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Business Strategies for the Indian Cement Industry

A Business Intelligence and Analytical Perspective for the 21st Century

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***Abstract*—Cement is the single most important and profitable product in the building material sector and with the consumption of cement in India to touch 600 million tonnes by the year 2020.-this is truly the California Gold Rush of the new century. With an 8% GDP growth rate, governmental infrastructure augmentation and population expansion, the Indian cement industry is a market of opportunities waiting to be tapped. A direct implication of this sectoral growth is the influx of multinationals like Holcim and Lafarge, which will drive Indian cement companies in the building industry to adapt new business strategies to complement the higher demand and competition. A cogent analytical research on governmental reports, industry data and cement MNC annual reports has been performed. On analysis and scrutiny of the distinct variables involved in this market, this paper investigates the current and future trends in the Indian cement industry and enumerates key business strategies that cement conglomerates will have to adapt to compete in the Indian building materials market.**

Keywords-Cement Indistry;India;Business Strategy;Building Industry;Market Research;

I. INTRODUCTION

With the economic boom in India, the cement industry is experiencing a surge in demand. India has become the second largest producer of Cement in the world after China, as illustrated in Fig.1 with a total capacity of 224 MT (million tones) produced by about 125 large and 300 mini cement plants [1]. In the next decade, with India's GDP growing annually by about 8%, there will be paramount demand of infrastructure, and the Cement industry is expected to increase to 600 MT by 2020.

The Indian cement Industry has shown remarkable growth and has steadily increased production at a high rate since the 4th Five Year plan at around 25-26 MT[2].As the demand for Cement surges, the Indian cement industry will have to enhance capacity of production to compete against the multinationals which are entering the Indian market. Success for a company will also include adapting Business strategies, to compete against the global players.

The growth of this sector can be determined by analyzing industry trends and governmental data. We will look at the business strategies specifically in terms of consolidation, globalization, targeted customer strategies, R&D, corporate governance, innovation and branding.

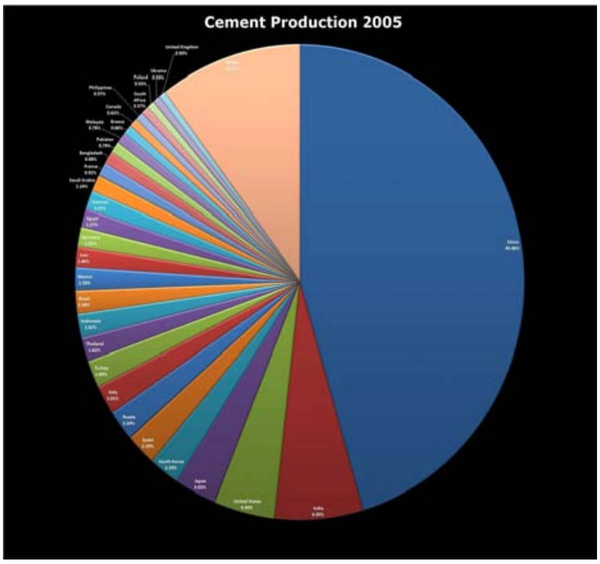

Figure 1. Worldwide Cement Production (Distribution)-2005

In emerging economies, particularly in Asia, demand will increase more significantly. Therefore, expansion will be there in growing economies and this is an important aspect of global strategy. There are three major macro-level overhauls that conglomerates need to integrate which are: -

A. *Vertical integration:*

Most large global players have multi-product businesses in the building materials segment and a key focus is to maintain the strategy of vertically integrating core activities of cement, ready-mixed concrete and sand and gravel. Cement continues to play the leading role.

B. Management focus:

The reorientation of the management style is based on proximity to operating activities, clear goals, consistent implementation and speed. The focus would be on:

- increasing efficiency,
- Cost leadership and growth.

C. Cost Efficiency:

Where it is difficult to develop really unique selling points, cost efficiency is the decisive criterion for competitiveness, adequate sustainable returns and, therefore, the basis for growth. There will always be a balance between increased risks, returns and growth.

II. TRENDS IN THE CEMENT INDUSTRY

As shown in Fig. 2, the world consumption of Cement is expected to increase to about 3560 million tones by 2020. The world's demand for Cement in the future will have developing countries account about 84% of it. India being the 11th largest economy of the world will play a major role in creating demand for Cement. The cement market grew by 10% in 2009-10 owing to the Real Estate boom in the country. The buoyancy in the industry has also been fuelled by the government's increased infrastructural development.

