The Indian Machine Tool Industry: A Case Study

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Abstract
In an ever more rising economy, consumerism and competitive environment, Marketers are looking to expand their portfolios. The Information technology has revolutionized the business environment and has changed economies, organizational, social and business structure.

The present case research paper puts forth a study on one of the major equipment and machinery manufacturing company. This company is although a leader in its product category but recently facing a setback due to new Japanese entrant in the market, offering similar but better technology products. This case represents a global competitive environment situation and describes a situation in which the global leader is entering into the domain of domestic leader. The majority of the Indian firms are in to the business with traditional approach. The study emphasizes on various aspects of business management including Marketing, Production, Human resources development, Research and development, new product development strategic planning, Management information system etc. This unbiased study is a bare observation about how the organization and people working in it evolves. The present study involves a series of events which are quite normal for any Indian company. When the problem comes across how the CEO of the company responds to the situation and how he tries to address the issues is worth observing.

Keywords
Marketing Environment, New Entrant, Product Development, Technology, Market Leader

II. Background
According to J.D. Power & Associates, The Indian industrial markets witnessing a tremendous growth and expected to be double to 3 million by 201. A Study conducted by Professor J. Sutton of the London School of Economics, with the assistance of Mr. G. Doshi (Annexure-1), on behalf of the World Bank, during the period December 1999 to August 2000 draws a very significant conclusion that—“The more important priority in improving performance lies in quality, rather than productivity. Many of the problems in machine quality are of a kind that requires both design improvements and a tight control of production processes. Here, low volumes are a problem, as it is difficult to implement and sustain improvements in production. The wide range of products, the increasing use of technology, automation, lean manufacturing, quality assurance, materials management techniques, economies of scale and superior supply chain management has given customers a real taste of consumerism.

This case study shows how environmental factor specially technology and open market policies makes an opportunity for someone and threat for others in a given point in time. In this case study we keep our self as a bare observer and put realistic problem by asking the questions to the management students. The outcomes of the study will definitely be helpful for the management students to deal with such critical issues in their career. The formulation of strategies mostly depends upon the environmental scanning. The case study is developed in context to India.

The study calls for the management trainees and students to apply their minds to suggest the possible solutions to the issues. On the request of the company stake holders the actual identity of the company is not disclosed.

III. Rationale
• Familiar and enjoyable learning methodology
• Provides a degree of richness to understanding
• Helps explore totally different dimension to understand industrial marketing in dynamic environment
• Encourages critical thinking skills
• Enhance effective decision making

IV. The Case
Mark-Tec Corporation which was established in the year 1994 is a major manufacturer of industrial machineries and tools including CNC machines. Its first manufacturing unit was located in Vadodra. It has a turnover of 120 Cores and employed 375 on roll and equal numbers of off roll employees. The corporation is a market leader with 64% market share at national level. In northern and central India it enjoys around 73% market share. It is operating in a market characterized by few competitors. 8% of its sales revenue is generated from foreign markets. The CNC machines contribute towards 70% of it’s over all revenue. These products are technical in nature and have unique applications. It has enjoyed considerable market preference for its machineries. The company has demand and supply ratio of 1.25:1. Usually there have been more orders than what the company could supply. To meet the growing demand the company established another manufacturing unit at Rajkot in the year 2002.

In 2012 the scenario changed dramatically. Three competitors with foreign technological collaboration marked their entry in the market. Within a span of six months The company started facing problems in marketing its products with normal profit margin.

Mr. Praveen bhai Gandhi the Managing Director and CEO of the company although anticipated increase in foreign trade in machinery and tools(Annexure-2) but after Sensing the likely problem, has decided to attend the annual sales meeting. In the meeting Mr. Devendra the Head of Marketing and sales for the northern region have expressed his serious concerns over their current distributors’ fascination towards the products of newly entered competitor. This competitor is a Japanese giant known for technologically sound products. This Japanese company has a wide market in Europe and Middle East and enjoying a market share of 40% in these regions. Mr. Ashish Yadav the Head of Sales and Marketing of Mark-Tec Corporation also joins the voice of Mr. Devendra. Mr. Yadav presented data demonstrating a sales drop of 4% in the last quarter of 2012. The entire sales team was expressing discomfort and insecurity regarding future course. After the two days meeting looking towards the gravity of the problem, Mr. Gandhi called Mr.Prashant Bajpai (VP, Operations) to hire the services of a seasoned consultant to address the problem. Mr. Bajpai hired the services of Mr. Pankaj Kshirsagar a consultant who had similar assignment abroad before coming back to India. Mr. Pankaj has earlier worked with their Japanese competitor as

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a Head of Marketing and Customer Relationship in Europe. Then later on he had started his own management consultancy in the Scandinavian nations.

