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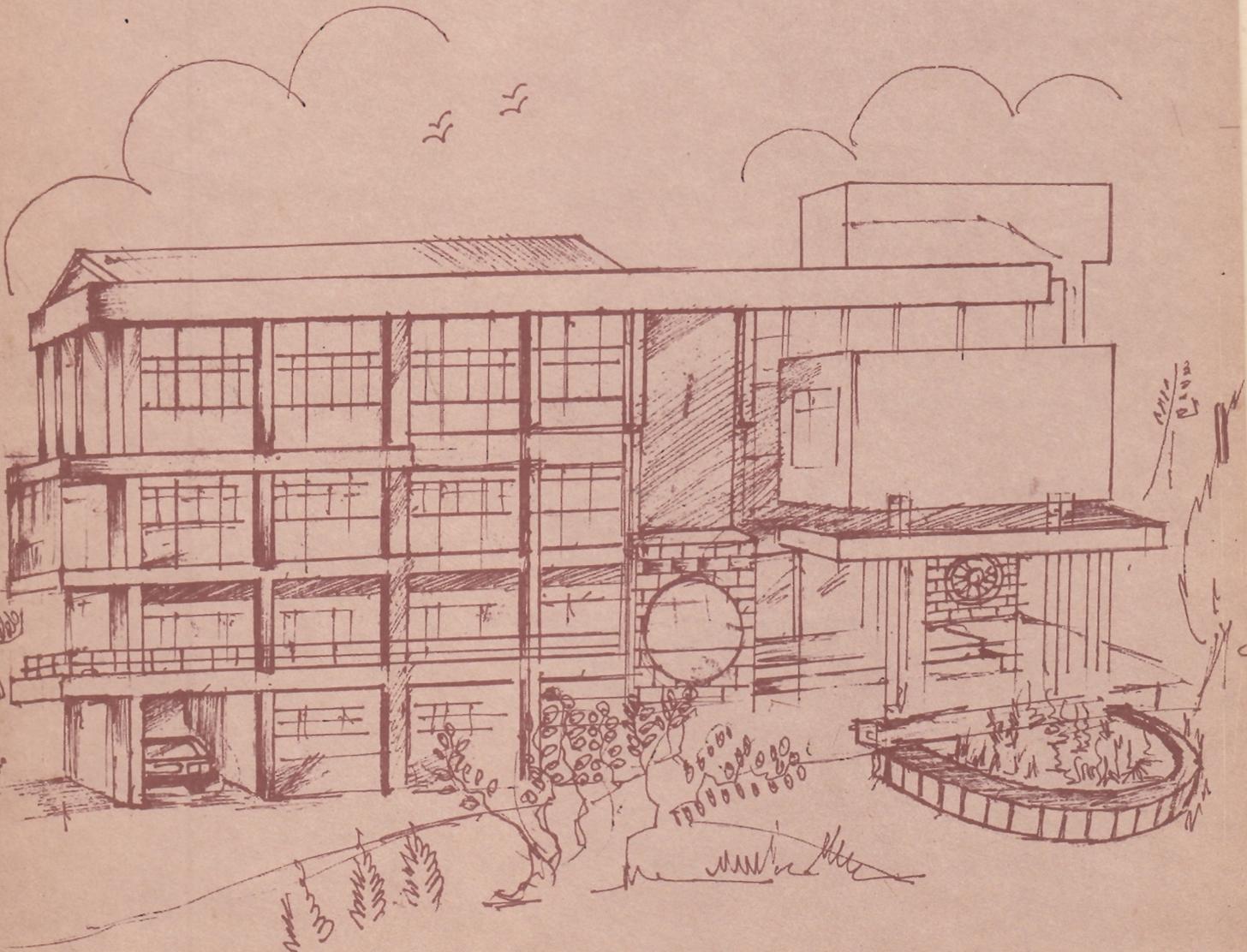
No. 5

Working Paper Series

SPEED AS A STRATEGY IN SUCCESSFUL PRODUCT CREATION

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TAPMI WORKING PAPER SERIES NO.5
December 1996/12

The Objective of TAPMI working paper series is to help faculty members of TAPMI to test out their research ideas/findings at the pre-publication stage.

