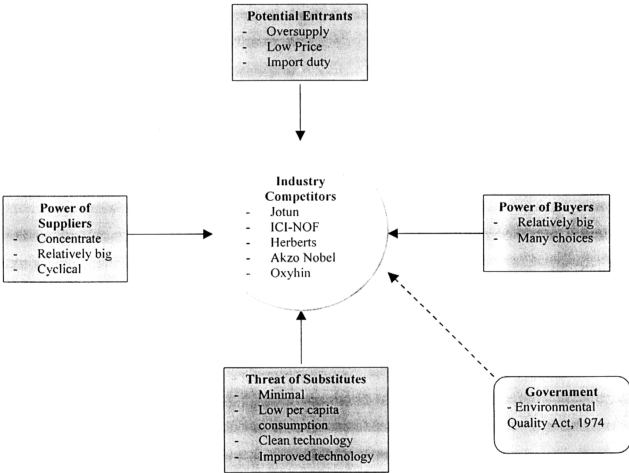


Chapter 3

Competitive Analysis

In this chapter, we shall use Michael Porter's Five Forces Model (Porter,1980) to examine the competitive position of the various stakeholders in the powder coating industry in Malaysia. In addition, the power of government through its regulations is also discussed.

Figure 3-1: Forces Driving Industrial Competition in the Powder Coating Industry



Source: Adaptation from Porter's Five-Forces Model

3.1 Threat of New Entrants

The powder coating industry generally has a low entry/exit cost and can be operated profitably from relatively small facilities serving a niche market. In Malaysia this has led to overcapacity in manufacturing which in turn has driven down price, particularly for commodity products.

Looking at the present economic situation, all the manufacturers have more capacity than market demand. There is no reason to add new powder coating capacity into the industry. Even before the economic slow down, Nippon Paints Malaysia had discarded the idea of setting up of a powder coating plant due to overcapacity in the market. More importantly, the low profitability of the industry discourages any potential entrant to compete with existing players in the market.

In ASEAN, the majority of the manufacturers originated from Europe. The American companies on the other hand concentrated in China. For the short term, it is unlikely for American companies to enter into the Malaysian market as it is overcrowded. The China powder coating market is about ten times bigger than Malaysia and with the China GDP still growing, it is more likely for them to expand their business in China than in Malaysia. However in the longer term, we cannot rule out possibility of the American companies shifting their operations into ASEAN region especially Malaysia and Thailand. In any case, the high possibility is through acquisitions rather than setting up a new plant as the oversupply situation provides the major stumbling block.

Nevertheless, we should not ignore the threat from regional players especially from Thailand. Currently they sell the powder coating to Malaysia through agents. The small market share they have now do not warrant establishing a manufacturing plant. In the longer term, especially after year 2003 (AFTA), when tariff protection of 10% is lifted, the Thai manufacturers may seize the opportunity to intensify the sales efforts, to gain more market share at the expense of local manufacturers.

In view of the current situation in which powder coating manufacturers are well established and with excess capacity, it is reasonable to assume that the threat from new entrant is at its minimal level.

3.2 Threat of Substitute Products

Powder coating is the fastest growing coating system in the world. The growth rate is estimated at more than 10% in comparison with near stagnancy of overall liquid paint consumption in 1996. The trend of coating system is now towards "clean technologies" which is consistent with the rising demands of end-users and government regulations. The "clean technologies" which include powder coating is predicted to penetrate 50% of total paints market in Europe by the middle of the first decade of the next century.

A study conducted by well-known Irfab Chemical Consultant (Busato,1998) estimated a 2.3% of powder coating penetration in paint globally in 1996. This means that powder coatings still have more room for growth in the world paints arena.

Nevertheless, it should remembered that the popularity of powder coating is not solely based on environmental factors. It must also be based on improved performance characteristic and cost benefits. Recent breakthrough in technology enables heat-sensitive substrates to be coated by powder coating. Improved technologies also prompted German automaker BMW to use clear powders as a topcoat on actual production model. Three big car makers in US also tested clearcoated whole car bodies as part of USCAR Low-Emissions Paint Consortium Project.

In 1998, Malaysia's per capita consumption of powder coating was about 0.3kg. In comparison with the developed countries like United States and Germany, the consumption per capita is ranging from 0.48kg to 0.75kg. Powder coating industry in Malaysia still has room to grow to catch up with developed countries. It can be seen that powder-coating is poised to be in center stage of coating system and the threat for substitution looks remote in foreseeable future.

