

Evidence of manufacturing strategies in Indian industry: a survey

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Abstract

This paper presents findings of an extensive survey of Indian manufacturing companies. The survey encompassed four sectors: automobile, electronics, machinery, and process industry. Various manufacturing strategy issues (such as competitive priorities, order winners, and activities of improvement) have been identified and assessed in Indian context. Sector wise comparison of competitive priorities, order winners, and activities of improvement (advanced manufacturing technology, integrated information systems, and advanced management systems) is provided. Our results showed that most of the Indian companies are still emphasizing on quality; however, automobile sector has set to compete globally with high innovation rate, faster new product development, and continuous improvement. Manufacturing competence index is also computed for each sector.

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Keywords: Manufacturing strategy; Competitive priorities; Order qualifiers; Order winners; Activities of improvement

1. Introduction

Manufacturing companies are under increasingly diverse and mounting pressures due to more sophisticated markets, changing customer choice and global competition. The market for products is becoming increasingly international. In this international marketplace, companies find themselves having to adopt international standards. Community groups and environmentalists are bringing increased pressure to bear on manufacturers to improve the reliability and safety of their

products and manufacturing processes. In such a competitive scenario companies have to search for new processes, new materials, new vendors, new shop floor design, and new channels to deliver their products and services at competitive price. Indian companies have quite often followed an opportunistic approach to growth as opposed to a capability driven approach, and paid very little strategic attention to their shop floors in the last few decades (Chandra and Sastry, 1998). This was reflected in poor quality of products, little awareness about competitiveness, little integration of various functions such as marketing, sales, production, etc. A comparative analysis of selected economic indicators of major Asian countries (Table 1) reveals that manufacturing value in

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Table 1
Select economic indicators of major Asian countries

Indicator	India	Singapore	Hong Kong	Korea	Malaysia	Thailand	Indonesia	China
Per capita gross national product (GNP) (US \$)	387	31900	26400	9511	4287	2450	981	738
Gross domestic product (GDP) (billion US \$)	360	96.3	N/A	442.5	97.5	157.3	214.6	825.0
Manufacturing (% of GDP)	18	N/A	N/A	N/A	33	29	N/A	37
Per capita R&D expenditure (US \$)	2.39	67.90	N/A	N/A	N/A	N/A	0.87	2.54
Crude oil production (million tonnes)	34.0	N/A	N/A	N/A	N/A	N/A	73.2	160.1
Export (billion US \$)	35	119	180	134	72	54	52	183
Foreign exchange reserve (billion US \$)	27	69	89	49	21	27	18	144
Overall world competitiveness ranking out of 59 countries as per world competitiveness report 1999	52	2	3	22	16	30	37	32

Source: Statistical outline of India (1999–2000).

India is about 18% of Gross Domestic Product (GDP). India has comparatively low per capita Gross National Product (GNP) and exports, i.e. US \$387 and US \$35 billion, respectively ([Statistical outline of India, 1999–2000](#)).

Between the 1950s and the 1990s, India's industrial development policy was characterized by excessive regulation. Initially set up to avoid over capacity in a capital scarce economy, it spawned a maze of regulations governing product, capacity, technology and foreign exchange availability. In the late 1980s, inflows of foreign technology and equity were permitted and manufacturing capacity constraints lifted. The gradual opening of the Indian economy resulted in the entry of foreign competitors and expanded production by domestic manufacturers. By the 1990s, the Indian economy was undergoing structural change and imports were largely unregulated ([Upadhyay and Kanavi, 1999](#)).

Since the introduction of reforms in 1991, Indian firms are facing a very different competitive scenario compared to the past. The abolition of the license regime meant the end of protection and control measures. Manufacturing in India is at a critical juncture. The Indian perspective on manufacturing is characterized as a support activity for marketing and finance and invited little top management attention. Most of firms are still very far from world class practices. Meanwhile international competitors are continuously working on improving manufacturing, bringing in new products and making manufacturing more proactive and responsive ([Chandra and Sastry, 1998](#)). As a result of this, Indian industry is facing competition both from imports and from multinational companies in the domestic markets. The new competition is in terms of reduced cost; improved quality, products with higher performance, a wider range of products and better service, all delivered simultaneously. [Mohanty \(1995\)](#) has elaborated on the corporate–manufacturing relationship in the contemporary context of global competition. He has also outlined a need for improvements in corporate learning and development of effective methods for managing manufacturing function from a strategic perspective.

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