T.A.PAI MANAGEMENT INSTITUTE
MANIPAL - 576119

SPEED AS A STRATEGY IN SUCCESSFUL PRODUCT CREATION

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The ability to make immediate decisions and put them into rapid effect is basic to any successful operation. Time is the cutting edge in the present competitive environment. Speed to market is being recognised as the most important element for success because it is becoming easier for companies to overtake the competitors on other fronts. The Indian industry though late has acknowledged that speed can be a very vital factor for marketing success. In one of the studies conducted by IMRB on marketing heads of 100 companies in the country, more than 50% consider speed as the most important factor in marketing strategic decision making.

In the early 1980s, leading Japanese companies and some small North American companies demonstrated two new dimensions of competitive advantage viz. low cost variety and fast response time. These companies were compressing time required to manufacture and market their products. Significantly, they tried to cut time required to develop and introduce new products. They realised that time is equivalent of money, productivity, quality and even innovation. These time based companies started offering greater varieties of products and services at lower costs and with quicker delivery times than their slower competitors. The focus was on responsiveness. (Responsiveness is the ability of a company to provide prompt and quick service to customers) Responsiveness is a culture which has to be cultivated by the whole organization not necessarily limited to product development only. This is the hall mark of some very successful companies like Honda, Toyota, Federal Express, Mitsubishi, Motorola, Walmart, Microsoft as well as our own Indian companies like Hindustan Lever, Titan, Dabur, BPL, Britannia, Marico, Videocon Asian Paints Sundaram fasteners, T.V.S. Suzuki etc.

DIMENSIONS OF SPEED

Speed is a multifaceted competitive weapon. In the liberalized Indian environment it has assumed a much bigger importance. Companies have realized the abundance of opportunities available in the market. If these opportunities have to be grabbed in the competitive market, it has to be through better products which will best satisfy consumer needs. Hence the focus is on new product development or product differentiation. But then time has

assumed a very critical role in successful new product creation and launch.

But a question any company involved in new product creation would like to ask is at what all stages in new product development programme can speed assume a critical role ?

In this article, I have tried to look at the criticality of speed through situation, process, structural and outcome dimensions of new product development process. Situational dimensions focus on the organizational characteristics required to adopt speed as a culture and later use it as a strategy. The process dimensions consists of the various steps in product development in which speed can assume significance. Structural dimensions relate to the organization structure needed for an effective product development programme. The outcome dimensions highlight the advantages derived out of a fast cycled product development process and introduction.

One can see that to create a responsive fast cycled product development programme, interventions need to be made on situation, process, and structural dimensions. Speed hence will be an outcome of these interventions. But Speed, can be looked from 3 angles (A) from the customer angle (B) organization angle and (C) competitor angle. The ultimate benefit of speed as a strategy is derived from customers.

A. Customer

The last few years have seen drastic changes in the Indian middle class society's (who are the major customers of a wide variety of products) perceptions, attitudes and behaviour. Customers want newer products and product with better features. Their preferences are also changing fast over time too. They also want quick availability of products and better service facilities. A beautiful example of a company which started thinking from the customer's angle is the Ludhiana based Hero Cycles. In 1990, Hero Cycles launched a product to up market consumers which got euphoric over the 'fitness craze' which started in 90s. The company launched the Allegro exerbike developed by the in-house R&D to satisfy the health conscious upper middle class consumer. The product was the first one of its kind to offer simulated rowing in addition to cycling. The product was a big success as it exploited a big opportunity in the market. Eventhough a lot of competitors entered the exerbike market later, Hero's allegro exerbike became Rs 7 crore market leader. The company later modified the original product and introduced a sophisticated variant - Allegro-plus which has a computerized device to track the number of calories burnt by the rider, smoother handling systems in

addition to the several technical innovations. A product will continue to succeed as long as the company is sensitive to customer needs and understands it faster than competitors.

