Unit-1

Consumer Decision Making

Structure

1.1 Introduction

Though similar, consumers are unique in themselves; they have needs and wants which are varied and diverse from one another; and they have different consumption patterns and consumption behaviour. The marketer helps satisfy these needs and wants through product and service offerings. For a firm to survive, compete and grow, it is essential that the marketer identifies these needs and wants, and provides product offerings more effectively and efficiently than other competitors. A comprehensive yet meticulous knowledge of consumers and their consumption behaviour is essential for a firm to succeed. Herein, lies the essence of studying the Consumer Behaviour.

Consumer behaviour explains the reasons and logic that underlie purchasing decisions and consumption patterns; it explains the processes through which buyers make decisions. The study includes within its purview, the interplay between cognition, affect and behaviour that goes on within a consumer during the consumption process: selecting, using and disposing off the goods and services.

A. **Cognition:** This includes within its ambit the "knowledge, information processing and thinking" part; It includes the mental processes involved in processing of information, thinking and interpretation of stimuli (people, objects, things, places and events). In our case, stimuli would be product or service offering; it could be a brand or even anything to do with the 4Ps.

B. **Affect:** This is the "feelings" part. It includes the favourable or unfavourable feelings and corresponding emotions towards a stimulus (e.g. towards a product or service offering or a brand). These vary in direction, intensity and persistence.

C. **Behaviour:** This is the "visible" part. In our case, this could be the purchase activity: to buy or not a buy (again specific to a product or service offering, a brand or even related to any of the 4 Ps).

However, the interaction is reciprocal between each of the three towards each other and with the environment.

In this context, consumer behaviour is defined as:

> *"The behaviour that consumers display in searching for, purchasing, using, evaluating and disposing of products and services that they expect will satisfy their needs." - Schiffman and Kanuk "*
>
> *".... the decision process and physical activity engaged in when evaluating, acquiring, using or disposing of goods and services." - Loudon and Bitta*

The study of consumer behaviour deals with understanding consumption patterns and behaviour. It includes within its ambit the answers to the following:

- 'What' the consumers buy: goods and services
- 'Why' they buy it: need and want
- 'When' do they buy it: time: day, week, month, year, occasions etc.
- 'Where' they buy it: place
- 'How often they buy' it: time interval
- 'How often they use' it: frequency of use

The scope of consumer behaviour includes not only the actual buyer but also the various roles played by him/ different individuals.

1.2 Components of consumer buying behaviour

Different components of consumer buying behaviour are given below.

A. **Buyer and seller**: They are the key elements in consumer behaviour. They have needs and wants and go through a complex buying process, so as to be able to satisfy the need through purchase of the good or service offering. They enter into an exchange process with the seller, which leaves both the parties (buyer and seller) better off than before. In fact, the exchange process is value enhancing in nature, leading to satisfaction of both the parties.

B. **Decision making (Cognitive and affective):** this includes the stages of decision making: Need recognition, Information search, Evaluation of alternatives, Purchase activity, Post purchase behaviour.

C. **Actual purchase (behaviour):** this includes the visible physical activity of buying of goods and/or service. It is the result of the interplay of many individual and environmental determinants which are invisible.

D. **Individual determinants and environmental influences**: The environmental factors affect the decision process indirectly, through way of affecting individual determinants.

E. **Buying roles:** Actual Buyer vis-a-vis other users. There are five buying roles, viz.,
   i. Initiator: The initiator is the person who identifies that there exists a need or want.
   ii. Influencer: The influencer is the one who influences the purchase decision, the actual purchase activity and/or the use of the product or service.
   iii. Decider: the decider is the one who decides whether to buy, what to buy, when to buy, from where to buy, and how to buy.
   iv. User: The user is the person (s) who use the product or service
   v. Buyer: The buyer is the one who makes the actual purchase

These five roles may be played by one person or by different persons. A person may assume one or more of these roles. This would depend on the type of product or service.

Examples on Buying roles:
A child goes to a kindergarten or nursery school. He / she comes back home and asks her parents to buy her a set of colour pencils and crayons. Now the roles played in the process are given below:

- Initiator : the child in nursery school
- Influencer : a fellow classmate or the teacher
- Decider : the father or the mother
- Buyer : the father or the mother
- User : the child

The lady of a house who is a housewife and spends her day at home doing household chores and watches TV in her free time. That is her only source of entertainment. The TV at home is giving problem. She desires a new TV set, and says that she wants an LED – HD TV. Now the roles played are:

- Initiator : the housewife
- Influencer : a friend / neighbour
- Decider : the husband or the son
- Buyer : the husband or the son
- User : the family

A boy enters college and needs a laptop for doing assignments.
- Initiator : The boy himself
- Influencer : His friends and classmates
- Decider : The boy himself
- Buyer : The boy himself
- User : The boy himself

Therefore, consumer behaviour focuses specifically on the Buyer and often User. But also analyses impact of other roles. Marketers need to understand the dynamics of the consumer decision making process. While the process and the internal and external factors affecting decision making would vary from person to person and within the same person from situation to situation, the study of consumer behaviour attempts to draw certain generalizations. The major decisions taken by a consumer relate to what he buys (products and services as also the brands), how much he buys (quantity), where he buys (place), when he buys (time) and how he buys (payment terms). In the following sections, we will discuss the consumer decision making process and different factors that affects in the decision making process.

1.3 Decision making

A decision is defined as choosing an option of the few/many available. Decision making is the process of choosing between two or more alternatives; It is the selection of an alternative out of the few/many choices that are available. Decision making is i) a goal oriented process and ii) a problem solving process which helps to take advantage of opportunities and fight threats. Decisions Making can be of two types, such as:

A. **Programmed decision making:** This is applied for problems that are routine and regular. Such problems are simple to deal with and guidelines to sort out such problems exist. Such decisions are made without much thought. With respect to marketing, these are decisions related to day to day purchases or convenience and shopping goods; these are generally low involvement purchases. They may also be habitual in nature, and brand loyalty could easily develop. Examples: Purchases made for our daily usage products like staples, soaps, cooking oil, salt etc.

B. **Non-programmed decision making:** This is applied for problems that arise suddenly and are unique or novel. As the problem is sudden and novel, it is complex and requires a lot of information gathering, deliberation and thought. With respect to marketing, these are decisions related to infrequent purchases or specialty goods and emergency goods; these are high involvement purchases. Examples: Purchases made for TV, laptops, car, house/flat, etc.

1.4 Consumer decision making

A consumer purchase is actually a response to a problem. Consumer Decision Making pertains to making decisions regarding product and service offerings. It may be defined as a process of gathering and processing information, evaluating it and selecting the best possible option so as to solve a problem or make a buying choice. Consumer Decision Making pertains to the following decisions:

- What to buy: Products and Services (and the Brands?)
- How much to buy: Quantity
- Where to buy: Place
- When to buy: Time

- How to buy: Payment terms

All purchase decisions are not similar. The effort put into each decision making is different

Levels of consumer decision making

While decision making is defined as the selection of an alternative to solve a problem, the time and effort required to complete the process varies across buying situations. We may define three kinds problem solving spread over a continuum; these are referred to as the levels of consumer decision making. They are as follow.

A. Extensive problem solving (EPS)
B. Limited problem solving (LPS)
C. Routinized problem solving (RPS) or routinized response behaviour.

These are explained as follows:

A. Extensive problem solving (EPS): In EPS, the consumer is unfamiliar with the product/service category; he is not informed of the product or service offering, and thus, the situation requires extensive information search and evaluation.

In this case, the consumer is not aware:

- About the various decision criteria used to evaluate the product or service offering.
- About various brands that are available and from which to evaluate.
  The result is that the purchase process involves significant effort on part of the consumer. He has to gather knowledge about
- the decision criteria
- the brands available and
- make a choice amongst the brands

The types of products and / situations where we generally have EPS are:

- These goods are ones of high involvement; they are expensive; they are infrequently bought; there is considerable amount of risk involved.
- These are generally first time purchases.
  Examples: Jewellery, electronic goods, Real estate and property etc.

B. Limited problem solving (LPS): In this case, the consumer is familiar of the product or service offering; but he is unaware of the various brands. The case is one where the buyer is familiar with the product category but unfamiliar with the brands.

Here, the consumer: -

- is aware of some brands and also of the various criteria used to evaluate the product or service offering.
- is unaware of the new brands that have been introduced.

- has not evaluated the brands amongst the awareness set and has not established preferences amongst the group of brands.

The result is that the purchase process is more of a recurring purchase and it involves only a moderate effort on part of the consumer. He has to gather knowledge to add/modify the existing knowledge that he has in his memory. Thereafter he has to make a decision.

The types of products and / situations where we generally have LPS are:

- These goods are ones of low involvement; they are generally moderately priced; they are frequently bought; there is lesser amount of risk involved.
- These are generally recurring purchases.

Exceptions: They may also be cases where an expensive product is being repurchased. *Examples*: A laptop replacing a desktop, a second TV for the home.

C. **Routinized problem solving (RPS) or routinized response behaviour:** In this case, consumer is well informed and experienced with the product or service offering. The consumer is aware of both the decision criteria as well as the various brands available.

Here, the goods are ones of low involvement; they are inexpensive; they are frequently bought; there is no risk involved. These are routine purchases and are a direct repetition, where the consumer may be brand loyal.

The result is that the purchase process involves no effort on part of the consumer. It is simple and the process is completed quickly; purchases are routine and made out of habit.

The types of products and / situations where we generally have RPS are:

- These goods are ones of low involvement; they are inexpensive; they are frequently bought; there is no risk involved.
- These are routine purchases and the consumer is brand loyal.

Examples: Staples, Cold drinks, Stationery etc.

Table-1.1: Comparison between EPS, LPS and RPS

Attributes	EPS	LPS	RPS
Complexity of decision making	High	Medium	Low

Time taken to make decision	High	Low or High	Low
Information gathering	Yes	Yes	No
Information sources	Many	Few	Few or none
Awareness and knowledge of Decision criteria.	No	Yes	Yes
Awareness and knowledge of Alternate brands available	No	Somewhat	Yes
Evaluative criteria	Complex	Moderate	Simple
Brands considered	Many	Few	One (Repeat purchase)
Cognitive dissonance	High	Rare	None
Consumer involvement	High	Medium	Low

Note-1:

What is cognitive dissonance: In psychology, cognitive dissonance is the mental stress or discomfort experienced by an individual who holds two or more contradictory beliefs, ideas, or values at the same time; performs an action that is contradictory to one or more beliefs, ideas, or values; or is confronted by new information that conflicts with existing beliefs, ideas, or values. For example: A satisfied buyer is a silent advertiser. But, if the used brand does not yield desired satisfaction, negative feeling will occur and that will lead to the formation of negative attitude towards brand. This phenomenon is called cognitive dissonance.

Alternative way of understanding the consumer decision making

Let us discuss consumer decision making in terms of consumer involvement. Consumer involvement is actually defined in terms of the level of interest and intensity with which the person approaches the product or service category. So, people some people are involved with some kind of product category some are involve with other kinds of product category. Generally, people are highly involved in high involvement product category because the perceive risk is very high.

Therefore, on the basis of consumer involvement and the level of significance among brands to take the decision, Assael (1981) has classified the types of buying behaviour into four categories, such as:

A. Complex buying behaviour
B. Dissonance reducing buying behaviour
C. Habitual buying behaviour
D. Variety seeking buying behaviour

A. **Complex Buying Behaviour**: In this case, the consumer shows a high level of involvement while purchase and observe considerable differences among brands. This kind of buying behaviour is noticeable when the product price is high, risky, availability of after sales services etc.

   Example: First time buyer of a car, mobile phone or a laptop. All the products are expensive and variety of brands are available. Consumer feel uncomfortable to decide for a specific brand.

B. **Dissonance reducing buying behaviour:** In this case, consumer involvement is very high due to high price and infrequent purchase with less significance difference among brands. In such cases, the buyer purchases the product which is easily available. After the product is purchased, consumer may face dissonance in the post purchase behaviour. (See the meaning of dissonance as given in Note-1).