Mr. Pankaj had a long discussion with the chief executive about the nature of the problem being faced by the company. The chief executive advised him to meet certain distributor of northern and central region and consult various heads of department of his company to have first hand information. However, he accepted that the company up to some degree fails to keep pace with the technological up gradation in the product line.

Mr. Kumar got briefings from the heads of all the departments. He asked all heads to submit a brief report identify major problem and issues concerning them. The operations Head emphasized that the company lacked an integrated planning and MIS. In absence of such system the company can’t read the pulse of the market. In his opinion this system is highly required to foresee the opportunities and threats and to take the necessary steps. The marketing Head indicated that he needed central organization to provide sales support and generous budget for demonstration team which could be sent to customers to win business. The marketing manager also emphasized that he needed more technically qualified sales team.

The works manager complained about the old machines and equipments used in Manufacturing. Therefore, cost of production was high but without corresponding quality. Competitors have better equipments and machinery. Mark-Tec Corporation never considered replacing and reconditioning its age-old plant. He suggested that the automation is the only answer to this everlasting problem Mr. Abdul Sarafraz (Head, R&D) shown his discomfort over company’s less focus on research and development activities. He stressed on hiring employees having experience and sound track of research. He suggested that we are dealing in technical products and technology is changing very fast and if we do not adapt and upgrade our products then we cannot meet the challenges of modern times. However one scientific officer indicated on one day that the Head did not emphasize on short-term research Projects, which could easily increase production efficiency by at least 15 percent within a very short period without any major capital outlay.

Ms. Deepika Pradhan the Director of Quality assurance department has expressed her grievances about the old equipments in the testing laboratory. One QA engineer told that there is a huge employee turnover in the quality assurance department. He indicated that the reason might be lack of grievances handling procedures he further told that Ms. Deepika is a hard core engineer and often over looks HR related issues of the employees of her department.

The purchase and materials management department Head looks quite satisfied and did not raised any major issue. One trainee in the purchase department told that he observed that the purchase manager is reluctant to switch from the existing vendors and sometimes they end up compromising on quality of material supplied.

The Accounts and administration Head Mr. Mundra who is in his 60’s indicated that he has been working in this company since he was 15 years. The founder of the company Mr. O.P. Gandhi (Father of CEO) did a charity by giving employment to him in this company because he belongs to the same village where Mr. Gandhi used to live. He calls the promoters by the nick name of ‘Bhaiya Ji’. People in the organization told that Mr. Mundra has a say in virtually every affair of all the departments because he pretends to be very loyal and close to the promoters family. Mr. Pankaj (consultant) noticed that the way of working in the accounts and administration is very conservative and the employees are also not professionally qualified with few employees.

The consultant had a word with major distributors from central and north India. The distributors told that they have been associated with the company right from its inception. Some distributors indicated that they started their business of distribution by the motivation and support of Mr. O.P. Gandhi. One distributor Mr.Ramswaroop told that he handed over his business to his two sons who are professionally qualified. The young generation has a different approach of doing the business and they are well updated with the technological changes. They are well informed and want to explore more in order to improve revenues and turn over. They are insisting to get associated with the Japanese company for better response from the market.

Mr. Pankaj (Consultant) prepared a report based on his interactions with Employees and Distributors and discussed with the CEO Mr. Praveen bhai. CEO was highly astonished to know about the employee’s words and felt that he did not ever come to know about these issues earlier.

The consultant was on his toes to know the root cause and address the issue. He has a variety of questions in his mind and would like to have a brain storming session with his team to precipitate the situation. He wants to have a highly professional approach to address the problem.