B. Organization

A responsive system is not the necessity of only the producer development programme, but of the entire organization. The entire organization has to take a conscious decision to stretch and be responsive. Employees should also be oriented about the benefits of a speed culture. Researches have shown that speed will improve (i) operational efficiency and (ii) provide cost-effectiveness.

(i) Operational efficiency

Leading companies are compressing time required to manufacture and market their products by restructuring the organization to achieve flexibility and responsiveness. A flexible and responsive organization can only undertake successful and effective product developments. The level of speed hence becomes the indicator of capability and efficiency of employees. A culture which values time leads to rapid response to customer demands, enquiries, requests for providing technical information, delivery or after sales service. Organizations are under going restructuring to be flatter and creating cross-functional working mechanisms in their quest to be responsive.

(ii) Cost effectiveness

Time is money. A shorter development cycle can save cost of development. Extra week or months incurred in product development can add to the cost of product creation. Product development costs include product cost (new material) development cost (process) and investment cost. Hence some of the Japanese companies are trying to develop new models of cars in 2-3 years of time compared to 4-6 years needed by Western Companies. A shorter development cycle avoids the escalated cost of components and hence the company is able to offer a new product at a lower price.

In this context, it appears quite curious when TELCO claims that they will develop and launch a small car at the price of Maruti 800 by 1998. It may be quite difficult to believe as the development cycle time is taking more than 4-5 years of time by which all the cost advantages can be lost and TELCO may find it difficult to match Maruti, price-wise. Speed eliminates waste too. Toyota company's contribution of JIT (Just-in-time) approaches are derived from their belief in a time value system.

(C) Competitors

In many industries, competition is becoming extremely stiff. Competitor analysis, taking pro-active and reactive measures are the order of the day. Short cycle time allow a company to acquire a market advantage either by finishing first in the new product race or by following quickly with a modified product after the competitor has introduced an innovation. Developing and launching innovative products to satisfy 'newer' needs as well as developing products as a sequential response to competition are both equally important. In both cases speed is the essence. In the marketing battle in soft drink industry in India, we have already witnessed how Pepsi responded quickly with cans when Coco-cola introduced them first. Now as Coca-cola is planning to introduce cans with contours all over the world; we have to see how quickly Pepsi will respond to this packaging innovation.

An innovator can not rest on the one time laurels it received in introducing a new product. The success lies in responding to challenger strategies to the innovation. In 1995, Real value launched a truly unique electrical product called vaccumizer which can preserve food for long by removing the air from the container. The product costs around Rs.2400 which is high even from the perception of an upper middle class housewife. But another company quickly launched a vaccumizer with a mechanical system to remove air to preserve food and then pricing it low. Now, the success of Realvalue depends on how quickly they respond to this challenger's strategy.

A FAST CYCLED PRODUCT DEVELOPMENT PROCESS

Product development is a complex set of activities that extends over a considerable time period. It can be seen that new products and process come to the market through a process that transforms ideas and concepts into prototypes. The sequence starts with ideation and then converting these ideas into meaningful concept. The concept development stages proceeds through product planning, detailed design and development of the prototype. The prototype is tested and further modification on it is done appropriately. The process development task also take place concurrently with prototype development before the product is commercialized. All these activities are carried out through intense interaction and co-ordination across functions of R&D, engineering, manufacturing and marketing at various stages. Hence the critical issue to be addressed by the company in new product development is to decide on the set of choices to be made regarding organization of work, sequencing of tasks and activities, deciding on nature of leadership,

integration of functions and the type of interventions to be made by the top-management.