C. **Habitual buying behaviour**: In this case, the buyer's involvement is very low, but there are no significant differences among brands. The good example is a lighter or a match box. Consumer just go for it and purchase it from the soap. There is no brand loyalty. Consumer do not need information regarding brand purchase and product characteristics. For such brands, TV commercials, newspaper and magazines build positive attitude towards brands.

D. Variety seeking buying behaviour: In this case, consumer involvement is very low, but there are significance differences among brands. In such situations, consumer perceive brand switching. A good example is purchase of a chips packet. In such cases, consumer purchase chips and consume it. Next time, the consumer purchases another brand for a change of taste.

Assael's Classification of Types of Buying Behaviour		
	High Involvement	**Low Involvement**
Significance difference between brands	Complex Buying Behaviour (CBB)	Variety Seeking Buying Behaviour (VSBB)
Few difference between brands	Dissonance Reducing Buying Behaviour (DRBB)	Habitual Buying Behaviour (HBB)

Table-1.2: Assael's Classification of Types of Buying Behaviour

1.5 Consumer decision making process and implications for marketer

Marketers are interested in consumers' purchase behaviours, i.e., the decision making process. The consumers' decision making is a choice amongst various alternatives that address problematic issues like:

- what to buy
- where to buy
- when to buy
- how to buy
- how much to buy

Consumer decision making involves a continuous flow of interactions among environmental factors, cognitive and affective processes and behavioural actions. A consumer's decisions are based on knowledge, affect and behaviour related to the marketing mix such as product, price, place and promotion.

Stages in consumer decision making process

There are five stages in the consumer decision making process. These are:

i. Need recognition/Problem recognition
ii. Pre-purchase information search
iii. Evaluation of alternatives
iv. Purchase decision
v. Post-purchase outcome and reactions

Each of these stages are explained as follows:

i. Need recognition/Problem recognition

This is a stage of perceiving a deficiency/need. A need could be triggered off by an internal stimulus or an external stimulus. For example, a person is thirsty and feels like having a cola drink. The stimulus is internal. On the other hand, while walking across the street, he sees a hoarding which shows a person having a frosted, chilled cola, and he too desires to have the same, the need is said to have been stimulated by some external stimuli.

A need or problem recognition could be Simple or Complex.

A. **Simple:** Simple problem recognition is similar to Structured Problems; They occur frequently as a routine and can be dealt with automatically without much effort.

B. **Complex:** A Complex problem recognition is similar to Unstructured Problems; They occur infrequently as unique and non-routine and need considerable effort to be solved.

A need or problem recognition could result when:

1. the "Actual State" changes (AS type); such as,
   - the product is failing, or the consumer is running short of it;
   - there is a problem that exists.
   - consumers who react in such situations are called AS Types.

     Example: A product stops functioning and the customer needs a replacement; e.g. A refrigerator.

2. The "Desired State" changing (DS type); such as,
   - there is an imbalance between the actual state and the desired state
   - another product seems better and superior to the one that is being currently used
   - consumers who react in such situations are called DS Types.
     Example: The product is functioning properly; but the consumer wants to buy an upgraded model; for example, the refrigerator is functioning properly; However, the customer wants to buy another one which has more features and is more modern; Samsung Two doors: Deluxe: Frost free.

Therefore, which of the particular styles operates' depends on the product or service in question as well as the situation. Whether a problem is an AS or DS Type also gets affected by an individual and his personality. Some consumers are AS Types, who realize that there is a problem after it has arisen, and so they go in for a purchase; They are reactive by nature; E.g. The consumer reacts after the refrigerator breaks down. Other consumers are the DS Types, who want to upgrade to better/newer products; They are proactive; E.g. Want to purchase a newer model of the refrigerator.

A need is recognized in any of the following situations:

- When a current product brand X is not performing well.
- When the current product brand X is nearing depletion.
- When another brand Y seems superior to the one currently owned, X.

ii. Pre-purchase information search

After a need is recognized, the consumer goes for an information search, so as to be able to make the right purchase decision. He gathers information about the:

- product category and the variations
- various alternatives
- various brands.

However, the amount of information a consumer will gather depends on the following:

- *The consumer*: demographics (age, gender, education), psychographics (learning, attitudes, involvement, personality type)
- *Product category*: differentiation and alternative brands available, risk, price, social visibility and acceptance of the product.
- *Situation*: time available at hand, first time purchase, quantity of information required, availability of information.

Types of search activities:

The information search activity may be of various types such as, specific, ongoing and incidental.

a) *Specific*: This type of search activity is specific to the problem and/ immediate purchase; it is spurred as the need arises, and the consumer actively seeks information.
Example: student enters college and needs to buy a laptop so that he can work on his assignments.

b) *Ongoing*: Here the search activity is a gradual process that could span over time.
Example: the same student, has been thinking of purchasing the laptop since the past five years, and over these past 5-6 years, he has been gathering information specific to the laptop as a product category and also about the various brands available.

c) *Incidental*: This is a by-product of another search activity or experiences. Consumers absorb information from their day to day routine activities and experiences.
Example: the student goes to a mall; he has gone there to help his mother buy a microwave oven; there in the store, he attends a demonstration of a new laptop that is being launched.

Information sources: The information sources are of two types:

a) *Internal sources:* This includes the consumer and his self. He recalls information that is stored in his memory (comprising information gathered and stored, as well as his experiences, direct and indirect). Internal sources seem sufficient when:
    - it is a routine purchase
    - the product is of low involvement

b) *External sources:* Here the consumer seeks information from the external environment. External sources of information include:
   - Interpersonal communication (family, friends, work peers, opinion leaders etc.)
   - Marketing communication or commercial information (advertisements, salespeople, company websites, magazines etc.
   - Other public sources (editorials, trade magazines and reports, consumer awareness programmes on TV, Internet etc.)

   Moreover, external sources are resorted to in cases where: i) past knowledge and experience is insufficient and ii) the product is of high involvement and the risk of making a wrong decision is high.

iii. Evaluation of alternatives

Once the consumer has gathered information and identified the alternatives, he compares the different alternatives available on certain criteria. This involves: a) Generation of choice alternatives; b) Identification of evaluative criteria such as 'product attributes' and 'benefits from these attributes' and c) Application of Decision Rules.

a) **Generation of choice alternatives:** While generation of alternatives, a consumer moves from an evoked set towards the choice set.
   - *Evoked set/Consideration set:* This is the set of alternatives that he actively considers while making a purchase decision; these exist either in his memory or feature prominently in the environment. The consumer perceives them to be acceptable.

   - *Inept set:* These are those alternatives from the evoked set that the consumer excludes from further consideration, as he perceives them to be inferior and unacceptable.

   - *Inert set:* These are those alternatives from the evoked set that the consumer excludes from further consideration, as he is indifferent towards them and perceives them as ones without much advantages or benefits.

   - *Choice set:* This comprises the final set of one or two brands from which he finally decides.

b) **Identification of evaluative criteria:** Attributes and Benefits: These are objective and subjective parameters of the brand that the consumer regards as important, and uses as standards to discriminate among the various alternatives. The consumer evaluates the different alternatives on one or few or many of these features and then makes a final choice. They are features that a consumer considers in choosing among alternatives; these could be functional/utilitarian in nature (benefits, attributes, features), or subjective/emotional/hedonic (emotions, prestige etc.). The major evaluative criteria are:

   - *Economic:* Price, Value (Product Attributes, Brand image, Evaluation of Quality, Price, & Features).

- *Behavioural*: Need/motivation, Personality, self-concept and self-image, Lifestyle etc.
- *Social influences:* Group influences, environmental issues etc.

c) **Application of Decision Rules:** The consumer uses certain decision rules. The decision rules help a consumer simplify the decision process; the various evaluative criteria are structured and integrated so as to simplify the evaluation process. There can be two kinds of Decision Rules, viz., i) Compensatory rules and ii) Non-compensatory rules.

i) ***Compensatory rules:*** Under compensatory rules, the various evaluative criteria are listed as attributes. These attributes are scored and rated for the various alternative brands. A lower rating on an attribute may be offset by a higher rating on another; i.e. a higher rating on one attribute would compensate for a lower rating on another. Based on the final scores, the brands are ranked; the one with the highest score, being regarded as the best. The consumer would then select the brand that scores the highest among the various alternatives that have been evaluated. Compensatory rules could assume two forms: simple summated and weighted.

- *Simple summated*: The attributes are rated for each brand and the scores are totalled.
- *Weighted:* The attributes are first given weights relatively based on the level of importance; thereafter, the attributes are rated and finally scored after multiplication with the weights. The weighted scores are then totalled.

ii) **Non-Compensatory rules**: Here, a negative evaluation of any one attribute eliminates the brand from consideration. A lower rating on an attribute cannot be offset by a higher rating on another; i.e. a higher rating on one attribute would not compensate for a lower rating on another. The consumer would then select the brand that scores the highest among the various alternatives that have been evaluated. Non-compensatory rules could assume three forms, such as:

a) *Conjunctive*: A minimally acceptable cut off point is established for each attribute. The brands are evaluated, and, the brand that falls below the minimally acceptable limit on any of the attributes is eliminated/rejected.

b) Disjunctive: A minimally acceptable cut off point is established for each attribute. The brands are evaluated, and, the brand that falls above the cut-off point on any of the attributes is selected.

c) *Lexicographic*: The various attributes are ranked in terms of perceived importance. First, the brands are evaluated on the attribute that is considered the most important. If a brand ranks considerably high than the others on this attribute, it is selected. In case the scores are competitive, the process may be repeated with the attribute considered next in importance.

Sometimes the application of one rule may not be enough; And another may also be applied to reach a final decision.

Table-1.3: Decision rules with example.

Decision rule	Example
Compensatory rule	The consumer chooses that laptop which the judges as the best when he balances the good and bad ratings with each other.
Non Compensatory rule : Conjunctive	The consumer chooses that laptop that has no bad features.
Non Compensatory rule: Disjunctive	The consumer chooses that laptop that has at least one good feature.
Non Compensatory rule: Lexicographic	The consumer chooses that laptop that is the best on the most important of all features.

iv. Purchase decision

After the consumer has evaluated the various alternatives, he/she selects a particular brand. Consumer purchases may be trials/first purchases or repeat purchases.

- *Trials/First purchase*: Trials could be elicited through market testing, or through promotional tactics such as free samples, coupons, etc.
- *Repeat purchases:* If the consumer is satisfied, he would buy the brand again. Repeat purchases lead to brand loyalty.

The consumer may further have to make decisions on:

- where to buy from? (Place: Real/brick and mortar or virtual/online)
- whom to buy from? (Which store: Depends on reputation of seller, past experience, etc.)
- when to buy? (Time: Emergency or Routine; During season, off season, sale, rebate etc.)

Therefore, it is noteworthy that a purchase intention (desire to buy the most preferred brand) may not always result in a purchase decision in favour of the brand; it could get moderated by i) Attitudes of others; and ii) Unexpected situational factors.

v. Post-purchase outcome and reactions

The post purchase outcome and reactions contains two stages;

A. Stage-I: Comprises Post purchase Cognitive Dissonance, and
B. Stage-II : Comprises Product usage and reaction.

A. Stage-I : Comprises Post purchase Cognitive Dissonance

This is a feeling of tension and anxiety that a consumer experiences after the purchase of a product. The consumer begins to have a feeling of uncertainty with respect the performance of the product and begins to doubt his purchase decision "whether the decision was the right one?". He begins to ask himself the following questions:

- Have I made the right choice?
- Have I purchased the right brand?
- Have I got value for money?

Cognitive dissonance generally occurs in the following cases where:

- the decision making and purchase relates to a high involvement product
- the purchase activity is irrevocable.
- the consumer cannot return the product.
- the various alternatives have desirable features and are all comparable.
- the alternatives are also unique in some way or the other.

Consumers try to reduce this dissonance by:

- gaining more product information.
- discussing with other satisfied customers who have bought the same product/brand.
- going back to the dealer and asking for reassurances.

