New Product Development

Once a company has carefully segmented the market, chosen its target customers, identified their needs, and determined its market positioning, it is better able to develop new products. Marketers play a key role in the new-product process, by identifying and evaluating new-product and working with R & D and others in every stage of development.

Every company must develop new products. New-product development shapes the company's future. Replacement products must be created to maintain or build sales. Customers want new products, and competitors will do their best to supply them. Each year over 16,000 new products (including line extensions and new brands) are introduced into groceries and drugstores.

A company can add new products through acquisition or development. The acquisition route can take three forms. The company can buy other companies, it can acquire patents from other companies, or it can but a licence or franchise from another company. The development route can take two forms. The company can develop new products in its own laboratories. Or it can contract with independent researchers or new-product development firms to develop specific new products.

Booz, Allen and Hamilton had identified six categories of new products :

1. New-to-the-world products : New products that create an entirely new market.
2. New product lines : New products that allow a company to enter an established market for the first time.
3. Additions to existing product lines : New products that supplement a company's established product lines (package sizes, flavours, and so on).
4. Improvements and revisions of existing products : New products that provide improved performance or greater perceived value and replace existing products.
5. Repositionings: Existing products that are targeted to new markets or market segments.

6. Cost reductions: New products that provide similar performance at lower cost.

- It was also observed that less than 10% of the new products are truly innovative and new to the world.
- Such products involve higher costs and risks because they are both, new to the companies and to the markets.
- Most of the new products are improvements in existing products. Most companies rarely innovate, some innovate occasionally. Very few companies innovate continuously, for example, Sony, 3M, Oracle, Microsoft, etc. created a positive attitude toward innovation and risk taking and have routinised the innovation process through teamwork, allowing people to experiment and even fail.
- They have realised that in an economy characterised by rapid changes, continuous innovation is necessary and an inevitable practice.

Why New Products Fail?

Some of the important reasons for product failure are as follows:

- The idea may be good but the market size is over saturated
- Top executives may push their favourite idea through
- The product may not be well designed
- The product may be incorrectly positioned in the market, or it may not be effectively advertised or may be over
- priced Products may fail due to lack of sufficient distribution coverage or support
- The development costs of the new product are very high
- Competition may fight back harder than expected
- Customer reactions are unfavourable.

Challenges to New Product Development

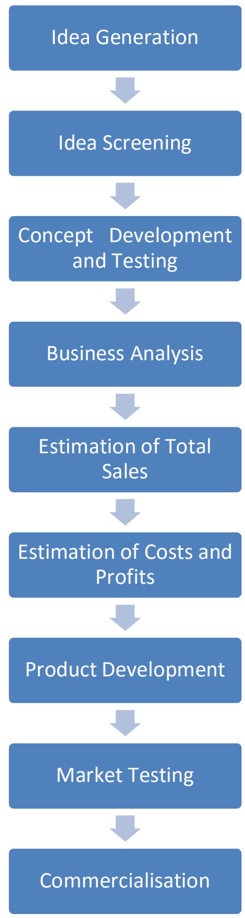
The development and positioning of a new product in the market has become a costly and risky affair under the modern dynamic environment. There are several challenges that need to be faced.

Some of these are stated below:

- Cost of development that covers research and development, manufacturing marketing, etc. tends to be high.
- There is an increase in domestic and foreign competition.
- A shortage of innovative ideas: Very few areas left to be improved with some basic products like steel, detergents, etc.
- Fragmented markets: When companies aim at selling their new products to the sellers markets, it results in lower sales and profits for each of the producers.
- Social and governmental constraints: New products have to satisfy needs of consumer safety and protection of environment.
- Capital Shortages as compared to heavy demand for investment in research and development.
- Failure to attain a faster rate of development: A new firm needs to reduce the development time to overcome competition.
- Need to develop unique and superior products that have chances of success.
- Achievement of technological and marketing synergy, quality of execution and market attractiveness.
- Development of appropriate organisational arrangements in spite of resistance of employees.

Steps in the Development of the New Product

With a company's new product strategy as a guide, the development of a new product proceeds in stages they are as discussed below:



Steps in the development of the product

Idea generation

- Ideas for new products can come from customers, employers, competitors, channel members, scientists and top managers.
- Generally customer needs and wants are where the highest percentage of ideas originates.
- They are able to give suggestions for improvements in the existing products.
- Employees in the company too2 can suggest ideas for improving a product, for example, Toyota claims that its employees suggest about 2 million ideas annually, i.e., 35 suggestions per employee, of which over 85% are implemented.
- Some companies like Kodak give monetary benefits, holidays and recognition awards to employees for their suggestions.