All the four functions which are involved in product development programme (Engineering, R&D, Product management and manufacturing) will have to be closely involved throughout. The Marketing function initiates idea generation and pass it on to the R&D for evaluation. The Engineering and R&D is responsible for evaluating ideas, build models and suggest technologies. They are also involved in the detailed design of the product and building prototypes. Based on market feedback they refine the prototype and hand it off to the manufacturing function. The manufacturing's key responsibility is to develop appropriate process, estimate cost and develop tools and equipments to build prototypes. Marketing at various stages provide customer focussed feedback to other functions too.

Organizing for development.

A key determinant of success in the whole programme is the organization of the product development team. The type of team can determine the efficiency, and effectiveness of the product development process. Success of a time based process depends heavily on the type of structure formed.

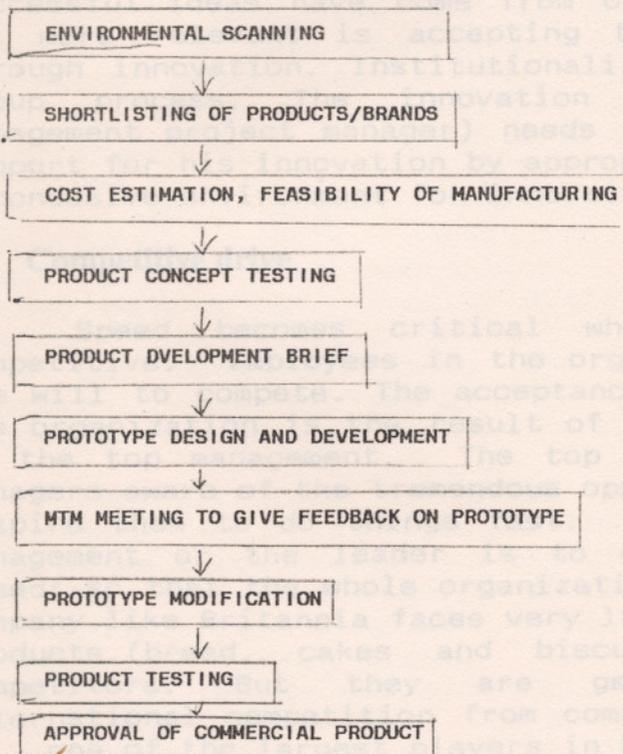
Four types of organizational structures are found in product development programmes. First is the functional team which is followed by Kodak evolved out of its strong technical expertise. The second type is a light weight team structure as followed in General Electric. Here eventhrough there is a strong functional orientation the team functions with the support of representatives of each function under the guidance of a programme manager. The third type is a 'Heavy weight team' structure as seen in Motorola. Here the tasks are carried out by a strong cross functional team which is 'contract driven' under the able supervision of a programme manager. The fourth type is a highly 'autonomous team structure' as found in Lockheed. This is a highly autonomous cross functional group with complete responsibility and with no limitation of resources for creative development.

These 4 types of structure appear to be evolutionary over time. On closer examination, we can see that many of the Indian company's product development teams are either functional or a light weight team structure. But a heavy weight team or autonomous team structure heavily favour a fast cycled development process. As competition in the Indian market intensifies and companies are under pressure to develop their own products, they may have to adopt cross functional product development teams. The Motorola or Lockheed experience can be an answers to that.

Product Development Process in Britannia : BASED PRODUCT CREATIONS

The author undertook a study of the product development process in Britannia. It was done keeping in background the recent development and launch of two of their successful products. One in the biscuit category called Little Hearts and other one in the Cake category called Mini Roule. A product development programme in Britannia is the result of active interactions between the product management group, R & D, manufacturing, technical group and finance group. It has structured the development process to achieve reasonably good integration with the functions. The emphasis is not very much on a close cross functional integration as there is no great pressure on a fast development cycle. One of the main reason can be due to the weak competition in the market from Parle, Marie and Bakemans, etc. But even with less intense competition Britannia strongly believes in being a product innovator and speedy product developments. But the only stage where a time frame was kept was at the R & D in the design of the product. Little Heart's was given 6 months and Mini Roule was given 3 months for designing. The following is the sequential stages in the product development process in Britannia.

