Consumer-Friendly Designs in a Competitive Market

In a market where the consumer is king, products should be designed for easy comprehension by the average consumer. **Jhumkee Iyengar** explains the importance of Human Factors Engineering - a highly specialized and as yet lesser known field that deals with designing products, keeping in mind the consumers and their typical mindset when it comes to utilizing a particular product.

It's not an uncommon situation to come home brimming with excitement clasping a new gizmo, only to have the fizz taken out of your exuberance once you get down to the nitty-gritty of making it operational within your house. The uncanny ability of most manuals and product installations to sound intimidatingly technical and highbrow on first encounter coupled with your own unfamiliarity with the product, can well spell into a frustrating first day spent grasping the know how of setting up and using the new product. It is then that one realises the gaping chasm that exists between the importance of having user friendly products and the actual design of such items.

Why is it that even after so much talk about consumer friendliness, most products end up having designs that are far from being within easy comprehension of the average consumer?

The main hurdle that makes it difficult to put user-centred design into practice is that engineers who are the developers of a product, tend to believe that they are typical consumers and use their own acceptance criteria to design for consumers. This phenomenon of engineers designing for engineers is very dangerous as it not only generates a difficult to use design but also gives a false sense of security about consumers' acceptance of the product.

In reality, engineers are the most atypical consumers conceivable for consumer products as they tend to be analytical, logical and organised in their thinking and forgiving of machine like conduct that is unfamiliar territory for most humans. Typical consumers on the other hand are comparatively more disorganised, random in their approach and intolerant of product behaviour contrary to their expectations.

Human Factors Engineering is a specialised and as yet lesser known branch that deals with this particular and extremely important aspect of designing products, keeping in mind the consumers and their typical mind set when it comes to utilising a particular product.

In today's market, flooded with consumer products, where the range available to the consumer for any product she would like to procure is mind boggling, ultimately what is going to tilt the balance in favour of a particular brand of make is the products' consumer friendliness.
Take televisions for instance. A 300-channel situation is not too far away, but right now with just 30 channels consumers are finding it difficult to manage their TV watching time amidst conflicting preferences. And of course the well known problem that exists, of deciphering the technical jargon consumers are confronted with when it comes to taping some programme or even while switching over from television to video viewing. This has made the consumer more discerning and perceptive while opting for a certain make.

A simple example could further illustrate 'design for the user'. The buttons in a lift may either accomplish the goal of allowing the user to go up or go down quickly or may conversely confuse the user into pressing the 'open door' button when he really intended to press the `close door' button. Even if one takes some thing as innocuous and seemingly untechnical as a peeler you find that a majority of them do not give a good grip or are not of the right size or do not facilitate even that simple peeling motion. So it's not just the very advanced or latest systems that need user centred-designing but every possible product that is designed, produced and intended for use by consumers.

All this actually tapers down to the `user interface' which can be defined as that layer between the user and the product that enables the user to easily interact with and accomplish the tasks for which they are using the product. User centred design is accomplished by applying perceptive thinking, accepting the fact that the product must suit the customer who pays for it and for whom it is intended, failing which it does not fulfil its purpose. And this is only possible by adopting this philosophy from the initial stages of design followed by progressive refinement of the design based on feedback from users to ultimately come up with the final usable product. This has been widely accepted as the only known means to

Human Factors Design
-An illustration

The methodology for user-centered design could be illustrated through an example of the design of a mailing system and its setup guide, for which I was the Human Factors Engineer right from the conceptual stage.
The company wanted to eliminate the practice of having a service person accompany the product to the client-site for installation, which was costing them significantly. So, for the guide, we started working from the time the machine arrives at the customer's doorstep.
Keeping in mind that the maximum tolerance limit for a person trying to set up a new product before they expect it to accomplish what they purchased it for, is about 30 minutes, we defined a target of 20-25 minutes set up time with no more than one error.
The guide started out as a totally pictorial version, yet at first try it took an average consumer 40 minutes to set it up. So we redesigned it on the basis of observation, identification of problem areas and by talking to the assorted participant group we had invited over to ultimately achieve our set target of 20 minutes. Not only was the goal of an unaccompanied installation accomplished without the customer complaining, thus saving the corporation a substantial amount of money, but it even bagged an award from the Society of Technical Communication.

guarantee long term customer satisfaction after the initial euphoria with their purchase. The benefits of adopting the user-centered design approach are two fold in that in facilitates maximum usage by the customer providing him with real value for money on one hand and saves the manufacturers much in terms of post launch costs like maintenance of a customer service staff, product returns and exchanges, and what is perhaps most costly, the loss of faith by the consumer in that brand resulting in a loss of reputation for the company.

While user centred designing is now being accepted as an integral and important aspect of production in the west, the concept is yet to take route in India. But with increasing globalisation and the surfeit of consumer products that the Indian market has of late been witness to, it is perhaps simply a matter of time before industries incorporate the user friendly approach in their product creation process to get that essential edge over their competitors. Pune being at the fore front of the country's industry and marketwise progress, providing a home to some of the leading-edge technologies of India, it is expected and hoped that user–centred design will gradually become an inherent part of this progressive march by Pune industries-an inevitable wave of a not-too-distant future, in a market where the consumer is the undeniable king.