As shown in Table I, since the first five-year plan by the government of India, the demand for Cement has increased to meet the growing infrastructural needs of the country [3]. The 11th five-year plan by the Government of India, involves re-constructing various heritage sites, urban-development and slum-reconstructions apart from developing roads and highways [4]. The Ministry of Road transport and Highways has planned to invest $345 billion in road infrastructure by 2012, which would further accelerate the consumption of cement [5]. With the increase in population, the housing sector, which accounts for almost 50% of the demand for cement, will further push the demand [6]. The metro rail projects in Mumbai, Bangalore and Hyderabad and the expansion phase in Delhi drive cement demand in this segment. Airports modernization across major cities will also expand demand. Projects involving the hosting of the Commonwealth Games in 2010 and similar large-scale sports activities are driving demand.

Cement demand is expected to grow at 9 percent CAGR over the next five years; the buoyancy in demand is derived from the boom in the construction sector, both commercial and real estate, robust growth in the housing sector, the flourishing IT/ITES industry, and major infrastructure development works, such as roads, railways, ports, airports, power projects.

Demand will also increase on an International basis. US and Pakistan are potential export markets for India. The cement produced within these countries is costlier than imported cement, and therefore, importing cement will be favored.

The real estate sector will attract an investment of Rs. 5508 billion over the next three years [7], aided by population growth, growing urbanization, rising income levels which are primarily the result of growth in the services sector. The boom is limited to organized urban housing segment and some prosperous rural belts. The growth drives are:-

- Reduction in the average size of the household due to increased nuclearization family.
- Tax SOPs
- Reduction in the age of the house owner
- Easy availability and growing penetration of housing finance and a favorable tax regime
- Increased per capita income

The commercial construction is powered by the IT/ITES industry, which plans to develop 252 million sq feet. While 60 percent of the activity is concentrated in cities such as Bangalore, Chennai, Hyderabad, Noida and Gurgaon, others also lead the race in the changing face of India. The important aspect for the next decade would be the emergence of this activity in Tier II and Tier III cities such as Pune, Kolkata, Chandigarh, Coimbatore, Mangalore, Mysore, and Trivandrum.

Owing to the boom in retail trade and increased disposable income, in the next five years, there will be some addition of about 105 million sq feet to mall space and this would involve a construction investment of Rs.112 billion. These are clear examples that the emerging markets in Asia and India will spur growth in the coming decade.

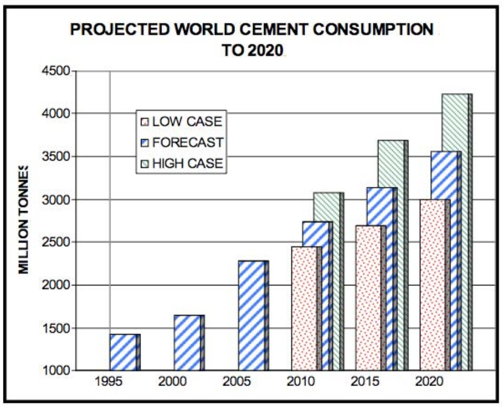

Figure 2. Estimate Production of Cement in 2020

TABLE I. DEMAND OF CEMENT WITHIN FIVE-YEAR PLANS

End Year of the Plan	Capacity (M.t.)	Production (M.t.)	Capacity Utilization (%)
Pre- Plan Period (1950-51)	3.28	2.20	67
Ist Plan (1955-56)	5.02	4.60	92
2nd Plan (1960-61)	9.30	7.97	86
3rd Plan (1965-66)	12.00	10.97	91
4th Plan (1973-74)	19.76	14.66	74
5th Plan (1978-79)	22.58	19.42	86
6th Plan (1984-85)	42.00	30.13	72
7th Plan (1989-90)	61.37	45.42	74
8th Plan (1996-97)	105.26	76.22	72
9th Plan (2001-02)	145.99	106.90	73
10th Plan (2006-07)	177.83	161.66	91

Source: CMA

III. Business Strategies for the Indian Cement Industry

A. *Consolidation and Globalization*

Large cement players in India will use the acquisition route to enhance capacity and market share. It is clear that smaller plants will not survive in the long term. The top five players will hold 70-80 % of capacities and market in the next decade. There is an expectation that more global players would come into India as they would like to get a foothold in the market as the demand will propel in the emerging economies. As long as we have the emergence of serious, mature, long-term players, it would be good for the industry. Entry of smaller, non-serious and non-cement players may pose a threat to others, as they do not have a long-term commitment to the industry and the customer. They may adopt different strategies not beneficial to the industry.