Fig: Steps in product development at Britannia



KEY ORGANIZATIONAL FACTORS OF TIME BASED PRODUCT CREATIONS

It needs clear, focussed and sustained effort to create an organization which develop products based on time. A time based responsive organization should possess certain vital characteristics to succeed in the intensely competitive market.

1. Spirit of innovation

Innovation is the process of developing a creative idea so that it can be put to practical use. Many companies thought that creative thinking is not their job. But of late, companies are teaching their employees to be creative. Creativity is eventually identified as a discipline involving methods. Moreover recent researches suggest that not only components of creativity be identified, but the qualities corresponding to these components can also be developed. Companies like Titan, Mudra Communications, Wipro etc., are organizing workshops on creativity for their employees.

The creative idea need not necessarily have originated in the organization. But it is taken up by the organization, developed, tested out and implemented. Infact more successful ideas have come from outside the organization. But more relevant is accepting the idea and proceeding through innovation. Institutionalizing an innovation is a group process. The innovation sponsorer (leader top management project manager) needs to build credibility and support for his innovation by appropriate tactics and create a condusive environment for innovation.

2. Competitive drive

Speed becomes critical when the environment is competitive. Employees in the organization should acquire the will to compete. The acceptance of a speed culture in the organization is the result of the inspiration provided by the top management. The top management make the key managers aware of the tremendous opportunities in market and inspire them to do things fast. Hence the role of top management or the leader is to develop a commitment to speed; so that the whole organization becomes responsive. A company like Britannia faces very little competition for its products.(bread, cakes and biscuits) from the present competitors. But they are geared to face future international competition from companies like Nabisco etc. BPL, one of the largest players in home appliances, audio and video strongly believes in being the best and No.1.

3. Employee interaction description

Many organizations have well defined job descriptions and clearly drafted organizational structure. These can be effective for a traditionally bureaucratic organization carrying out repetitive tasks. But a product creation programme which is highly vibrant and dynamic may not easily fall into a traditional mould like the above. Hence a different blue print has to be developed. This blue print should contain a map of interactions among the employees involved in product development among various functions. A map of this nature can capture links across functions taking into consideration their own rules. This can help the organization to understand not only how the system works but also why it works that way. Problem identification and solution become much more easier if a blue-print of this nature is developed. This type of blue-printing can bring effective co-ordination and smoother flow of communication among the participants drawn from different functional areas.

4) Emphasis on team work

Developing the blue print of interactions of participants can be the starting point in creating a coordinated team. The name of the game is team work. The selection of team members become very crucial. At this selection stage, apart from skills an equally valuable criteria should be the attitude of members to work together. Once selected, they should be given the freedom and time to interact as closely as possible without the botheration of day to day problems. The team should know clearly the opportunity, goals, objectives, action plan and also bottlenecks in implementation. This calls for creative group members too. Another quality of these members should be their ability to acknowledge change and adapt to change. The top management makes the necessary intervention to remove traces of resistance to changes from the old conventional ways as well as resolve conflicts.

Conflict tend to arise in a product development programme which needs multi functional interactions. But the study conducted on the product development programme of BPL for their BPL-Trinity model of stereo player showed otherwise. This programme involved the working together of product management group, Marketing research, R&D (both industrial design and electronic design) and manufacturing groups together at BPL. The marketing manager was proud to admit very less occurrence of conflicts. The reasons he pointed out were three. First is that the groups are small and members know each other personally. Second is that they are geographically located closer in Bangalore. The third

reason was due to the fact that each group put the company objectives above the group objectives.