- Companies also find good ideas by looking into the competitor's products and services.
- They can find out the customer's likes and dislikes about the competitors products.
- They may buy the competitors' products, take them apart and develop better products.
- The company's salespersons and intermediates also suggest new ideas as they are in close contact with customers.
- Sometimes ideas may come from inventors, patent attorneys, universities, laboratories, industrial consultants, advertising agencies or marketing research firms, etc.

Idea screening

When the idea manager receives new ideas from employees, an idea committee reviews these ideas each week.

These ideas are then classified into three categories as

- Promising ideas
- Marginal ideas
- Rejects
- A committee member then researches each promising idea and reports them to the committee.
- The surviving ideas then move into a full scale screening process. While screening the ideas, the company has to avoid two types of errors.

A drop error: It takes place when the company rejects an otherwise good idea, hence, while dismissing an idea, great care has to be taken.

A go error :It occurs when the company accepts a poor idea to move into development and commercialisation.

Concept development and testing : A product concept is an elaborated version of the idea expressed in meaningful consumer terms. The company should identify which group of customers e.g. infants, teenagers, adults would use the product and its primary benefits. Concept testing involves presenting the product concept to appropriate target consumers and getting their reactions)

Business analysis: Its aim is to evaluate the proposal's business attractiveness. Estimates on future sales, costs, and profits are done to determine whether they satisfy company objectives.

Estimation of total sales: The total estimated sales include the total of estimated first time sales, replacement sales and repeat sales.

Estimation of costs and profits

- Costs are estimated by research and development, manufacturing, marketing and finance departments.
- Companies use the technique of break level analysis to estimate how many units of the product should be sold to break-even at a given price and cost structure.
- If the management concludes that sales would easily reach the break-even point, product development can take place.
- For the purpose of estimating profit, the risk analysis method is used.
- According to this risk analysis method, three estimates- (Optimistic, Pessimistic and most likely) are obtained for each uncertain variable affecting profitability under the assumed marketing strategy and market environment for the period covered by the plan.
- With the help of computer simulation, the possible outcomes and the rate of return are estimated.

Product development

- During the product development stage, the management determines whether the product idea can be translated into a technically and commercially feasible product.
- If not, then the product idea will be dropped.
- If the product idea is observed to be feasible, then a set of methods known as Quality Function Deployment (QFD) are applied for translating the job of the target customer requirements into a working prototype.
- For this purpose, the list of consumer-designed attributes supplied by market research are converted into engineering attributes, which are then used by the engineering department to put them into practice.

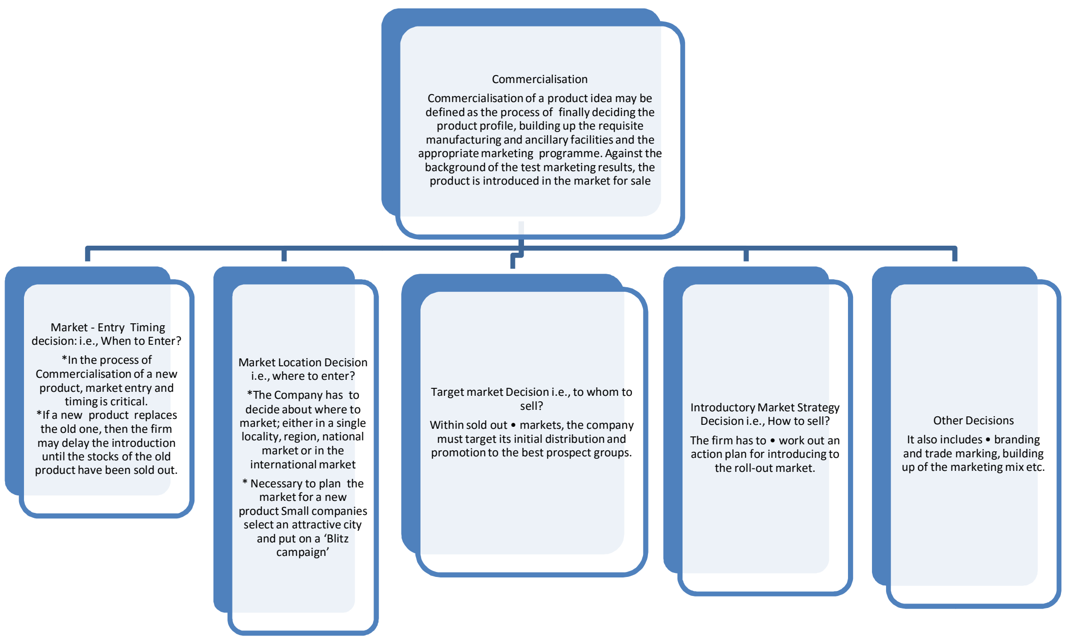
- The research and development department develops one or more physical versions of the product concept.
- It tries to find a prototype that includes the key attributes described in the product concept statement that performs safely during normal use and under normal conditions and it can be produced within the budgeted manufacturing costs.
- Developing and manufacturing a prototype may take months or even years.
- However, modern sophisticated virtual reality technology is useful in speeding up the process.
- With the rise of the World Wide Web, it has become easier to have more rapid proto typing and a more flexible developmental process.
- When the prototype is ready, it has to be put to rigorous functional tests and customer tests.
- Alfa Testing is the procedure of testing a product within the firm to see its performance in different applications.
- After refining the prototype further, beta testing is to be applied.
- A set of customers are selected for using the prototype and to give feedback.
- Beta testing is useful when potential customers are heterogeneous, the potential applications are not fully known.
- Several decision makers are involved in purchasing the product and the opinion of the early users is sought.