Other methods that consumers employ to reduce cognitive dissonance are by:

- rationalizing that the choice that they have made is the right one.
- refer to data (printed/audio visual) that supports and recommends the chosen product/brand.
- make others buy the same product/brand to reassure their choice.

Marketers also employ strategies to reduce this dissonance by providing guarantees and warranties, membership to company consumer forums and communication and follow up with the customers.

B. Stage-II : Comprises Product usage and reaction.

After the purchase, the consumer uses the product and re-evaluates the chosen alternative in light of its performance vis-à-vis the expectations. This phase is significant as i) it acts as an experience and gets stored in the memory; ii) it affects future purchase decisions and iii) it acts as a feedback.

In this context, there could be three situations that can arise. These are:

- *Performance meets expectations:* This leads to a neutral feeling; Customer may think of more suitable alternatives next time.

- *Performance exceeds expectations:* The customer is satisfied and this leads to a positive feeling. He would tend to repeat purchase and it would lead to brand loyalty. He would also spread positive word of mouth.

- *Performance falls short of expectations:* Here, the customer is dissatisfied and this leads to a negative feeling. The customer would search for other alternatives, express grievances, spread negative word of mouth and may even resort to legal action.

Note: It is important to note that the five staged decision making process is not so simple; it is complex. The decision making process is an interplay of reactions amongst a consumer and his cognition, affect and behaviour on the one hand, as well as the environmental forces on the other hand. Further, the procedure may not always follow a linear order, and the decision making may not always proceed through all the five stages; it would vary across -

- the nature of the product (high and low involvement);
- the purchase situation (emergency or planned or routine);
- the personal characteristics of the consumer; and
- the type of problem solving (EPS, LPS and RPS).

Implications for the marketer

An understanding of the consumer decision making process, can help a marketer formulate appropriate marketing strategies. He can also model his marketing mix accordingly. The implications of understanding the dynamics of consumer behaviour are discussed as follows:

Table-1.4: Implications for the marketer

Stages of consumer decision making	Implications for the marketer
Need/Problem recognition	A marketer can create an imbalance between the actual and desired state; it would trigger of the purchase decision process.
	He can launch newer models; marketing communication has a big role to play.
	-He can focus on both functional (utilitarian) and emotional (hedonic) benefits that the product purchase could offer.
	-He can activate a need through

	communication (advertisements, sales promotion, point-of-purchase stimuli, opinion leaders and reference groups).
Pre-purchase information search	Marketing communication has an important role at this stage.
	The marketer can identify the sources of information that the people generally access and use these to present information about his product and service offering.
	The marketer can also identify the functional or hedonic utility and use appeals accordingly.
	This would help create the right kind of cognitive and emotional touch point so as to elicit a favourable behaviour (purchase).
	The marketer should be able to provide the right kind of information at the right place and at the right time.
	The marketer must make sure that his product and service offering forms a part of the evoked /consideration set. • For high involvement products: the marketer should ensure that information is available. • For low involvement products: he should use emotional appeals, POP stimuli etc.
Evaluation of alternatives	The marketer should be careful that his product is: positioned and promoted well; • is readily available and displayed well; • the product features prominently in the evoked/consideration set; • he highlights those attributes and benefits that are regarded as most important to the consumers, and which they are most likely to evaluate while selecting an alternative.
	The marketer should inform and educate the customer about the various criteria to use for evaluation of alternatives.
	While doing so an intelligent marketer should

	focus on those attributes, where his product is better and/superior.
Purchase decision	The marketer should be careful to stock the product at the right place at the right time so that the consumer who has made a decision in favour of the brand can have access to the product; Else the consumer may have to change his decision at the last moment.
	As far as trial and first time purchases are concerned, the marketer should encourage trials through market testing, or through promotional tactics such as free samples, coupons, etc.
	For repeat purchases: • the marketer should make sure that he has satisfied the customer at the first time. • that his offering is a part of the evoked/consideration set.
	He should aim towards creation of brand loyalty.
Post-purchase outcome and reactions	The marketer can play an important role in reducing the dissonance that the consumer faces and reassuring him that the choice he made was the right one. • The marketer can communicate with the customer about the various attributes/features and benefits that the product has to offer in comparison with other alternatives. • He can follow up with the customer and address queries and concerns if any (e.g. follow up calls). • Marketers' assurances with respect to warranties, guarantees and exchange can also pacify the cognitive dissonance state. • Company websites with FAQs (frequently asked questions); satisfied customers' comments and blogs; and customer care information (e.g. toll free numbers etc.) can also prove to be helpful.

1.6 Factors influencing consumer buying behaviour

As discussed earlier, there are different processes involved in the consumer behaviour. Initially the consumer tries to find what products he/she would like to

consume, then he selects only those products that promise greater utility. After selecting the product, the consumer makes an estimate of the available money which he can spend. Lastly, the consumer analyses the prevailing prices of commodities and takes the decision about the product or brand he should consume.

The length of this decision process will vary. A consumer may not act in isolation in the purchase, but rather may be influenced by any of several people in various roles. The number of people involved in the buying decision increases with the level of involvement and complexity of the buying decision behaviour. Consumer s buyer behaviour and the resulting purchase decision are strongly influenced by cultural, social, personal and psychological characteristics. An understanding of the influence of these factors is essential for marketers in order to develop suitable marketing mixes to appeal to the target customer.

By identifying and understanding the factors that influence their customers, companies have the opportunity to develop a strategy, a marketing message (Unique Value Proposition) and advertising campaigns more efficient and more in line with the needs and ways of thinking of their target consumers, a real asset to better meet the needs of its customers and increase sales.

Consumer s buyer behaviour is influenced by four major factors:

A. Cultural
B. Social
C. Personal
D. Psychological

A. Cultural factors: Culture and social environment

Culture is the part of every society and is the important cause of person wants and behaviour. The influence of culture on buying behaviour varies from country to country therefore marketers have to be very careful in analysing the culture of different groups, regions or even countries. Throughout his existence, an individual will be influenced by his family, his friends, his cultural environment or society that will teach him values, preferences as well as common behaviours to their own culture. For a brand, it is important to understand and take into account the cultural factors inherent to each market or to each situation in order to adapt its product and its marketing strategy. As these will play a role in the perception, habits, behaviour or expectations of consumers.

For example, in the West, it is common to invite colleagues or friends at home for a drink or dinner. In Japan, on the contrary, invite someone home does not usually fit into the local customs. It is preferable to do that this kind of outing with friends or colleagues in restaurant.

i. **Sub culture:** A society is composed of several sub-cultures in which people can identify. Subcultures are groups of people who share the same values based on a common experience or a similar lifestyle in general. Each culture contains different subcultures such as religions, nationalities, geographic regions, racial groups

etc. Marketers can use these groups by segmenting the market into various small portions.

ii. **Social class:** Social classes are defined as groups more or less homogenous and ranked against each other according to a form of social hierarchy. Even if it is very large groups, we usually find similar values, lifestyles, interests and behaviours in individuals belonging to the same social class. Every society possesses some form of social class which is important to the marketers because the buying behaviour of people in a given social class is similar. In this way marketing activities could be tailored according to different social classes. In addition, the consumer buying behaviour may also change according to social class. A consumer from the lower class will be more focused on price. While a shopper from the upper class will be more attracted to elements such as quality, innovation, features, or even the social benefit that he can obtain from the product.

B. Social factors

It includes groups (reference groups, aspirational groups and member groups), family, roles and status. This explains the outside influences of others on our purchase decisions either directly or indirectly.

i. **Reference group and membership status:** The membership groups are usually related to its social origin, age, place of residence, work, hobbies, leisure, etc. Reference groups have potential in forming a person attitude or behaviour. The impact of reference groups varies across products and brands. For example, if the product is visible such as dress, shoes, car etc. then the influence of reference groups will be high. Reference groups also include opinion leader (a person who influences other because of his special skill, knowledge or other characteristics).

More generally, reference groups are defined as those that provide to the individual some points of comparison more or less direct about his behaviour, lifestyle, desires or consumer habits. They influence the image that the individual has of himself as well as his behaviour.

Within a reference group that influences the consumer buying behaviour, several roles have been identified such as 1) the initiator; 2) the influencer; 3) The decision maker and 4) the buyer (Discussed earlier as “Buyer’s role”)

ii. **Family:** Buyer behaviour is strongly influenced by the member of a family. Therefore, marketers are trying to find the roles and influence of the husband, wife and children. For example, if the buying decision of a particular product is influenced by wife, then the marketers will try to target the women in their advertisement.

iii. **Social roles and status:** The position of an individual within his family, his work, his country club and his group of friends etc. All this can be defined in terms of role and social status. A social role is a set of attitudes and activities that an individual is supposed to have and do according to his profession and his position at work, his position in the family, his gender, etc. and expectations of the people around him.

For example, a consumer may buy a Ferrari or a BMW for the quality of the car but also for the external signs of social success that this kind of cars represents. Moreover, it is likely that a CEO driving a small car like a Ford Fiesta or a Maruti swift, would be taken less seriously by its customers and business partners than if he is driving a German luxury car. And this kind of behaviours and influences can be found at every level and for every role and social status. Again, many brands have understood it by creating an image associated with their products reflecting an important social role or status.

C. Personal factors

It includes such variables as age and lifecycle stage, occupation, economic circumstances, lifestyle (activities, interests, opinions and demographics), personality and self-concept. These may explain why our preferences often change as our "situation" changes. Decisions and buying behaviour are obviously also influenced by the characteristics of each consumer.

i. Age and way of life: A consumer does not buy the same products or services at 20 or 70 years. His lifestyle, values, environment, activities, hobbies and consumer habits evolve throughout his life. It is obvious that the consumers change the purchase of goods and services with the passage of time.

Family life-cycle consists of different stages such young singles, married couples, unmarried couples etc. which help marketers to develop appropriate products for each stage. For example, during his life, a consumer could change his diet from unhealthy products (fast food, ready meals, etc.) to a healthier diet, during mid-life with family before needing to follow a little later a low cholesterol diet to avoid health problems.

ii. Lifestyle: The lifestyle of an individual includes all of its activities, interests, values and opinions. The lifestyle of a consumer will influence on his behaviour and purchasing decisions. For example, a consumer with a healthy and balanced lifestyle will prefer to eat organic products and go to specific grocery stores, will do some jogging regularly (and therefore will buy shoes, clothes and specific products), etc.

iii. Personality and self-concept: Personality is the set of traits and specific characteristics of each individual. It is the product of the interaction of psychological and physiological characteristics of the

individual and results in constant behaviour. It materializes into some traits such as confidence, sociability, autonomy, charisma, ambition, openness to others, shyness, curiosity, adaptability, etc. While the self-concept is the image that the individual has or would like to have of him and he conveys to his entourage. For example, since its launch, Apple cultivates an image of innovation, creativity, boldness and singularity which is able to attract consumers who identify to these values and who feel valued in their self-concept by buying a product from Apple.

iv. **Occupation:** The occupation of a person has significant impact on his buying behaviour. For example, a marketing manager of an organization will try to purchase business suits, whereas a low level worker in the same organization will purchase rugged work clothes.

v. **Economic situations:** Consumer economic situation has great influence on his buying behaviour. If the income and savings of a customer is high, then he will purchase more expensive products. On the other hand, a person with low income and savings will purchase inexpensive products.

D. Psychological factors

It affecting our purchase decision includes motivation (Maslow's hierarchy of needs), perception, learning, beliefs and attitudes. Other people often influence a consumer s purchase decision. The marketer needs to know which people are involved in the buying decision and what role each person plays, so that marketing strategies can also be aimed at these people. Among the factors influencing consumer behaviour, psychological factors can be divided into four categories as given below.

i. **Motivation:** Motivation is what will drive consumers to develop a purchasing behaviour. It is the expression of a need is which became pressing enough to lead the consumer to want to satisfy it. It is usually working at a subconscious level and is often difficult to measure. The level of motivation also affects the buying behaviour of customers.

Every person has different needs such as physiological needs, biological needs, social needs etc. The nature of the needs is that, some of them are most pressing while others are least pressing. Therefore, a need becomes a motive when it is more pressing to direct the person to seek satisfaction. Motivation is directly related to the need and is expressed in the same type of classification as defined in the stages of the consumer buying decision process.