5) Smooth flow of information

Several studies reveal that effective communication among team members are highly correlated with product development success. Communication pertains to easy access of information as well as sharing of it. The product development team should have easy access to market research data about unmet needs of customer, customer preferences, competitor strategies etc. Fast cycle development groups generate and analyse more information and share it more spontaneously. In such cases, the channels of communication should be very sound and effective. Lots of companies are investing on multi media communication channels. Fax, E-mail and Internet have improved the process of sharing information. Many companies are able to achieve cross functional integration even when members are in multiple locations. The communication technology advancements are greatly helping many MNCs operating in India whose development teams are located in different places to work cohesively as well as quickly.

5. Performance appraisal system

A product development programme can have very objective evaluation criteria for measuring its success. The final output in a product development programme is a physical product which can be objectively assessed for its success. In the same way the process also need to be evaluated. A balanced process structure need to have certain milestones harmoniously spread over the entire project. Most innovative product development projects are implemented with 6-9 milestones. These milestones are positioned at natural and strategic points. These milestones facilitate a structured performance appraisal and review system. The review system will have to cover all aspects of technical, economic and commercial success of the process and product. Product success review typically focus on the various terms that the products adopts from initial concept visualization to prototype development to final commercial product approval. Process success reviews at milestones are an opportunity first for the team and also for the management to check the implementation schedule of the project against plan.

The top management or the team doing the review of the various milestones should provide timely and effective feedback to the team. This includes both in terms of quality and quantity of assessment. A prominent dimension in the review process can be cost. Cost and time are strongly related in the product development process. A fast cycle development process believes that a schedule driven

programme can lower cost without sacrificing quality. Hence when a company goes for a speedy product development process it tends to compress both time and cost.

7) Motivation mechanism

In many companies product development teams are dismantled after the exercise is over and the members go back to the parent structure. But in some other companies it is an on-going programme. Nevertheless, in both situations it is of paramount importance to motivate the group from time to time. Eventhough creation can be a joy, set backs at critical stages can demoralise them. Here, the role of top management is to motivate the team by providing full support through words and deeds. Providing resources and incentives timely can work wonders. Moreover on successful completion of the project, further motivation through rewards and promotion can create a world of good.

STRATEGIC ADVANTAGE

For most industries, speed in creation is indeed becoming a critical company competency. The ability to merge marketing ideas with technology, rapidly and consistently into successful new products increasingly determines long-term competitiveness. The long term implications of a speed strategy has its manifestations in the organization, for the customer and against the competitors.

The manifestation of a successful time based product development programme is reflected in the organization through financial measures (profit goals, margins) process measures (technical performance, on-time delivery) programme measures (new product programme achieved its objectives at various milestones) firm level measures (success/failure rate, % of sales in new product). The success of speedy new product development programme provides a big competitive advantage over the present as well as potential competitors. But more importantly an innovator provides customers the product awareness and give him satisfaction faster and better than competitors could do. A company adopting speed derive the following broader advantages.

1. Enhances company image

The launch of a new product enhances the corporate image in the mind of its publics. As people's belief and trust on Ayurvedic products increases, Dabur's frequent launch of new Ayurvedic products over the recent years has made the company one of the most admired and respected Indian companies. It has created a positive image among

customers, shareholders, media, financial institutions and Government. This can have great impact on stock price, employee morale and trade loyalty.

Nestle India's first Indian managing Director D.E. Ardeshir wants his company to be now known as a dynamic new product launching company erasing the image of a sleeping giant. The company decided to introduce at least one or two new products every year. But in 1993 it introduced seven products including Nescafe Dolca, Nestle Bonus, Soya powder and the highly successful Polo-the mint. In 1994, it introduced about 13 new products which were either new to market or line extensions. Nestle did creditably well in 1995 too. These quick and large number of new product introductions has suddenly given the company a new vibrant and dynamic image.

2. Internal enthusiasm

The development of innovative products not only creates new market and attracts new customers, but also leverages existing assets and builds new capabilities in an organization. A fast cycled product development stretches employees abilities. It stimulates creation of greater capability in problem solving in the organization as well as enhances original thinking, design abilities, testing and feedback collection abilities among employees. Successful new products energize achievement, provide confidence and high morale. Ability to tackle problems successfully increases among employees.