Questions for Discussions
1. Discuss the nature and characteristics of the problem in this case.
2. Explain how the consultant can formulate an effective strategy to cope up with the high degree of ups and downs in the current business environment.
3. What measures should CEO take to safeguard the interests of the organization at large?
4. The feeling of Marketing Heads reveals only a perceived insecurity or is there really a threat to their sales and revenues?
5. Develop an effective competitive business model which should be adopted by Mark-Tec Corporation to create niche.

Annexure-1

The Indian Machine-Tool Industry (A Report)
The main dimensions studied in respect of productivity and the uses of manpower are:
1. Differences among Indian firms are extremely large. A simple measure of crude labour productivity (no. of machines produced per man-year, corrected for machine size) shows a difference among Indian producers of a factor of more than 6.
2. The best level of crude labour productivity achieved by any Indian producer is somewhat less than half the minimum achieved among foreign producers.
3. The productivity gap between the leading Indian producer and the foreign firms surveyed is not as wide as the gap in wage rates, so that labour costs per machine are lower for the most productive Indian producers than for comparable foreign producers.
4. In respect of the design function, the absolute size of design teams is small in comparison to foreign companies but this largely reflects the smaller scale of the Indian producers.
Findings:
1. The range of productivity across Indian producers is very wide, and the highest level attained in India is not very far below those of some foreign competitors. This implies that benchmarking against best Indian practice may be a good strategy for many firms in the industry.
2. The productivity gap between the leading Indian producer and world class levels is not as wide as the gap in wage rates; labour costs per machine produced are below foreign levels.
3. Only 15% or so of total unit cost consists of in-house wage costs, so even a doubling of productivity would support a price cut of about 7.5%. Such a price advantage can be wiped out by even very small quality failings.
4. An important contributory factor to shortcomings both in productivity and quality lies in the low output volumes of Indian firms.
5. The more important priority in improving performance lies in quality, rather than productivity. Many of the problems in machine quality are of a kind that requires both design improvements and a tight control of production processes. Here, low volumes are a problem, as it is difficult to implement and sustain improvements in production?
6. Recent experience of Foreign (and other foreign) competition has shown that many Indian customers are highly price-sensitive. Cutting prices may solve the volume problem for some individual firms, but the net effect of such developments will lie in a rise in industry concentration (a fall in the number of Indian producers), whether by way of merger, consolidation or exit.
7. While Indian machines enjoy an overall advantage on service-related factors, they under-perform foreign machines in terms of the knowledgability of service personnel. This suggests that efforts should be focused, not on increasing the number of service personnel, but on improvements in the training of service engineers.

Annexure-2

Machine-Tool Industry: An Increased in Trade

The WMTO&C Survey confirms that import and export activities in the past years have regained momentum, as the Importers, Exporters, and Trade Balance tables in the previous three pages show. Eight of the top ten exporting nations increased their 2012 exports compared to 2011.

Japan and Germany continue as the leading exporters of machine tools, with Germany making a 19% increase in exports. Other leaders are Italy, Taiwan, Switzerland, China, South Korea, the U.S., and Spain. American exports grew 11%, following a 20% rise the year before.

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Dr. Harish B. Bapat (Director Academics & and Corporate Communications, Vindhya Group, Indore). He is a dual post-graduate in Management and Law. From the prestigious Devi Ahilya University, Indore (M.P.). He has done full time residential FDP from Indian Institute of Management (Indore). He did his Ph.D. in Management from IMS, DAVV, Indore (M.P.). The topic of his Doctoral research was “A Study of Marketing Practices in Professional Education.” He is currently Director (Academics) & Head (Corporate Communications) at Vindhya Group of Institutes. Prior to joining Vindhya, he taught at various technical and management education institutes. He had also worked as HOD (Management Programs) at Wigan & Leigh College U.K. (Indore Campus). He has a vast teaching experience and his teaching and research interests are in Marketing, Business Law, IPR’s, and Operations Management etc.

He has authored various case studies and research papers on diversified topics. His case study ‘Fresh Revolution’ based on Reliance Fresh has received special mention at IIMC. Another case study developed by him is on Tata’s Nano which was selected for presentation at Welingkar institute of Management, Mumbai. It was among top four case studies selected from all over India. He has conducted several workshops and faculty development programs at various prestigious management Institutes.

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