To increase sales and encourage consumers to purchase, brands should try to create, make conscious or reinforce a need in the consumer s mind so that he develops a purchase motivation. He will be much more interested in considering and buy their products. They must also, according to research, the type of product they sell and the consumers they target, pick out the motivation and the need to which their product

respond in order to make them appear as the solution to the consumers need.

ii. **Perception:** Perception is the process through which an individual select, organizes and interprets the information he receives in order to do something that makes sense. The perception of a situation at a given time may decide if and how the person will act.

There are three different perceptual processes which are selective attention, selective distortion and selective retention. In case of selective attention, marketers try to attract the customer attention Whereas, in case of selective distortion, customers try to interpret the information in a way that will support what the customers already believe.

iii. **Learning:** Learning is through action. When we act, we learn. It implies a change in the behaviour resulting from the experience. The learning changes the behaviour of an individual as he acquires information and experience. For example, if you are sick after drinking milk, you had a negative experience, you associate the milk with this state of discomfort and you learn that you should not drink milk. Therefore, you don't buy milk anymore. Rather, if you had a good experience with the product, you will have much more desire to buy it again next time.

iv. **Beliefs and attitudes:** A belief is an opinion that an individual has on something. Through the experience he acquires, his learning and his external influences (family, friends, etc.), he will develop beliefs that will influence his buying behaviour. Customer possesses specific belief and attitude towards various products. Since such beliefs and attitudes make up brand image and affect consumer buying behaviour therefore marketers are interested in them. Marketers can change the beliefs and attitudes of customers by launching special campaigns in this regard. To change the brand s marketing message or adjust its positioning in order to get consumers to change their brand perception.

1.7 Let's sum up

1. Consumer behaviour explains the reasons and logic that underlie purchasing decisions and consumption patterns and it explains the processes through which buyers make decisions.
2. The interplay between cognition, affect and behaviour that goes on within a consumer during the consumption process i.e. selecting, using and disposing off the goods and services.
3. The components of consumer buying behaviour includes the buyer and seller, decision making (cognitive and affective), actual purchase, individual determinants and environmental influences, and different buying roles.
4. Decisions Making can be of two types, such as programmed decision making and non-programmed decision making.

5. The levels of consumer decision making includes extensive problem solving (EPS), Limited problem solving (LPS) and routinized problem solving (RPS).
6. On the basis of consumer involvement, and the level of significance among brands to take the decision, the levels of consumer decision making are again classified into four categories. These are: complex buying behaviour, dissonance reducing buying behaviour, habitual buying behaviour and variety seeking buying behaviour.
7. There are five stages in the consumer decision making process. These are: i) Need recognition/Problem recognition; ii) Pre-purchase information search; iii) Evaluation of alternatives; iv) Purchase decision; and v) Post-purchase outcome and reactions.
8. Consumer s buyer behaviour is influenced by four major factors such as cultural, social, personal and psychological.

1.8 Key terms

Consumer behaviour
Consumer decision making
Extensive problem solving
Limited problem solving
Routinized problem solving
Complex buying behaviour
Dissonance reducing buying behaviour
Habitual buying behaviour
Variety seeking buying behaviour
Cultural factor
Social factor
Personal factor
Psychological factor

1.9 Self-assessment questions

Q1: Define consumer decision making. Compare and contrast the various levels of consumer decision making.

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Q2: Discuss the different stages of consumer decision making process.

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1.10 Further readings

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1.11 Model questions

Q1: Why it is important for a marketer to understand the factors influencing consumer decision making process? Briefly discuss each factor.

Q2: What are the different components of consumer buying behaviour.

Q3: How can the understanding of the consumer decision making process help a marketer to formulate appropriate marketing strategies? Discuss.

Unit-2

New Product Development

Structure

2.1. Introduction

Once the company has successfully segmented the market, chosen its target customers, identified their needs, and determined its market positioning, it is not the task of the marketer to develop the new product. Marketer plays a key role in the new product development process, by identifying and evaluating new product ideas and working with research and development (R & D) departments and others in every stage of development.

New product development (NPD) 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. A company can add new products through acquisition and development. The acquisition route can take three forms. The company can buy other companies, it can acquire patent from other companies, or it can buy a licence or franchise from other companies. 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.

There are six categories or new products. They are:

1. New-to-the-world products: New product that create an entire new market.
2. New product line: New product that allow the company to enter an established market for the first time.
3. Addition to existing product line: New product that supplement a company's established product line (package size, flavours and so on).
4. Improvements and revisions of existing products: New product that provide improved performance or greater perceived value and replace existing products.

5. Repositioning: New product that are targeted to new markets or new market segments.
6. Cost reductions: New product that provide similar performance at lower cost.

Less than 10 percent of all new products are truly innovative and new to the world. These products involve the greatest cost and risk because they are new to both the company as well as the marketplace. Most new product development activities are devoted to improving existing products. For example, at Sony, over 80 percent of the new product activities is undertaken to modify and improve the existing Sony products.

2.2. Reasons for new product failure

1. A high level executive pushes a favourite idea through in spite of negative market research findings.
2. The idea is good, but the market size is over estimated.
3. The product is not well designed.
4. The product is not well positioned in the market, not advertised effectively, or overpriced.
5. Product development cost are higher than expected.
6. Competitors fight back harder than expected.

Besides this, several other factors that hinder the new product development. They are:

1. Shortage of important ideas in certain areas, for example, there are few ways left to improve some basic products like steel and detergent.
2. Because of fragmented markets, companies have to aim their new product at smaller market segments, and this can lead to lower sales and profit for each product.
3. The new products have to satisfy consumer safety and environmental concerns as governed by the government.
4. Some companies with good ideas can't raise the funds needed to research and launch them.
5. Because of the faster required development time, companies can't develop new products quickly, which will be a disadvantage.
6. Though a new product is successful, because of product life cycles, the competitors are quick to copy it.

2.3. Attributes for the success of a new product

Understanding why new products succeed and why some businesses are so much better than others at new product development is central to effective new product management which provides insights for managing new product projects and clues to new product selection. Some success drivers distinguish successful new products from unsuccessful ones and thus are most relevant for managing individual new-product projects. These are:

1. A unique superior product: A differentiated product that delivers unique benefits and a compelling value or benefit proposition to the customer or use which is the number one driver of new product profitability.

2. Building in the voice of the customer: A market-driven and customer-focused new product process—is critical to success.
3. Build, test, obtain feedback, and revise and putting something in front of the customer early and often gets the product right.
4. A well-conceived, properly executed launch is central to new product success. And a solid marketing plan is at the heart of the launch.
5. Speed counts: There are many good ways to accelerate development projects, but not at the expense of quality of execution.

However, delivering products with unique benefits and real value to customers and/or users separates winners from losers more often than any other single factor. Such superior products have five times the success rate, over four times the market share, and four times the profitability of "me too," copycat (copying other products) and reactive with few differentiated product characteristics. That differentiated and superior products are key to success and should come as no surprise to product innovators. moreover, this is not obvious to everyone. Study shows that reactive products and "me too" offerings are the rule rather than the exception in many businesses' new product efforts, and the majority fail to produce large profits.

Therefore, let us discuss, what do these superior products with unique customer or user benefits have in common? These winning products:

1. Feature good value for money for the customer, reduce the customer 's total costs (high value in use), and boast excellent price/performance characteristics.
2. Provide excellent product quality relative to competitors' products and in terms of how the user measures quality.
3. Are superior to competing products in terms of meeting users' needs, offer unique features not available on competitive products, or solve a problem the customer has with a competitive product
4. Offer product benefits or attributes easily perceived as useful by the customer and benefits that are highly visible.

But how does one create or build in product superiority? Note that superiority is derived from design, features, attributes, specifications, and even branding and positioning. The important point here is that superiority is defined from the customer 's or user 's standpoint, not from those of the R&D, technology, or design departments. Sometimes product superiority is the result of new technology or a technological breakthrough. But more than technology and unique features are required to make a product superior. By contrast, benefits are what customers pay money for. So, in defining unique benefits, think of the product as a bundle of benefits for the user and a benefit as something that customers view as having value to them.

2.4. New Product Development

Countless studies reveal that the steps that precede the actual design and development of the product make the difference between winning and losing. Successful firms spend about twice as much time and money as unsuccessful firms, as a percent of total project costs on the following important front-end activities.

1. Initial screening-the first decision to begin the new product development project (the idea screen).
2. Preliminary market assessment-the initial market study.
3. Preliminary technical assessment-the first and quick technical appraisal of the new product development project.
4. The detailed market study, market research and the voice of customer (VoC) research.
5. The business and financial analysis just before the decision to go to new product development.

2.5. Meeting the customer needs

There are three key elements to meeting a customer's need when developing new products. These are:

1. Desirability: the new product or service must be desirable, i.e. a person wants to use it
2. Purpose: the new product or service must have a useful purpose, i.e. a person will use it.
3. User Experience: the new product or service must provide customer satisfaction, i.e. a person is happy using it.

When creating and designing a new product, it is important to consider the use of the product (what does the product do), the level of usability of the product (how does it work, can it be used comfortably) and the meaning that the product conveys. A well-designed products consider both function (use and usability) and meaning as both affect a person's total perception of the product. "Often the product's meaning is most influential in the customer's purchase decision and in the creation of a positive ownership and use experience". The reason that the product's meaning is so important is that people want to buy and use a product or service that matches their beliefs, values and desires, not purely for fulfilling a purpose.

Examples could be a Maruti Car, an HP Computer, a Samsung mobile phone, a Cadbury chocolate bar, having a coffee at Cafe Coffee Day (CCD), shopping at Big Bazaar. However, every product that is created should also have a consistency with regard use, usability and meaning covering product development, design, manufacturing, marketing, branding, advertising, packaging, etc. You cannot create a meaning of quality and elegance through design, packaging and advertising if the product's use and usability are not of equal quality and sophistication.

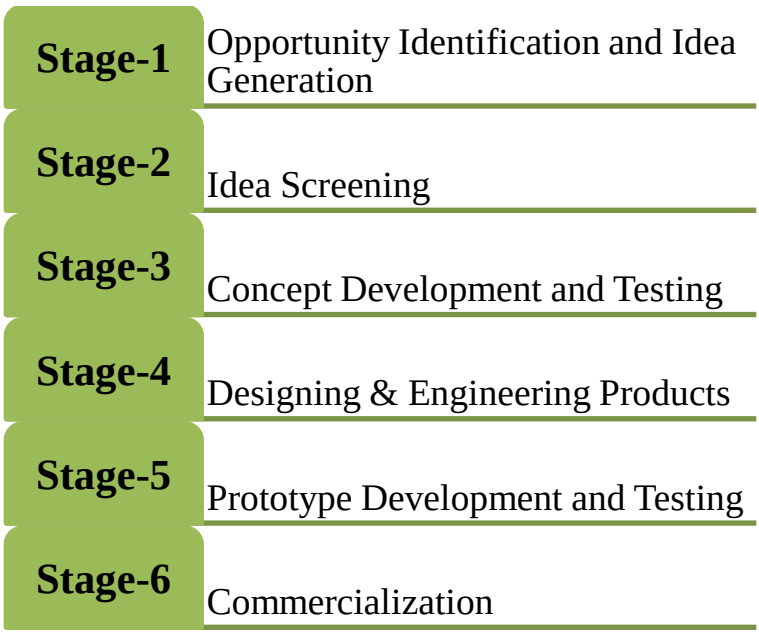
2.6. Stages of New Product Development (NPD) process

Without a good NPD process firms cannot efficiently manage the inherent risk of new product development. However, even a good NPD process is inherently complex to manage. Organizationally, the NPD process operates best when it is able to capitalize on key inputs from multiple functional areas within the firm, including marketing, engineering, production, finance, etc. In general, no single organizational unit optimally represents at the same time the voice of the customer, as well as all of the technical, operational, and financial competences of the firm. The interactions between multiple organizational units are instrumental

in influencing the efficacy of the NPD process and, in turn, the likelihood of introducing commercially viable products.