An excellent example is the case of Sintex plastic containers. In late 1970's it was launched as one of the most innovatively developed Indian product. Early 1980s brought market acceptance and success for the product. But the company faced one major problem of increased transportation cost as many of the containers were very big and only a handful could be carried in a truck. But interestingly the company tackled it by designing the top of the container in such a way that it can be lifted up. Now smaller containers can fit into a larger one and hence a large number of containers could be accommodated for transportation. Success and motivation make employees to think differently for solving problems.

3. Entering the mind first

Jack Trout and AlRies who contributed one of the most widely accepted concept in Marketing called 'positioning' believes that the easy way to get into a person's mind is to be first. The information which comes to the mind first is easily retained and get strongly associated. Many of the successful products had the natural advantage of getting

into the mind first. Sintex is most closely associated with plastic containers as it was the first brand in the category developed and launched by Bharat Vijay Mills. Goodnight is almost synonymous with electronic mosquito repellent as it was the first brand in that product category. The advantageous position of these products/brands in the mind of customers have provided ample mileage to these companies.

4) Customer satisfaction

An important difference a researcher can find by having a comparison of customer segments five years back and that of now is the fast changing need profile of the present days customers. The present day customer will hence accept a company with its brands which can take care of his fast changing needs. The reason for the continued acceptance of products of companies like Wipro or Titan is due to their ability to continuously innovate as well as innovate fast, satisfying changing customer needs. The main reason for Titan to grab a 58% of the market share in watches at a time when they had tough competition from the giant of a company like HMT can be attributed mainly to the above belief. In the recent years both these companies have developed a big and satisfied customer base.

5) Distribution loyalty

The distribution system which consists of the wholesalers, retailers and agents are most euphoric over new product introductions. They value and accept a company which frequently launches new products as well as launch them fast too. This acceptance is much higher for established companies. The eagerness to wait for new product introductions of established companies by the trade has three reasons. One reason is that obtaining distributor rights for new products is easier as companies are eager to 'fix' the wholesalers, retailers and agents at the earliest. Second reason is due to the fact that the discounts and commissions offered to new products are much more attractive to the trade. The third reason is that the trade expects better incentives and rewards for new product distribution. Hence it is commonly found that the intermediaries tend to be more loyal to those established companies which introduce new products frequently.

Conclusion

The future success of marketing is going to be determined by the ability of a company to develop new products. These new products may be platform products, breakthrough products, or replacement products. But acquiring ability by companies to develop these new products has now become a necessity. The last few years have seen

drastic changes in customer needs and preferences. Any company desirous of succeeding in the market has to be a continuous innovator to satisfy the ever changing consumer needs. But critical will be speed of innovation. Speed will provide the strategic edge over the competitors. But mounting a product development programme based on speed is a challenging task.

A fast cycled product development programme need to be carefully built by identifying the key organizational factors, (both situation and structure) and process factors. An organization should acquire characteristics like spirit of innovation, competitive drive, and develop effective team work, employee interaction system, flow of information, performance appraisal system and motivation mechanisms, if they want to create successful products. The process of product development assumes great significance as many failures have been because of the flaws in process. The sequential structuring of steps may vary among companies. But the success of the development process will be determined by the effective working together of the various functions like product management (Marketing) R&D, Engineering and Manufacturing. Four different organizational structures are usually found in development programmes. Many of our companies are still struggling to set right their teams by adapting a functional or light weight team structure. But the coming years may force many Indian companies to adopt a Motorola type Heavy weight team structure or a Lockheed type highly autonomous structure. Speed and cross functional integration which are the essence of successful performance thus naturally built within these structures. They have not been given enough priority by Indian companies now. Indian companies will have to go a long way before they are really accepted as speedy innovators.

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