In the Indian scenario, domestic players believe that acquisition is the quickest and the best route to cut competition and increase market share. In an industry, which is fragmented, consolidation appears to be an imperative strategy for the larger players. Acquisition appears a good route primarily because a Greenfield cement plant takes 3-4 years to build and another 3-4 years to break even at an operating level of even 70-75 %. It is unlikely for new businesses to venture into cement owing to huge capital costs and therefore to meet increasing demand, existing players will either add capacity through the acquisition route or set up Greenfield plants. Large domestic players will acquire smaller or weaker plants in order to improve market share.

The acquisition of the Larsen & Toubro cement (Ultra Tech Cement limited) business by Grasim Industries Limited in 2003-04 is a case in point. Till 2010, The Aditya Birla Group, has increased its capacity to 31MT and is currently a market leader in India and tenth in the World. Most players believe that it is good that an existing cement player has acquired the capacity. Had the capacity gone to someone who was not in cement, then this would have led to the emergence of a new player who may have not understood the business of cement.

In cement, mergers and acquisitions do not happen when the going is bad. They happen when the going is good, as every seller in cement has a price tag in his mind. There is also the situation where there are no demanding lenders; even if the company is not making money, lenders do not want them to go out of business.

The market share of the top twenty players in India has moved to 70 % of the Indian market in 2010[8].Secondly, with only a few players commanding a majority of the market, there is a clear advantage of exerting influence over the pricing of the product.

As cement is a commodity product, manufacturers compete chiefly based on price. Production economies of scale are important, but are limited by the cost of transporting the finished product. The efficiencies that can be achieved with new energy-efficient (but capital-intensive) "dry" production technology are a major source of competition. Small manufacturers may not have the financial resources or production volume to justify investing in the most efficient technology, putting them at a competitive cost disadvantage [9].

The worldwide consolidation of the cement industry is intensifying. Besides the established global competitors who are driving this process forward, there are a large number of new, large regional companies based in countries experiencing strong growth. Global players will play an active yet cautious role in this process of consolidation, on the basis of a solid balance sheet with significantly improved key financial ratios.

B. *Process Automation*

The significant nature of changes to the Information technology area and the manner in which information will be processed will be drastic over the next 10-15 years. This will have some impact on the cement industry. Higher levels of technology, its seamlessness and functionalities that have wider acceptance and usage will also bring down operating costs considerably. It is envisaged that Indian companies, which operate several plants across states in India, will need to monitor plant operations on a centralized basis through the use of process automation.

CRM (Customer Relationship Management) tools will now be used more effectively in the next few years, relevant information with Channel partners, dealers will be shared through the company network for enabling synergies [10]. This will help to track profile of the actual user who the company is not aware of now. In the next decade, the company will have complete demographic data on the end user of cement irrespective of the quantity that is bought. This will enable proactively to size up the customer and determine future needs. For high productivity there is a need to deal with and implement optimization systems with the usage of mathematical programming. Effective usage of sensitivity analysis and a systems approach are also of paramount importance [11].

With growth in organization and industry, the goals of the trading operations have also been redefined. The industry no longer looks just at maximizing domestic production capacity. The trade operations enable them to build international relations, explore new markets for establishing the demand in cement in a particular demographic, and balancing out regional supply and demand. Cement can be directed to a demographic, where its need is established, and consequently, gain flexibility to maximize worldwide production capacity.

C. *Technology*

Use of technology in marketing will assume more changes with increase in both communication and information technological changes. Concepts will emerge such as phone-a–cement, or portraying a 3-D animation of the house prior to its construction in a library, providing responses to customers through mobile technology. Increasing customer expectations of adding greater value will ensure greater attention to this aspect. Necessary enhancement in using mobile and communication technologies will also be introduced.

IT is present in every aspect of trade, affecting the activities, which are performed, and 'how' those activities are performed. IT is different from other business strategies, and has a strategic significance, because it affects the competitive scope and how production is customized to the buyer's desire.

Value Activity has both a physical and an information-processing component. Physical component involves all the physical tasks to perform the activity. The information-processing component involves the steps to encapsulate, manipulate and guide the data necessary to perform the activity. It is everything that the buyer needs to know before buying the product to suit his expected result. The product includes information about its characteristics, and what can be, its possible uses. Computing power does this at a marginal cost relative to manual information processing.

D. Cement Economics

Costs have a significant bearing on the performance of an industry and cement is no exception. The uptrend in costs is likely to continue, although the increase in input costs is expected to be neutralized by rise in prices owing to higher demand. Power and fuel costs have a strong influence on the operating expenditure of the company as they would account for about 32 % of total production costs. The overall costs are also determined by the economies of scale. The operating efficiencies of foreign players are better that that of the Indian counterparts. Companies such as Lafarge and Cemex fare better on energy costs and raw material costs when compared with Indian players. It will be necessary: -

1) Large buyers of cement would align with cement producers for a long-term supply relationship; pricing will be determined by market and expected off take during a given period.