The process of NPD clearly benefits from inputs gathered from sources outside of the organization - from key customers, from important competitors, and from strategic partners such as the firm's principal suppliers. It is generally accepted that limiting the NPD process to the insights of only a few people in one certain functional area inside the firm will generally restrict its long term effectiveness, and have a negative influence on the firm's product portfolio. Apart from understanding the customer, NPD teams need to stay well-informed of advances being made in technology and by competitors. Finally, suppliers represent a strategic resource that should be carefully integrated into the new product development process. Suppliers are valuable sources of input at all stages from idea generation to designing and engineering. Figure-2.1 depicts the different stages of new product development.

Figure-2.1: Stages of New Product Development.



2.6.1. Stage-1: Opportunity Identification and Idea Generation

In this stage, new product opportunities are identified or new product ideas are generated based on unmet customer needs. While customers are the most obvious sources of unmet needs, firms cannot afford to ignore its key suppliers and its own employees as valuable sources of opportunities and ideas. Marketing's role at this stage of the process is to reduce uncertainty during the NPD team's search for winning product concepts by accurately capturing customers', suppliers', and

employees' points of view about customers' needs and communicating them to the team. However, there are many nuances and challenges when attempting to capture the voice of the customer, assess customer needs, measure preferences, and predict new product purchase behaviour. These are:

1. Customers may still be forming their preferences and may change their opinions by the time the actual product ships.
2. It may be difficult for customers to articulate and express their true preferences (e.g., for really new products or product features),
3. The questioning process itself can be intrusive, often requiring the use of multiple, convergent data collection methods, and
4. The information gatherers themselves may "filter" the voice of the customer through their own individual biases.

Data gathering techniques can produce hundreds of ideas and unfulfilled customer needs. Even for a simple product such as a coffee maker, it is not uncommon to generate a list of 100 or 200 different customer needs. For complex products such as copiers and automobiles, such lengthy lists might be generated for each of a product's individual subsystems (e.g., interior, exterior, drive train, electronics, climate control). To proceed further in idea generation, the NPD team needs focus. This focus is provided by recognizing that all needs are not independent, and many needs can be grouped into strategic, tactical, and detailed needs. Such grouping is done using voice-of-the-customer methods. If we call the raw output of the various needs-generation methods "detailed needs," then we often find that the 100-200 detailed needs can be arranged into groups of 20-30 tactical needs.

The detailed needs help the NPD team create technology and other solutions to address the tactical need. However, the tactical need is sufficiently general so that the NPD team might develop totally new ways of meeting that need. The tactical needs might also be grouped into 5 to 10 strategic needs such as "easy to use," "does the job well," "easy to learn," etc. The strategic needs help the team develop concepts that stretch the product space and open up new positioning strategies.

Later in the NPD process the team needs to decide upon which strategic need to focus, or which specific features best fulfil a strategic need. However, in the opportunity identification / idea generation stage it is more important to generate a larger number of potential product ideas so that the possibility of identifying the right strategic and tactical groups of needs is high.

Idea generation - Methods

The more different "ideas" are explored, the higher the probability that the best ideas will be a good product concept that can position the organization to satisfy customer needs in new and creative ways. A wide variety of ideation methods have been proposed as follows.

A. Brainstorming,
B. The idea and incentive game,
C. Morphological analysis,
D. Forced relationships,
E. Varied perspectives, and
F. Archival analysis.

A. Brainstorming:

Brainstorming is a method of shared problem solving in which all members of a group spontaneously contribute ideas, including seemingly unrealistic ideas – which often serve as a catalyst that stimulates the generation of additional, more-realistic ideas.

B. The idea and incentive game:

As the Internet becomes more prevalent and accepted for management processes, idea generation has moved to web-based methods. any of the criticisms of brainstorming.

A. First, by using the web in an asynchronous game, participants can post ideas, expand ideas, and comment on ideas at their convenience from anywhere in the world; they do not all have to be in the same room at the same time.
B. Second, ideas are organized in threads so that participants can easily build upon other ideas.
C. Third, the incentives are balanced so that respondents think hard and post only those ideas that are new, different, and incremental. Participants earn rewards for posting new ideas, but the largest rewards come when other participants build on your idea. To avoid redundancy, any participant can challenge another's idea if it perceived as redundant. Challenges are adjudicated by a monitor.

C. Morphological analysis:

Morphological Analysis is a method for identifying and investigating the total set of interesting new combinations of product attributes and features. In this technique, the NPD team first lists the key attributes of the given product or service.

For the coffee-maker example, the attributes might include capacity, colour, style, shut down methods, turn on methods, filter shape, material, and clock attributes. After listing all possible attributes, the NPD team creates a table using each of these attributes as column headings (see table 2.1 below), and generates as many existing and potential variations of each individual attribute as possible. The resulting table should show all possible variations of each attribute. Morphological Analysis entails randomly selecting one item from each column and investigating the novelty, plausibility and applicability of each combination.

Table-2.1: Attribute Listing for Morphological Analysis

Capacity	Colour	Style	Shutdown	Turnon	Filter Shape	Material	Clock	Other Features
1Lt	Black	Traditional	Auto	Auto	Traditional	Plastic	Digital	**Grinder**
2Lt	Grey	Modern	Manual	Manual	Conical	Stainless Steel	Analog	Espresso Maker
4Lt	White	Compact				Ceramic		Milk Steamer
10Cup	Red					Glass		Water Filter
10Cup	Blue							Freezer for Coffee Bean

D. Forced relationship:

It is a classic idea method relies upon the creation of a forced relationship between two or more normally unrelated products or ideas. A good example of the use of forced relationships is the ongoing series of innovations coming from cell phone manufacturers. Some of the forced relationships that have stimulated successful product developments include cell phone/camera, cell phone/MP3 player, and cell phone/internet access device. Another possibility would be using cell phones as credit cards - replacing the need to carry and use plastic credit cards when purchasing goods and services. Using our coffee maker example, a NPD team might consider a forced relationship between a coffee maker and a food processor. Can some aspects of these two products be combined into one? Can the coffee-maker be enhanced by taking features from a food processor? Clearly, the coffee bean grinder comes to mind.

E. Varied perspectives:

Members of a product design team often have diverse creative perspectives. DeBono's "Six Thinking Hats" model (http://www.debonothinkingsystems.com/tools/6hats.htm) represents the variety of different member perspectives.

1. The white hat is concerned with information,
2. The red hat has to do with feelings,
3. The black hat is for caution,
4. The green hat is the creative energy hat (which stimulates the generation of possibilities),
5. The blue hat is for looking at the thinking process itself, and
6. The yellow hat looks at the benefits of a suggestion.

Typically, NPD team participants feel most comfortable wearing only one or two of the six different hats. Using DeBono's "Six Thinking Hats" model in a new product development context requires team members to analyse a new product idea from the perspective of each one of the six hats so as to improve communications and foster creative exchange.

Applying this approach to our coffee maker example, a group member might suggest a coffee maker with a built in water purification filter that would make the coffee taste better.

1. White hat: The person wearing the white hat might ask exactly how the filter will work? Where will it be located on the machine? How often will it need replaced?
2. Red Hat: The red hat would tell the group how the water filter makes him feel, without explaining why it makes him feel this way.
3. Black Hat: The black hat would point out why the filter would not work.
4. Green Hat: The individual wearing the green hat would suggest other possibilities for the water filter, such as using a filter that not only makes the coffee taste better, but also removes harmful bacteria from the water.

5. Blue Hat: The blue hat would set a goal for the session, deciding exactly what is to be accomplished by the end of the allotted time. In this case the goal could be to determine if the idea is strong enough to spend the money to develop a prototype.
6. Yellow Hat: The yellow hat would summarize all of the benefits of the idea.

DeBono's model can be effective in not only stimulating useful ideas, but also in creating valuable discipline and skill among team members by forcing them to think and work outside their normal comfort zones, and to consider different perspectives (wear different hats) than they normally would.

F. Archival analysis:

Archival analysis (also known as TRIZ) involves critically and judiciously gathering and analysing the ideas of others who have solved problems in other domains in order to help solve the problem on hand.4 It attempts to document and summarize all solutions to problems that are relevant to the firm or the NPD team. It then creates a universal table or template that lists possible solutions to potential problems facing the NPD team. Using the coffee maker example, if the design team desires the machine to be strong, lightweight, and stain resistant, they could look at a list of possibilities generated by archival analysis and determine that titanium should be considered for use as the basic material.

It is worthwhile pointing out here that not all product features are "equally" valued by customers. Such needs are usually met by current products and any new product must satisfy these needs. If the new product does not meet these needs (e.g., an automobile must have four properly inflated tires that perform robustly under all commonly occurring types of driving condition), then the product will fail. However, there are opportunities to save costs if new technologies can be used to address these must-have needs as well or better at a lower cost.

Other needs are classified as "more the better." When new technology or improved ideas increase the amount by which these needs are satisfied, customer satisfaction increases, but usually with diminishing returns. Such needs are usually relevant when technology is advancing rapidly, such as with computer processor power. In order to stay on top of the market, a computer manufacturer must always be developing more powerful and easier to use computers.

Finally, a special class of needs are those which customers have difficulty articulating or rarely expect to have fulfilled. When features are included in a product to satisfy such customer needs, often unexpectedly, customers experience "delight!" Sources of customer delight can become strong motivators for initial purchase and for customer satisfaction after the sale. Examples include complementary fruit baskets in hotel rooms, software that anticipates your next move, automobiles that rarely need serviced. Conceptually, once a product provides one or more "delighter" features that surpass a certain threshold of functionality, customers become extremely satisfied and seek out the product for those features.

2.6.2. Stage-2: Idea screening

After the idea gathering stage completes, the NPD team moves towards the screening the best ideas. Here, the company must avoid two types of errors:

A. Drop-Error: It occurs when the NPD team dismiss an otherwise good idea. It is extremely easy to find fault with other people's ideas.
B. Go-Error: It occurs when the company permits a poor idea to move into development and commercialization. In this case, we can distinguish three types of product failures. i) An absolute product failure loses money and its sales do not cover the variable cost. ii) A partial product failure loses money, but its sales cover all its variable cost and some of its fixed cost. iii) A relative product failure yields a profit that is less than the company's target rate of return.

The purpose of idea screening is to drop poor ideas as early as possible. The rationale is that product development cost rise substantially with each successive development stage. Most companies require new product ideas to be described on a standard form that can be reviewed by the NPD team. The description states the product idea, the target market, and the competition, and roughly estimate market size, product price, development time and cost, manufacturing cost, and the rate of return.

The executive committee then reviews each idea against a set of criteria. Some of these are:

1. Does the product or the idea meet the need?
2. Would it offer superior value?
3. Can it be distinctively advertised?
4. Does the company have the necessary know-how and capital?
5. Will the new product deliver the expected sales volume, sales growth and profit?

The surviving ideas can be rated using a weighted-indexed method as given in table-2.2.

Table-2.2: Product idea rating device

Product success requirements	**Relative weight**	**Product Score**	**Product Rating**
	(a)	**(b)**	**C = a X b**
Unique or superior product	40	80% of 40	32
High performance-to-cost ration	30	60% of 30	18

High marketing vs. rupee support	20	70% of 20	14
Lack of strong competition	10	50% of 10	5
	100		69
Rating scale: 0 – 30% poor; 31-60% Fair; 61 to 80% good; Minimum acceptance rate = 60			

The first column lists the factors required for successful product launches, and the second column assigns importance weights. The third column scores the product idea on a scale from 0-100, with 1 be the highest score. The final column multiplies each factor's importance by the product score to obtain an overall rating. In this example, the product idea score is 69, which places in the good idea level. The purpose of this basic rating device is to promote systematic product idea evaluation and discussion.

As new product idea moves through the development, the company will constantly nee to revise its estimate of the product's overall profitability of success, using the following formula.

Overall profitability of success = Profitability of technical completion × Profitability of commercialization given technical completion × Profitability of economic success given commercialization

For example, if the three probabilities are estimated as .50, .65, and .74 respectively, the company would conclude that the overall probability of success is .24. The company then has to judge whether this probability is high enough to warrant continued development.

