Competitive Edge through Design

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India is fast emerging as one of the largest market in the world. The Indian middle income group segment itself is larger than the entire European market, and is largely an untapped market. This has attracted International enterprises to look for business opportunities in India. These Industries, from all over the world, are trying to tap this market either through direct venturing, marketing or through collaboration. Indian market is now flooded with the latest and best products from around the world. The customers, today, get varied options to choose their product. Also, the widespread media exposure has made the customer more aware and demanding. The product therefore has to "stand out" and attract the customer. The market in India has thus shifted from the consumer-oriented market to the customer-oriented market where satisfaction to the customer is the order of the day. This has shifted the focus of the business -from that of the manufacturing / technology oriented business to that of marketing / user oriented business. Understanding customers' needs and presenting them with the product that is distinctly perceived as satisfying those needs, is the only way an enterprise can win their market in today's rapidly changing business scenario. Design plays a major role in making a product pop up from among the sea of products and also helps convey its worth and value to the customer thus building their confidence in the product. Thus, the present increasing competitiveness, increasing market segmentation and product differentiation have all made design an imperative need.

Intensive competition and ever growing demand of customers have made the very survival – leave aside the growth - extremely difficult for the Indian manufacturers. Indian companies are now directly facing the challenge from the products having best technology, quality, better aesthetics and at the same time lesser price. Ever changing customer needs and rapid advance in science and technology has shortened the overall lifecycle of the product. The Indian Industries are thus forced to acquire international competitiveness through newer approaches to manage their business. While a great deal of work has been done to improve the efficiency and performance of the product and to reduce their overall cost, attention has now shifted towards improving their aesthetics and functionality so as to ultimately increase the overall value of the product. Today for most products the technological development is mainly horizontal rather than vertical, which leads to the products having, generally, equally good performance, reliability, quality etc, and also the price is more or less the same. In such a situation, when a customer has to choose from such products his decision to choose one from the other will depend mainly on the visual

appearance of the product and the ease of its use. These are the parameters typically decided by the Industrial Designer. All the other parameters being equal, Industrial design can provide the necessary product differentiation and perception for the company to effectively compete in the market. Design thus plays a crucial role in the success of any business today.

Design has to do with a product's

- Performance
- Quality
- Durability
- Appearance and
- Cost

It is at the very heart of a successful product. A good design not only appeals to the eye, but it must also be reliable and efficient. It should also be easy to produce, assemble, use and maintain.

The word 'Design' is seen to be directly associated with Consumer products and fashion and thereby with the visual appeal or aesthetics of the product. Design is more than merely a skin deep or a cosmetic activity, which the manufacturer will use at the last phase when everything is finalized and the product is about to be launched. Over and above doing all that, Industrial design, more importantly, can also help improve the quality, performance and manufacturability aspects of the product, besides its formal and functional aspects.

Increasing tendency towards specialization has forced engineers to concentrate on the engineering and technical aspects - so as to say the 'functional aspects' of the product, while the Industrial designers take care of the aspects which has direct human contact, ensuring that the product satisfies and appeals to its users.

Industrial design is a profession that specializes in optimizing the function, value and appearance of the product for the mutual benefit of both the user and the manufacturer. Industrial designer thereby looks at the product from the user perspective and concentrates on the usability aspects of the product.

What makes a product "whole", as perceived by the customer is it's so called "physical and reliable performance", its "user friendly design - "that is ease of operation, and a value of the product that brings to a user "better mental feeling" or increased satisfaction.

To succeed in today's highly competitive global market, it is therefore essential that the technology / idea be processed through Industrial Design input so as to convert these ideas into a marketable products in a way such that

(a) The client / manufacturer can produce the product within his constraint.

(b) Customers could buy it and with a satisfaction of it meeting their perceived values and functions.

The Government and Industries have made massive investment in the Science and Technology sector. Various research laboratories and institutes set up in the country develop lot of ideas and new technology, but these ideas / technology seldom gets commercialized. These ideas need to be processed through the Industrial Design inputs to convert them into the useable and marketable products. Industrial design, here, can provide the essential inputs in terms of its design features – its form and color, etc., ease of its use, considerations of safety factors, new product features, its positioning in the market etc. Understanding of customer need, his taste, his behavior patterns, aspirations etc. and designing products based on this, so as to say 'User centric design approach' can greatly increase the rate of success when the product is launched in the market.

Also Industrial design can help these organizations find offshoot applications of the technology developed by them. To give an example a student at NID developed an information Kiosk to be used at the airport considering the need and aspirations of the users at the airport. While another student developed the kiosk, using the same technology, to be used by the illiterate persons in the remote rural villages in India. Here the emphasis had to be on proper communication and thus on interface, mainly using the icons as understood by these people. For another project a group of students developed various applications for the Hand Held Data Terminal, using the same hardware. While one student developed an application for the Bus Conductor, to be used by him by one hand for ticketing, another student developed a data terminal for the waiter in the hotel to communicate the order to the kitchen and to the counter for billing, and yet another student developed a data terminal for the elderly people to receive and send data among their group. Each of these ideas were then further developed into products considering that particular user psychology. need, behavioral pattern, etc and thus each products were different in terms of its size, shape, color, interface etc.

Systematic and methodical process of product development followed by the designer will immensely benefit the industries – both small as well as large - as they will be able to come out with new products at much faster rate and with minimum risk. Also the ability of designer to look at the product in a holistic way - from manufacturers / production, users, and marketing point of view - will help develop a product in totality, in the sense a product that is most user friendly, cost effective and at the same time uses the most appropriate technology, thereby making it a highly rewarding business proposition. This will in turn enable the industry to compete in the global market.

Finally, it will be the Indian consumer who will be the ultimate beneficiary, as the product that he will get in the market will be designed considering his functional, ergonomic and psychological requirements. As these products will be designed

considering the specific regional, economical, social and cultural requirements they will be most suitable to the Indian user and thus the Indian consumer will not have to look for the foreign made products which are actually designed for foreign people and for foreign culture. Use of Indian product will thus not only reduce the loss of foreign exchange but will also generate employment opportunity as these products will be manufactured in India.

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