2) Region-wise strategy is likely to continue, unless state governments in surplus states along with business create a different growth strategy to boost infrastructure development.

3) Cement delivery will be made off city limits where the growth is expected to happen. The stocking points will be larger and fewer.

E. Corporate Governance and Branding

Corporate governance is as a set of systems, processes and principles, which ensure that a company is governed in the best interest of all stakeholders. The business environment has been changing over the years with increasing expectations from key stakeholders including regulatory bodies. Recent stock exchange regulations also require listed companies to enhance corporate governance and business practices and improved disclosure norms. While striving to achieve business objectives, companies and operating management are expected to enable a good working board and board committees, allow adequate transparency in operations, imbibe good business practices that are ethical, foster and institutionalize systems and controls in all spheres of activity.

While cement is largely branded, there is a continuous effort to project the brand, improve brand recall by the customer across a wide geographical coverage and provide superior quality of product and service.

As an example, L&T was a premium brand and now that Grasim has acquired the company, it is easier for Grasim to get into the premium brand market. Secondly, one cannot have two brands from the same capacity. It is necessary to have two different brands coming from two different capacities. It is largely difficult to cut down the cost of logistics, dealer networking and branding. Though there is some duplication of expenses, one has to absorb such a cost structure and then be with two brands.

F. R&D and Innovation

Companies do not have much of application-oriented research and development efforts but this will become critical for future success. To a large extent, this is related to creating the application and customer of the future and understanding customer needs based on the emerging environment. Companies will need to create **niche** products and develop the market for such products by providing solution-based offerings to the customer.

Innovation will be very important, to create high-grade and cheaper quality of cement. Indian companies have been moving from lower grade cement to higher over the years, and would have to continue to roll out even better quality to compete with the global players, and local competition. New cement products like RMC (Ready Mix Concrete) will help create a company carve out a niche in the market.

With the surge in world population, and continuously increasing pressure on natural resources, there is a need for using new technologies that make Cement production environment friendly [12]. It is imperative for innovators in the concrete and cement industry to consider a heterogeneous approach to materials and to integrate knowledge of other fields under a triple bottom-line of economic, social and environmental criteria. Stakeholder concerns have increased over the years and there are questions raised as regards sustainable development. While the world is conscious of the problem, there is a need to act now owing to better eco-efficiency, industrial ecology, design for a better environment

IV. CONCLUSION

We expect that in the presence of global competitors and a global market, Indian companies would be able to acquire most of the share of this market following sound business strata-gems as summarized below: -

- The problem of up scaling and surviving competition with multinational companies calls for Consolidation and Globalization amongst all Indian cement players. Indian companies would have to identify the threat from global cement players entering the market and find demand for the product in neighboring countries and continents. Smaller companies should consolidate their businesses to survive in the market, which will be dominated by larger players.
- The companies have to get a higher share of sales in the market. This would require multi-product entities. Indian Companies need to focus on products other

than just cement like RMC (Ready Mix Concrete), and research new building materials that will create a niche for them in the market.

- To serve as a truly global company, the operations of a company can't just be restricted to India. Indian companies should look at entering foreign countries in other continents to have a far larger customer base, thus enhancing production and creating demand leading to stronger businesses.
- To produce high quality cement and in the cheapest and most efficient manner possible, new technologies have to be adapted. New technologies have to be introduced and implemented across various plants and factories for enhanced control and efficient production of the product. Process Automation has to be employed to create high quality products.
- To gain a high visibility in the market and pose stiff competition to most multinational brands, Research is going to be the key. Research to develop newer, cheaper and more efficient technologies for creating cement and other products. Niche products like cement with Fragrance, pre-colored plasters can also be developed for increased consumption.

Considering the growing demand for cement in India and higher capacity utilization over the years, key Indian players have already begun to revisit their business strategies. Further, as cement is a commodity and the process is well known, there is no USP as far as this product is concerned. Therefore, the differentiation would largely relate to operating efficiencies, cost optimizations and reduction, and providing superior product and service and marketing strategies such as the presence of a stable and proactive marketing leadership, targeting specifically various customer and market segments, an expansion in product profile complemented with aggressive sales promotion and advertising will be the key to unlocking the puzzle of profit and expansion in the Indian cement industry in the 21st Century.

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