Market testing

- Once the management is satisfied with the functional and physiological performance, the product is ready to be dressed up with a brand name and package and to be put to a market test.
- The new product is introduced in the market to know how the dealers, retailers and consumers react to it.
- Many companies do not undertake market testing.
- Market testing depends upon the cost of investment and risk on the one hand, and the time pressure and research cost on the other.

- High investment, high-risk products where the chances of failure are very high, must be market tested as the cost of the market test is insignificant as compared to the total project cost.

Commercialisation



Commercialization: This is when the product is launched to the market on a full scale. Questions to answer:-

- When?
- Where?
- To whom

When (timing): If a company learns that its competitor is about to launch a similar product in the market, it has three options; First entry; the first firm that enters a market usually enjoys the advantages of hooking up key distributors and customers. But if the product is rushed to the market it may fail.

Parallel entry; the firm might time its entry to coincide with the competitor's entry. The market may pay more attention when two companies are advertising the new product. Late entry; the firm might delay its launch until after the competitor has entered. The competitor will have borne the cost of educating the market and its product may reveal faults that the late entrant can avoid.

If a new product replaces an older product, the company might delay introduction until the old product's stock is finished. If the product is seasonal, it might be delayed until the right season arrives.

***Where (geographic strategy*)** The company must decide whether to launch the new product in a single locality or several regions. Factors to consider:

- Company size; small companies will first enter an attractive city with a heavy promotional campaign and enter others one at a time.
- Cost of communication media.
- Competitive penetration
- Market potential and knowledge

To whom (Target- market prospects)

The company must target its initial distribution and promotion to the best prospect groups who would have the following characteristics; Early adopters, heavy users, opinion leaders, reached at a low cost, etc.

CHAPTER 4

Distribution Management

Contents:

- Meaning and definition
- Functions
- Objectives
- Types of distribution channels
- ***Types of intermediaries***

Meaning and definition

Distribution involves the marketing tasks concerned with making the product available and accessible to buyers. It ensures that customers get their products at the right place and at the right time. Distribution is about places i.e. places where the product will be made, stored, bought or used.

A distribution channel consists of a group of individuals or organizations that assist in getting the product to the right place and time- just when and where the customer wants it.

Delivering goods to the customer is a critical task. If the product is not made available when and where the customer wants it (that is time and place utilities), then, in spite of the good quality and fair price, the product is likely to fail in the market.

In order to achieve this value adding function, manufacturing firms have to carry out the distribution activity as an integrated part of the organisational structure which is also known as 'Public Distribution System', 'Traffic Management', 'Marketing Logistics' 'Value Network'. Physical distribution is an important factor in the selling process.

Physical distribution comprises the tasks involved in planning and implementing the physical flows of materials and final goods from the point of origin to the point of use or consumption to meet the needs of customers. Physical distribution is the science of business logistics whereby the proper amount of the right kind of produce is made available at the place where demand for it exists. It is the key link between manufacturing and the creation of demand. It includes various inter-related activities such as

- Inventory control
- Storage
- Transportation
- Material handling
- Packaging
- Order processing
- Marketing forecasting
- Customer service

According to the American Marketing Association, a channel of distribution or marketing channel is the structure of intra-company organisation units and extra company agents and dealers, wholesale and retail through which a commodity product or service is marketed. *Marketing channels are sets of independent organisations involved in the process of making a product or service available for use or consumption. The channel is an identifiable discrete, indispensable function of marketing, a pathway for ownership and possession of goods and services.*

Functions of the Distribution Channel

1. *Matching the Demand and Supply*: The intermediaries assemble goods from different producers to make them easily available for customers. The goal of marketing is to match the segments of supply and demand. The matching process involves the following

- *Contractual function*:Matching buyers with the sellers.
- *Merchandising function:* Supplying goods to meet the market requirements.
- *Pricing function:* The process of attaching monetary value to the product.
- *Propaganda function*: Sales promotion activities.