3.3 Bargaining Power of Supplier

Currently, most of the raw materials for powder coating are sourced from overseas. The suppliers generally are giant multinational companies like Du Pont, Dow Chemical and BASF which have stronger financial strength and size compared to powder coating manufacturers. Due to small scale of operation, powder coating manufacturers are in weaker position to bargain with suppliers than the liquid paints manufacturers over same common raw materials. On the other hand, specific raw materials for powder coating industry are only produced by handful of manufacturers. For instance, the epoxy resin available in Malaysia are confined to three sources only. It is not surprising that the raw materials suppliers are able to control the price.

The power of suppliers was evident during the currency crisis. The suppliers did not hesitate to switch the price based on foreign denominated currency to reflect the prevalent international price. The suppliers stood their ground despite strong protest from the manufacturers. In addition, the cyclical nature of raw materials price which depend on demand and supply also caused the unstable raw materials cost. In summary, the bargaining power of suppliers are relatively stronger than the powder coating manufacturers.

3.4 Bargaining Power of Buyers

In Malaysia, there is a total of 11,700 tonnes of production capacity but the demand is estimated at 6,500 tonnes. The contraction of construction industry in 1998 depressed the demands of architectural coatings and of related industries like light fittings, air conditioners and cable support systems. Electrical appliances sector neither fared well during this period. The appliance maker like Matsushita saw their demand dropped by 35%. The stiff competition in the overseas market from the crisis-stricken countries like South Korea and Thailand caused a big drop in profit. Instead of allowing the price of powder coating to increase, they requested for price reduction in order to enable them to compete in the international market.

The same scenario happened to other sectors, buyers were asking for price support for them to tide over the difficult period. However, in the growing industry like furniture, powder coating players slashed the price in order to have slice of market share. In short, the oversupply situation increases the bargaining power of buyer.

3.5 Rivalry Among Existing Firms

Before the currency crisis, the high growth rate of powder coatings industry had attracted increasing number of players to Malaysia. The oversupply situation caused intense rivalry among the existing firms. The consequence was the lose-lose situation for all the players. The Return on Sales for market leader like Jotun dropped from 13 - 14% in 1992-1993 to about 1.7-7% in recent years. For new players like Herberts, it has been making losses since its set up in 1995.

Price of powder coating has been deteriorating since 1993 when ambitious Akzo Nobel aggressively expanded market share. The situation worsen when another aggressive player Herberts entered the market in 1995. The price of white color for example, which was sold at RM11.50/kg in 1990 had drifted down to RM10/kg in 1993 and further deteriorated to RM9/kg in 1999 despite tremendous increase in raw material cost. New entrants adopted price-cutting strategy across all market segments in order to fill up their capacity. The existing players retaliated and caused overall price to drop further.

However, the economic recovery in 1999 has eased the rivalry. The positive growth of GDP at 4.1% in second Quarter and strong rebound of manufacturing sector, which registered 25% growth in Sep 1999 compared with corresponding month in 1998, had helped boost sales volume. Some manufacturers like Jotun and Akzo Nobel also took advantage of weak Ringgit to export to countries like China and Vietnam

3.6 Government Regulations

In recent years, the Malaysian public and government has emphasized a lot towards safety, health and environment especially in work place. Traditional liquid paints which emit volatile organic compounds (VOC) caused great concerns because of their hazards towards human health and environment. Besides that, the high amounts of wastage generated by liquid paints also pose danger towards environment.

In the promotion of environmentally sound and sustainable development, Malaysia has enacted Environmental Quality Act, 1974. The regulations and orders enforced under this act regulate the set up of manufacturing plant including the liquid paint factory. The Environmental Quality (Scheduled Wastes) Regulation 1989 and Environmental Quality (Prescribed Premises) (Scheduled Wastes Treatment and Disposal Facilities) Order 1989 further require the liquid paint manufacturers and the users to treat and dispose the wastes accordingly.

The increasingly stringent environmental laws caused the manufacturers as well as the customers to incur extra costs. This has pushed both parties to look for alternative coating system that are environmental friendly. As a 100-percent solids material, powder coating contains no solvents. With no solvent involved in the mixing, application or clean-up in the application, the need for venting, filtering and solvent-recovery systems required to control VOC is eliminated. In addition, since almost all powder coating is classified as non-hazardous, their use eliminates or minimizes the problems and expenses associated with the disposal of hazardous waste.

The environmental and health factors will continue to drive the growth of powder coating industry as Malaysia endeavor to achieve the status of developed country. It is very positive that the outlook for powder coating industry is bright as the government is seriously enforcing the environment acts diligently.