2.6.3. Stage-3: Concept development and Testing

Once the NPD team has identified and grouped customer needs, it must generate product concepts on how to address those needs. In a subsequent stage of the new product development process (designing and engineering concepts), we will discuss some formal methods for systematically generating effective new product concepts. A few good ideas often come from a much larger set of total ideas, some good and many not. Many good ideas start out as unconventional, impractical ideas that are shaped and refined into viable opportunities by the NPD team.

Concept testing involves presenting the product concept to appropriate target consumers and getting their reactions. The concept can be presented symbolically or physically. However, the more the tested concepts resemble the final product or experience, the more dependable the concept testing is. In the past, creating physical products are more dependable, costly and time-consuming, but computer aided design and manufacturing programs have changed that. Moreover, more new product opportunities and ideas are generated by the firm than are actually introduced as commercially viable offerings. Some firms have a measure of rigor and discipline in their NPD processes that other firms do not. One area where such

rigor and discipline is critical is concept testing. Concept testing is an essential step that plays a vital role in the new product development process. Here, new product concepts are screened with potential customers using both quantitative and qualitative research methods. Evaluations on such measures can be made on Consumer relevance (i.e. how important is the consumer need being addressed by the innovation), consumer purchase interest and dissatisfaction with currently available products are used to prioritize ideas for further testing, evaluation, and funding.

Concept definition:
The concept definition often takes the form of "stretcher" concepts, each of which explore a different strategic need by emphasizing or "stretching" it. For example, if a firm is developing a laundry detergent and knows that the strategic needs are cleaning, gentleness, safe for the environment, easy to use, among others, the firm might generate a concept that emphasizes each strategic need and promises more than can be delivered. Therefore, concept definition is a statement or promise to the customer that: -

1. Demonstrates that the firm has gained the necessary insight to accurately understand customers' relevant needs.
2. Credibly explains/proves how the firm is positioned to address such needs better than anyone else. Provides a rational or emotional reason for the customer to want to try the product or service.
3. Defines and communicates the concept's core benefit proposition (CBP) - the key benefits of the proposed product or service based on both customer needs and competition.

Concept evaluation:
Concept evaluation is a well-developed science based on both survey research and laboratory test markets (LTMs). Predictions are highly accurate and provide important information to new product teams so that they might evaluate concepts and improve the concepts. In a typical survey-based approach, a representative sample of respondents are presented with 3-4 concepts and asked to evaluate them. Respondents evaluate the concepts on their ability to fulfil customer needs and on overall preference and they often indicate their intentions to purchase a product based on the concept. The setting is more realistic, many elements of the marketing mix are used, and the concepts are closer to the product or service that will appear in the marketplace.

For example, respondents might be presented with advertising for the concepts, often simply storyboards rather than finished advertising, and presented with prototype products. In some cases, respondents indicate their intentions to purchase, but, if the concept is well along, they might get a chance to purchase the product in a simulated store (a store organized for a short term test selling purpose). The key outputs are:

1. As ales forecast that is sufficiently accurate for a go vs. no-go decision.
2. Diagnostic information that helps the new product team refine the concept so that it better meets customers' needs and expectations.

Conjoint analysis for concept evaluation:

After customer needs are identified and grouped, and after critical product features are identified and linked to customer needs, the NPD team's next step is to optimize the level or quantity of each feature/attribute that is most likely to satisfy customers and/or lead to profitable products. Conjoint Analysis is one of the most popular methods to assist with such decisions. The goal of conjoint analysis is: -

- To understand the consumer preference for alternative product concept.
- To help determine the level of each product feature that would be the most acceptable to an identified segment of customers.
- To infer the relative importance or influence of each individual feature on the total perceived utility of the product.
- To estimate the contribution to utility of each feature at each of its various levels.

Conjoint analysis is a method for deriving the utility values that consumers attach to varying levels of product attributes. Respondents are shown different hypothetical offers formed by combining varying levels of attributes, then asked to rank the various offers or benefits. The NPD team can identify the most appealing offer and the estimated market share and profit the company might realise.

Green and Wind have illustrated this approach in connection with developing a new spot-removing carpet cleaning agent for home usage. Suppose the NPD team is considering five designing elements:

1. Three package design (A, B, and C)
2. Three Brand names (X, Y, and Z)
3. Three prices (Rs. 50, 60, and 70)
4. A possible good housekeeping seal (Yes or No)
5. A possible money-back guarantee (Yes, No)

Although the researcher can form 108 possible product concepts (3 X 3 X 3 X 2 X 2), it would be too much to ask consumers to ask 108 concepts. A sample, say, 18 contrasting product concepts can be chosen, and consumers would rank them from the most preferred to the least preferred.

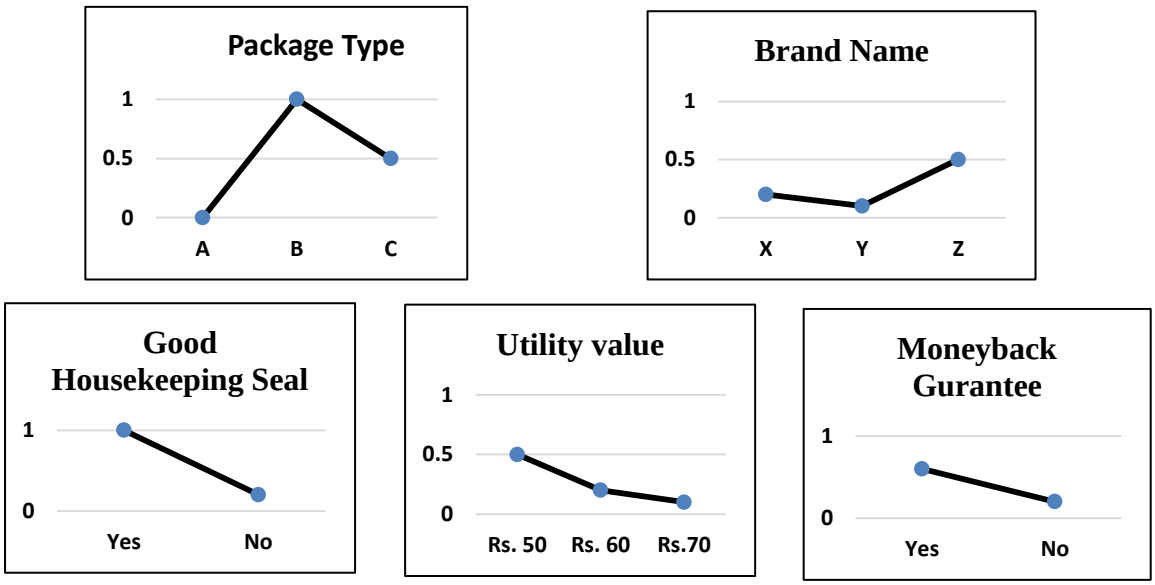
The NPD team not uses a statistical program to derive the consumers' utility function for each of the five attributes (see Figure 2.2). The utility value ranges between zero to one – higher the utility value, stronger is the consumers' preference for that level of attribute.

Looking at packaging, we see that package B is the most preferred, followed by C and A. The preferred names are Z, X and Y in the increasing order. The consumer utility varies inversely with price. A good housekeeping seal is strongly preferred; a money back guarantee is moderately preferred. Putting these results together, we can see that the consumers' most desired offer would be package design B, with

the brand name Z, selling price at Rs. 50, with the good housekeeping seal and a money back guarantee.

We can also determine the relative importance of each attributes to these consumer samples – the difference between the highest and lowest utility level for that attribute. The greater the difference, the more important the attribute is. Clearly, the consumer sees package design and a good housekeeping seal as the most important attributes followed by money back guarantee, price and brand name. When preference data are collected from a sufficient sample of target customers, the data can be used to estimate the market share any specific offer is likely to achieve, given any assumptions about competitive response. The company, however, may not launch the market offers that promises to gain the greatest market share because of cost considerations. The most customer-appealing offer is not always the most profitable offer to make.

Figure-2.2: Utility functions based on conjoint analysis



Under some conditions, the researcher will collect the date not with a full profile description of each offer but by presenting two factors at a time. For example, the respondents may be shown a table with three price levels and three package types and asked which of the nine (3 X 3) combinations they would like most, followed by which one they would prefer next, and so on. They would then be shown a further table consisting of the trade-offs between two other attributes. The trade-off approach may be easier to use when there are many variables or possible offers. Therefore, conjoint analysis has become one of the most popular concept development and testing tools.

Forecasting:

Because more valuable resources are used as the concept moves through the new product development process, it is critical that firms estimate the revenue and profit potential of the concept as early as possible in the process. One way to focus concept development on high potential concepts is to classify concepts as the following.

- Clearly worth further development,
- Clearly worth dropping, and
- Questionable - need more data.

One output of concept evaluation is a rough sales forecast. It may not be sufficiently accurate for a final launch decision, but it is often sufficiently accurate to make early decisions to focus on a few high-potential concepts. As in all forecasting, there is a trade-off between accuracy and cost. For example, the more realistic the concept (prototype vs. paper-and-pencil) the more accurate the forecast. As the product concept moves through the new product development process, concepts are refined and more accurate forecasts become available.

2.6.4. Stage-4: Designing & Engineering Products

Once the new product team is focused on a relatively few high-potential concepts, the concepts have to be designed and engineered to meet customer needs at a cost that is profitable to the firm. Value Engineering is one of the most preferred technique that are used to design and then engineer products.

For example, a maker of cameras might want to know the optimal values for each of the following features - Size, Megapixel, Optical Zoom, and Price - for a camera targeted to a particular segment. Or, the manufacturer might want to know how consumers would make trade-offs between features (e.g., an increase in megapixels with a decrease in optical zoom while keeping the price constant).

Value engineering: Quality function deployment (QFD) / House of Quality (HOQ)

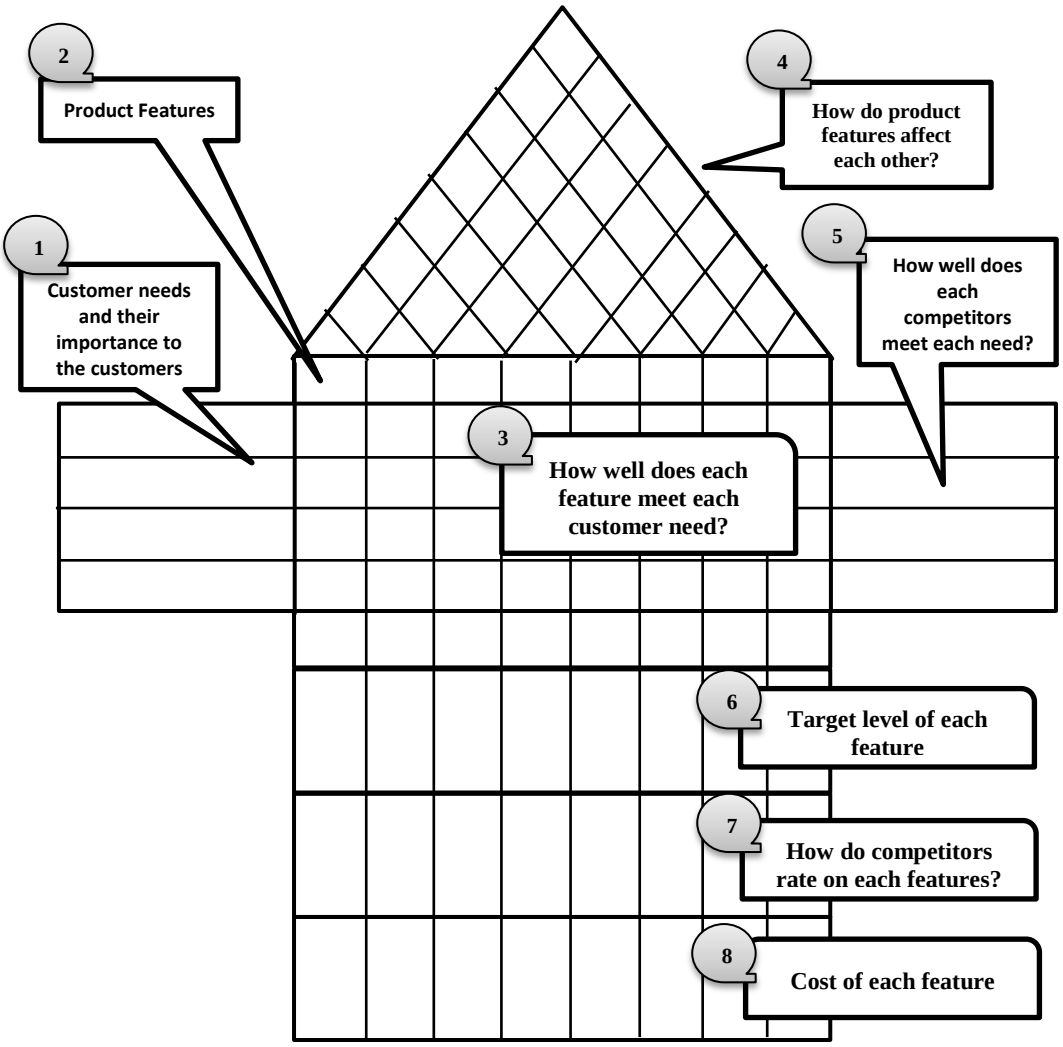
From a customer's point-of-view, a product consists of a bundle of features and benefits resulting from its use. From the firm's perspective, the product consists of a bundle of parts and the processes that result in its manufacture. When making cost and feasibility trade-offs, it is important for the design team to integrate both customer and firm perspectives. This is known as value engineering; it relates the importance customers place on each function performed by a product to the cost of the parts contributing to that function. A key principle underlying value engineering is that the marginal cost of each part of a product should be less than its marginal contribution to customer value. To implement value engineering the team must know:

- The value placed by customers on each function and
- The cost of the parts and manufacturing to provide that function.

Value engineering requires that we link customer needs to product solutions so that the NPD team can make intelligent trade-offs and, perhaps, find creative solutions that do not require trade-offs. Quality Function Deployment (QFD) provides one method to make this linkage. QFD itself is a set of processes that link customer needs all the way through to production requirements. Although the full QFD process is sometimes used, it is the first matrix of QFD, called the House of Quality (HOQ), which is used most often. The driving force behind the HOQ (see Figure-2.2) is the short, accurate, relevant list of key customer needs identified and structured into strategic, tactical, and detailed needs. In the HOQ, these needs are related to product features, which are then evaluated as to how well they meet customer needs. Product features are "benchmarked" against competitors' features in their ability to meet customer needs, and the HOQ is used to compare the benchmarking on features to benchmarking on customer needs.

Finally, the total product is evaluated by the ability of its features to meet customer needs more effectively and at lower costs than competitive products.

Figure-2.2: The House of Quality (HOQ)



The HOQ provides and organizes the information that the NPD team needs to refine each concept. It has proven effective in a variety of applications including frequently purchased consumer goods, consumer durables, consumer services, business-to-business products, and business-to-business services. A further advantage of the HOQ and related techniques is that it enhances communication among NPD team members. This is becoming even more important as NPD teams become more dispersed and global. The downside of QFD is that strict adherence to the method can be complex and extremely time-consuming, especially for products with many customer needs and engineering "key characteristics."

Clearly, firms must adapt the House of Quality to produce benefits commensurate with these implementation costs. Here, the NPD teams focus on a subset of customer needs and investigate those actions or engineering key characteristics that just affect those needs.

As the product concept progresses, the focus shifts and more of the HOQ is completed. In this way PD teams balance focus with completeness. Marketing's primary input to the HOQ includes identifying customer needs, measuring how products fulfil those needs, and understanding the trade-offs among customer needs and among potential product features. Ultimately, the HOQ method translates customer priorities, as captured by a prioritized list of needs, into engineering/design priorities by identifying those product features that contribute the most to satisfying customers better than competitive offerings.

Target Costing: Design for Manufacturing and Assembly (DFMA)

The final consideration in the 4th stage of the NPD process is the further minimization of the cost of the new product. Given the benefits desired by the customers, how can the costs be minimized? This is the question addressed in designing for manufacturing and assembly. Unit production cost is an important factor in the marketing success of a new product. Specifically, investments to reduce unit manufacturing costs can increase profitability through five possible mechanisms:

1. Market share improvements due to lower prices.
2. Primary market growth due to lower prices.
3. Reduced channel costs due to greater volume.
4. Quality improvements due to simplified designs.
5. Strategic benefits due to competitive disincentives.

As companies produce and sell more, because of lower costs and hence prices, they collect more experience which in turn results in product improvements and/or decrease in costs. Dramatically reducing unit manufacturing costs for a broad array of products can be achieved primarily through part count reduction and simplification of the assembly process. Because cost reductions may require changes in the appearance or performance of the product itself if taken to extremes, marketing input, to the extent that it captures cost-benefit trade-offs as The examples of integrated circuit chips are relevant here. The more the chips are made and sold the lower the unit cost. Finally, the strategic benefits due to competitive disincentives results because competitors are less inclined to enter the market if a large share is already rested by the incumbent firm.

Dramatically reducing unit manufacturing costs for a broad array of products can be achieved primarily through part count reduction and simplification of the assembly process. Because cost reductions may require changes in the appearance or performance of the product itself if taken to extremes, marketing input, to the extent that it captures cost-benefit trade-offs as customers would make them, is invaluable to making these decisions. Unit manufacturing costs for products competing in the same category (coffee makers) can vary greatly, holding quality constant and standardizing for feature variation. While some of these cost differences may be the result of local manufacturing economics or variations in plant efficiency, a significant portion of the cost differences result directly from design decisions made early in the product development process. Once these design decisions are frozen, reducing the excess costs that may result from them is very difficult.

2.6.5. Stage-5: Prototype Development and Testing

In this last stage of the NPD process, the goal is to evaluate the designed and engineered concepts so that any launch is likely to succeed. Having taken considerable input from potential customers in terms of desirable features via techniques such as conjoint analysis, and having conducted required analyses to determine engineering specs with techniques such as HOQ and DFMA, in this last phase several prototypes (perhaps virtual) are developed and tested. Recently, Rapid Prototyping Methods (RPM) have been developed. In essence, these techniques automatically generate multiple technical solutions on a product concept theme. Marketing's role in this phase is to simultaneously test multiple designs with customers. After such parallel concept testing is conducted the "freezing" of the design can be considered. However, at this stage very "realistic" testing is required. The NPD team needs to simulate product acceptance in a marketplace where sales are affected by marketing variables such as advertising, word-of-mouth, and sales force presentations.

Pre-test-market and Pre-Launch Forecasting

After the management is satisfied with the functional and psychological performance of the new product, the product is ready to be dressed up with a brand name and packaging, and put in to a market test. Therefore, the firm must have refined its product concepts, developed prototypes, and can produce its products in limited quantities, it needs to test the full benefit proposition that includes the physical product, service, distribution, and marketing actions such as advertising, detailing, sales force presentations, word-of-mouth, and publicity. We call such testing either pre-test-market or pre-launch forecasting. In a typical pre-test-market analysis, potential customers are shown products in a setting that is chosen to simulate the purchase experience. For consumer products they might be shown television advertising, magazine articles, tapes of other consumers talking about the product, sales force presentations, consumer magazine reports or whatever media are appropriate to the product category. They might be recruited at a mall, brought to a room to see advertising, then brought to another room that simulates a grocery store. They would be asked questions about perceptions, preferences, and purchase intentions and allowed to make an actual purchase in the simulated store.

Let us now discuss different methods for consumer-goods market testing.

1. Consumer-Goods Market Testing

In testing consumer products, the company seeks to estimate four variables. These are:

a. Trial
b. First repeat
c. Adoption
d. Purchase frequency

The company hopes to find all these variables at high level. In some cases, it will find many consumers trying the product but few rebuying it. Or it might find high

permanent adoption but low purchase frequency. Here, we describe the major methods of consumer-goods market testing, from the least to the costliest.

A. **Sales wave research:** In this method, consumers who initially try the product at no cost are re-offered the product, or a competitor's product, at slightly reduced price. They might be re-offered the product as many as three to five times (sales wave), with the company noting how many customers selected that company's product again and their reported level of satisfaction. Sales wave research can also include exposing consumers to one or more advertising concepts to see the impact of that advertising on repeat purchase.

   Sales wave research can be implemented quickly, conducted with a fair amount of security, and carried out final packaging and advertising. However, sales wave research does not indicate the trial rates that would be achieved with different sales promotion incentives, because the consumers are pre-selected to try out the product. Nor does it indicate the brand's power to gain distribution and favourable shelf position in the retail counter.

B. **Simulated test marketing:** Simulated market testing calls for finding 30 to 40 qualifies shoppers and questioning them about the brand familiarity and preference in a specific product category like tooth paste. These people are then invited to a brief screening of both well-known and new TV commercials or print ads. Here, consumers receive a small amount of money and are invited to a store where they may buy any items. The company notes how many consumers buy the new brand and competing brands. This provides a measure of advertisement's relative effectiveness against competing ads in simulating trials. Consumers are then asked the reasons for their purchase or non-purchase decisions. These who did not buy the new brand are given free samples. Some week later, they are interviewed by phone to determine product attitude, usage, satisfaction, and purchase intention and are offered an opportunity to repurchase any product.

   This method has several advantages. It gives fairly accurate results on advertising effectiveness and trial rates (and repeat rates if extended) in a much shorter time and at a fraction of the cost of using real test market. Pre-test often three to four months. The results are incorporated into new product forecasting models to project ultimate sales levels.

C. **Controlled test marketing:** In this method, a research firm manage a panel of stores that carry the new products for a fee. The company with the new product specifies the number of stores and geographic locations it want to test. The research firm then delivers the product to the participating stores and control shelf-positions; number of facings; displays; and point of purchase (PoP) promotion; and pricing in the retail counter of their stores. The sales result can be measured at the checkout. The company can also evaluate the impact of local advertising and promotion during the test.

Controlled test marketing allows the company to test the impact of in-store factors and limited advertising on buying behaviour. A sample of consumers can be interviewed later to give their impression of the product. The company does not have to use its own sales force, five trade-off allowances to the store owners. However, the controlled test marketing provides no information on how to sell the trade on carrying the new product. This technique is also exposes the product and its features to competitors' scrutiny.

D. **Test markets:** The ultimate way to test a new consumer product is to put it into full-blown test market. The company chooses a few representative cities, and the sales force tries to sell the trade on carrying the product and giving it good shelf exposure in the retail counter. The company puts on a full advertising and promotion campaign in these markets similar to the one that it would use in national marketing. A full scale test cost high, depending on the number of test cities, the test duration, and the amount of data the company wants to collect.

Test marketing permits testing the impact of alternative marketing plans. Colgate Palmolive used a different marketing mix in each of four cities to market a new soap product.

1. An average amount of advertising coupled with free samples distributed door to door.
2. Heavy advertising plus free samples.
3. An average amount of advertising linked with mailed redeemable coupons.
4. An average amount of advertising with no special introductory offers.

The third alternative generated the best profit level, though not the highest sales level. However, in today's fast changing market place, companies are eager to get the market first. Test marketing shown them down and reveals their plans to competitors. Therefore, many companies are skipping test marketing and relying on faster and more economical market testing methods.

2.6.6. Stage-6: Commercialization

Once the company is successful with its test marketing program, the next step is to commercialize the product in the market. Once the company goes ahead with commercialization, it will face its largest cost to date. The company will have to contract for manufacturer, build or rent full scale manufacturing utility or use its own manufacturing unit with required modifications. Another major cost is marketing. To introduce a major new product in the market in full-fledged way, the company need to undergo the following four major considerations carefully.