- *Physical distribution*: Distribution of products.
- *Termination Settlement contract*, i.e., paying the price and receiving goods

2. *Helping the Producer*: The intermediaries specialise in the function of marketing products. This reduces the burden on the Producers. They can hence concentrate on the production and development activities more effectively. As the producers' financial involvement in marketing is reduced, the producers' can use this finance for better production.

3. *Help in Financing the Producers:* The middlemen collect hope orders, purchase products in large quantities from the producers, and pay them in time. It helps producers to go for large scale production by using better technology, achieving economies of scale of production, etc without any financial problems. Some producers collect deposits from stockiest and distributors as a security.

4. *Stabilising Prices:* The middlemen help in stabilising prices of the products by stocking large quantities of goods to assure a steady flow of goods to the market. This helps in creating time, place and possession utilities for products and maintains the stability of prices.

5. *As a Means of Two-way Communication*: As a connection link between the producers and the consumers, they communicate about the product's features. They are in close contact with customers, so they are aware about changes in the consumer needs and preferences. They pass on this information to the producers upwards so that product modification can take place.

6. *Creating a Route in Selling*: Middlemen make a sales route for the producers. Once the route for reaching the customer with goods is established, the problem of selling the products becomes economical, easier and faster.

7. *Undertaking Promotional Activities*: Promotional activities such as advertising, personal selling, sales promotion, etc. are undertaken by the middlemen. Retailers also display the products in their windows to attract customers.

8. *Forecasting the Demand*: The middlemen help the marketing managers by supplying their estimates of demand and sales in the immediate future. This helps in forecasting the demand.

9. *Pricing Decision*: The middlemen are in close contact with customers and hence they know the prices which consumers prefer. Many a times a producer invites suggestions from the intermediaries, while taking decisions about pricing the product. It helps the producers in arriving at a rational price policy.

10. *Negotiating*: Active participation of the middlemen helps in negotiating with customers so that a final agreement regarding the price of the product and other terms in the offer can be made. This negotiation is facilitated by the middlemen.

Objectives of the Channels of Distribution

The primary objective of the distribution channel is to bridge the gap between the producers and consumers by way of resolving spatial (or geographical distance) and temporal (relating to time) discrepancies in supply and demand. It involves the following activities:

- The transfer of title to the goods involved in the marketing process
- The physical movement of goods from the point of production to the point of consumption
- The storage of goods
- Communicating information regarding the availability, characteristics and price of the goods in transit, inventory and on purchase

Types of distribution channels

1. Zero-level channel; this is where the producer sells directly to the consumer i.e

Producer $\Rightarrow$ final consumer/ end user

2. One level channel; this is where there is only one intermediary i.e

Producer $\Rightarrow$ retailer $\Rightarrow$ consumer

3. Two level channel; it involves two intermediaries i.e.

Producer → wholesaler → retailer → consumer

4. Three level channel; it involves three intermediaries i.e.

Producer → agent or distributor → wholesaler → retailer → consumer

Types of intermediaries

Wholesalers: A wholesaler is a businessman who carries out all the activities involved in the selling of goods. They acquire title to the goods that they handle. According to the American Marketing Association, wholesalers buy and resell merchandise to the retailers and the other merchants and to industrial institutions and commercial users but do not sell in significant amount to the final consumers.

Retailers: The term Retailer is derived from a French word “retailer” which means to cut again. Thus, retailer trade implies trading in small quantities. Retailing is the activity of direct re-selling of small quantities of the product to the final consumers. So they deal in a large variety of goods. A retailer is the last middleman in the channel of distribution. According to the American Marketing Association, retailing consists of the activities involved in selling directly to the ultimate consumer for personal, non-business use. It embraces the direct to customer sales activity of the producer whether through his own stores by house to house canvassing or by mail order business.

Distributors: These are the intermediaries who stock products for manufacturers and sell them. In most cases they are appointed by the manufacturer

Dealers: They are those who specialize in selling one particular brand e.g. motor vehicle dealers who are often associated with the manufacturer, selling on his behalf, including offering after-sales facilities. In most cases they sell to end user.

Agents/brokers: The agent middlemen are engaged in wholesale trading. They do not take title to the goods which they are dealing with. Their main characteristics are: They mainly serve industrial users. They carry out the function of the salesmen. They work on commission basis. They mainly work for the buyers

Franchise: This is a business relationship where the franchisee holds a contract to market and supply a product or service that has been very strictly designed and developed by the franchiser. The franchisee must adhere to the strict terms and conditions on store design, layout and contents sold within the retail outlet e.g. Guru sweets, moi amor etc.

Merchandisers: They buy and sell goods on their own account and take the risks. They get the title to the goods and take part in the distribution of the goods from one place to the other. Thus merchant middlemen buy and sell goods by taking possession of the goods, bear the risks and charge the price for their efforts. They also undertake auxiliary functions and provide services to the required participants in the channel. They can be classified as wholesalers and retailers.