information needed to formulate and implement strategy. In addition, cross-licensing and other forms of co-operation between otherwise competing companies is common. These and other factors,

* This chapter is a revised and condensed version of a paper by Merlin Stone that appeared in the Journal of Long Range Planning, April, 1984.

M. Stone et al., How to Market Computers and Office Systems
© Merlin Stone and Hamish Macarthur 1984

237
combined with a high level of technical literacy, ensure that the technical require-
ments for worldwide success are present. But this is only part of the story.

The real story is one of manufacturing and marketing strategy, working from a firm
technological base.

Without the three working together in an integrated fashion, Japan’s success story
would have been fiction. Until Western suppliers understand the nature of this
three-pronged attack, their capacity to deal with it will be limited. This chapter
concentrates on manufacturing and marketing strategies, and on their integration
with technological strategy. But first, we need to introduce the term ‘mechatronics’,
which, in the English language Japanese press represents part of that story.

Definition of ‘mechatronics’

‘Mechatronics’ refers to certain volume-produced engineering products. They range
from those which are principally electronic (computers, facsimile, telephone sets,
small telephone exchanges, calculators, digital watches, hi-fi, video tape recorders) to
those which are principally mechanical (photocopiers, cameras, typewriters, printers,
machine tools). The term also applies to some components used in the manufacture of
or connection between such items (integrated circuits, optical fibre cable). Mechatro-
nic markets are durable goods markets, and display classic features of such markets.
Some features (product design and cost, feasibility of high volume production) are
affected by rapid progress in electronics. Western companies may find it hard to deal
with Japanese competition here partly because of an apparently strong Japanese
consensus on how to handle such markets. The Japanese view of manufacturing and
marketing strategies for success in these markets gives Japanese industries (but not
necessarily all Japanese firms – often competing more fiercely with each other than
with Western firms) an advantage over Western suppliers.

The Behaviour of Mechatronic Markets

The behaviour of a mechatronic market is describable by a simple paradigm, varying
slightly between products. This paradigm consists of a cycle, which is a combination of
some or all of the following: a diffusion process; several product life cycles; recurring
product, component and production innovation; competitive entry; after-market
development; distribution channel evolution; joint-venture development, production
or marketing; and overseas assembly. The variety of processes may be responsible for
the difficulty some Western firms have in dealing with mechatronic markets. The cycle
has a number of phases. These are not necessarily sequential. Some phases overlap in
time, or may encompass other phases. The phases are as follows:

*Phase 1:* Recognition of opportunity
*Phase 2:* Product design to meet the gap
*Phase 3:* Establishing production capacity to seize the opportunity
*Phase 4:* Rapid production build-up
*Phase 5:* Marketing high output volumes
*Phase 6:* Developing the after-market
*Phase 7:* Overseas manufacture
*Phase 8:* Further market development and product upgrades
*Phase 9:* Moving on to the next market