1. When (Timing)
2. Where (Geography strategy)
3. To whom (Target-market prospects)
4. How (Introductory market strategy)

1. When (Timing)

In commercializing the new product, market entry-timing is critical. Suppose a company has almost completed the product development work on its new product and learns that a competitor is nearing the end of its development work. IN this case, the company faces three choices.

a. *First entry*: The first firm entering a market usually enjoys the "first mover advantage" of locking up the key distributors and customers and gaining reputational leadership.
b. 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.
c. Late entry: The firm might delay its launch until the competitor will have borne the cost of educating the market about the new product. The competitor's product may reveal faults which the late entrants can avoid.

2. Where (Geography strategy)

The company must decide whether to launch the new product in a single locality, a region, several regions, the national market, or the international market. Large companies will introduce their product into a whole region and then move to other regions. Companies with national distribution networks, such as auto / car manufacturing companies, will launch their new models in the national markets. However, many companies design new products to sell primarily in their domestic markets. If the product does well, the company consider exporting to neighbouring countries.

3. To whom (Target-market prospects)

Within the rollout market, the company must target its initial distribution and promotion to the best prospect groups. By this time, the company has already profiled the prime prospects, who would ideally have the following characteristics. They would be:

a. Early adopters,
b. Heavy users,
c. Opining leaders, and
d. They could be reached at a low cost.

4. How (Introductory market strategy)

The company must develop an action plan for introducing the new product into the rollout market. To coordinate the activities involved in the launching a new product, the company can use network-planning techniques such as critical path scheduling, which is a part of logistic management. The critical path scheduling calls for developing a master chart showing the simultaneous and sequential activities that must take place to launch the product. By estimating how much time each activity takes, the planner estimates completion time for the entire project. Any delay in activity on the critical path will cause the project to be delayed, If the launch is completed earlier, the planner search for ways to reduce time along the critical path.

2.7. Consumer adoption process and diffusion of innovation

How do potential customers learn about the new product, try them, and adopt or reject them? Adoption is an individual's decision to become a regular user of the product. The consumer adoption process is later followed by consumer loyalty process, which is the concern of the established marketer.

Stages in the adoption process

An innovation refers to any goods, service, or idea that is perceived by someone as new. The idea may have a long history, but it is an innovation to the person who sees it as new. Innovations takes time to spread through the social system. Roger defines the innovation diffusion process as "The spread of a new idea from its source of innovation or creation to its ultimate users or adopters". The consumer adoption process focuses on the mental process through which an individual pass from first hearing about an innovation to final adoption. An adopter of a new product has been observed to move through the following five stages.

1. Awareness: The consumer becomes aware of the innovation but lacks information about it.
2. Interest: The consumer is stimulated to seek information about the innovation.
3. Evaluation: The consumer considers whether to try the innovation.
4. Trial: The consumer tries the innovation to improve his or her estimate of its value.
5. Adoption: The consumer decides to make full and regular use of the innovation.

Therefore, the issue is not only will the product succeed, but also how long will it take the target market to become regular purchasers. The marketer's challenge is to shorten the length of time between customer awareness of a given innovation, and its wholesale adoption. Research into the diffusion of innovations has identified at least five key characteristics of any product or service that significantly influence its rate of adoption.

1. **The greater the relative advantage of an innovation, the faster its rate of adoption:** If the innovation delivers only a marginal improvement in utility or benefit to the customer, compared with substitutable products already available, the rate of adoption is likely to be relatively slow. On the other hand, if an innovation provides clearly superior features and benefits (such as when the introduction of satellite television offered customers remarkably better picture reception compared with conventional antennae-based reception), demand may accelerate rapidly.

2. **The greater the complexity of an innovation, the slower its rate of adoption:** Innovations that stimulate significant initial demand are typically those that are not difficult for customers to understand or use. When the personal computer was first introduced, initial purchasers were mainly those individuals who were not intimidated by the complexity of the initial operating systems and their relatively "user unfriendly" features. However, when Apple (and in turn Microsoft) introduced its much more

user-friendly operating system, based on simple icons and English commands, demand increased dramatically.

3. **The greater the compatibility of an innovation, the faster its rate of adoption**: When a new product innovation is incompatible with existing products and services already in use, or is incompatible with the basic systems and infrastructure already in place, its rate of adoption may suffer. When the compact disc (CD) player was first introduced, many music enthusiasts were unwilling or unable to enjoy its superior playback quality for a simple reason- these individuals' entire music collection was stored on vinyl records that were incompatible with this improved technology. On the other hand, when photo copy machines were first introduced, initial demand was intense - because the user simply plugged the machine into the existing electrical network, as well as the existing telecommunications network, and they were immediately able to fully capitalize on the advantages of this innovation.

4. **The greater the communicability of an innovation, the faster its rate of adoption**: When the results of using the innovation can be easily observed or described to others, rates of adoption will be greater. Clearly, the ability of a whole generation of young people to easily observe the advantages of innovations such as the Internet and cellular telephones has contributed to the astounding pace of growth for these two innovations. If an innovation cannot be directly observed by its intended target audience, its rate of adoption may be disappointing.

5. **The greater the divisibility of an innovation, the faster its rate of adoption**: This refers to the degree to which the innovation can be trialled by customers on a limited basis. Consumers understandably prefer a risk-free trial of any product or service before adopting it.

Therefore, the challenge for the NPD team is to develop product and service innovations that deliver a significant measure of relative advantage compared with competing alternatives, are compatible with customers' existing values and experiences, are easily observed and trialled, while not being too complex for customers to understand and use. Unfortunately, poor performance on any one of these dimensions can suppress initial demand and endanger the success of the NPD team's efforts.

2.8. Let's sum up

1. There are six categories or new products. They are: - New-to-the-world products; New product line; Addition to existing product line; Improvements and revisions of existing products; Repositioning; and new product for cost reductions.
2. Reasons for new product failures are: Consideration favourite ideas of the senior executives without proper market research; Market size is over estimated; The product is not well designed; The product is not well positioned in the market; Product development cost are higher than expected; Competitors fight back harder than expected.
3. Attributes for the success of a new product are: Unique and superior; Building in the voice of the customers; Build, test, obtain feedback, and revise and putting something

in front of the customer early and often gets the product right; A well-conceived, properly executed launch is central to new product success.

4. The front-end activities before developing the new product includes:
   i. Initial screening-the first decision to begin the new product development project (the idea screen).
   ii. Preliminary market assessment-the initial market study.
   iii. Preliminary technical assessment-the first and quick technical appraisal of the new product development project.
   iv. The detailed market study, market research and the voice of customer (VoC) research.
   v. The business and financial analysis just before the decision to go to new product development.
5. key elements to meeting a customer's need when developing new products. These are:
   i. Desirability: the new product or service must be desirable, i.e. a person wants to use it
   ii. Purpose: the new product or service must have a useful purpose, i.e. a person will use it.
   iii. User Experience: the new product or service must provide customer satisfaction, i.e. a person is happy using it.
6. The stages of new product development process include 1) Opportunity Identification and Idea Generation; ii) Idea Screening; iii) Concept Development and Testing; iv) Designing & Engineering Products; and v) Prototype Development and Testing and vi) Commercialization.
7. The process of NPD clearly benefits from inputs gathered from sources outside of the organization - from key customers, from important competitors, and from strategic partners such as the firm's principal suppliers.
8. In the idea generation stage, new product opportunities are identified or new product ideas are generated based on unmet customer needs.
9. Different ideation methods include:
   i. Brainstorming,
   ii. The idea and incentive game,
   iii. Morphological analysis,
   iv. Forced relationships,
   v. Varied perspectives, and
   vi. Archival analysis.
10. The purpose of idea screening is to drop poor ideas as early as possible.
11. The product concept is a statement that demonstrates that the firm has gained the necessary insight to accurately understand customers' relevant needs, credibly explains/proves how the firm has planned to position to address such needs better than anyone else. It provides a rational or emotional reason for the customer to want to try the product or service.
12. Conjoint analysis is a method for deriving the utility values that consumers attach to varying levels of product attributes.
13. Once the new product team is focused on a relatively few high-potential concepts, the concepts have to be designed and engineered to meet customer needs at a cost that is profitable to the firm. Value Engineering is one of the most preferred technique that are used to design and then engineer products.
14. Value engineering requires that we link customer needs to product solutions so that the NPD team can make intelligent trade-offs and, perhaps, find creative solutions that do not require trade-offs. Quality Function Deployment (QFD) provides one method to make this linkage.

15. The driving force behind the House of Quality (HOQ) is the short, accurate, relevant list of key customer needs identified and structured into strategic, tactical, and detailed needs. These needs are related to product features, which are then evaluated as to how well they meet customer needs.
16. The goal of product prototype development is to evaluate the designed and engineered concepts so that any launch is likely to succeed.
17. The objective of pre-test marketing is to test the full benefit proposition that includes the physical product, service, distribution, and marketing actions such as advertising, detailing, sales force presentations, word-of-mouth, and publicity for a limited period of time. This is done once a firm has refined its product concepts, developed prototypes, and can produce its products in limited quantity.
18. While testing consumer products, the company seeks to estimate four variables. These are: Trial, First repeat, Adoption and Purchase frequency
19. The major methods of consumer-goods market testing are i) Sales wave research, ii) Simulated test marketing, iii) Controlled test marketing and iv) Test market.
20. To introduce a major new product in the market in full-fledged way, the company need to undergo for commercializing the product which involve four major considerations such as When (Timing); Where (Geography strategy); To whom (Target-market prospects); and How (Introductory market strategy).

2.9. Key terms

New product development
Market testing
Idea generation
Idea screening
New product concept testing
Conjoint analysis
House of quality
Quality function deployment

2.10. Self-assessment questions

Q-1: What are the pre-requisites of a new product development? Briefly discuss about various stages of New Product Development (NPD).

_____
_____
_____
_____
_____ .

Q-2: What is pre-test-marketing? Discuss different methods of consumer-goods market testing.

_____
_____
_____
_____
_____ .

2.11. Further readings

3. Kotler, P., Armstrong, G., & Cunningham, M. H. (2005). *Principles of marketing*. (6th edition), Toronto: Pearson Prentice Hall.

4. Kotler, P., Keller, K. L. (2009). *Marketing Management. (13th edition), New Jersey*: Pearson Prentice Hall.
5. Kotler, P., Armstrong, G., Agnihotri, P. Y., and Haque, E. (2010). Principles of Marketing. (13th edition), Prentice Hall, US
6. Ramaswamy, V. S. and Namakumari, S. (2010). Marketing Management. (3rd and 4th Edition), Macmillan India.

6.6. Model questions

Q-1: What is opportunity identification and idea generation? Discuss different ideation methods for new product development.

Q-2: What is weighted-indexed method for screening idea? Discuss by citing an example.

Q-3: How can you use conjoint analysis for testing the concept of a new product?

Unit-3

Product Life Cycle

Structure

3.1 Introduction

As a human being passes through various stages in its life such as conception, birth, growth, maturity and late old age, a company's offering i.e. product also pass through different stages during its life span. Hence its positioning and differentiation strategy change as the product, market and competitors change over the product lifecycle. When we say that a product has a life cycle (PLC) we assert four things.

1. A product has a limited life cycle.
2. Product's sales pass through distinct stages, each posing different challenges, opportunities and problems to the marketer.
3. Profits rise or fall at different stages of the PLC.
4. A product requires different marketing strategies in each stage.

Every day we see new products. Car manufacturers bring out new models every year. But is this year's model really a NEW product? Some products have been around for a long time. Some die on the drawing board, some at intro stage. When a new product is introduced, is it really new? Only about 10% of new products are really "new", those innovations that create entirely new market. Majority are products most likely at the end of the PLC, and were re-introduced to start another new cycle (new, improved). However, whether truly new, or new improved, most products (services) go through PLC.

3.2 The concept of product

According to Peter Drucker, so long as a product is not brought and consumed, it remains a raw material or at best an intermediate. The product is almost always a combination of tangible and intangible benefits. For example, a refrigerator is not just merely steel, plastic, Freon gas, brand name, number of doors and so on, but also involves factors like after sales service, delivery and installation, assistances in purchase of the product, dealer network, and services. It also connotes status in developing countries. It is the same with products like TV, music system, automobiles, personal product, and services like banks, airlines, telephone, courier, and so on.

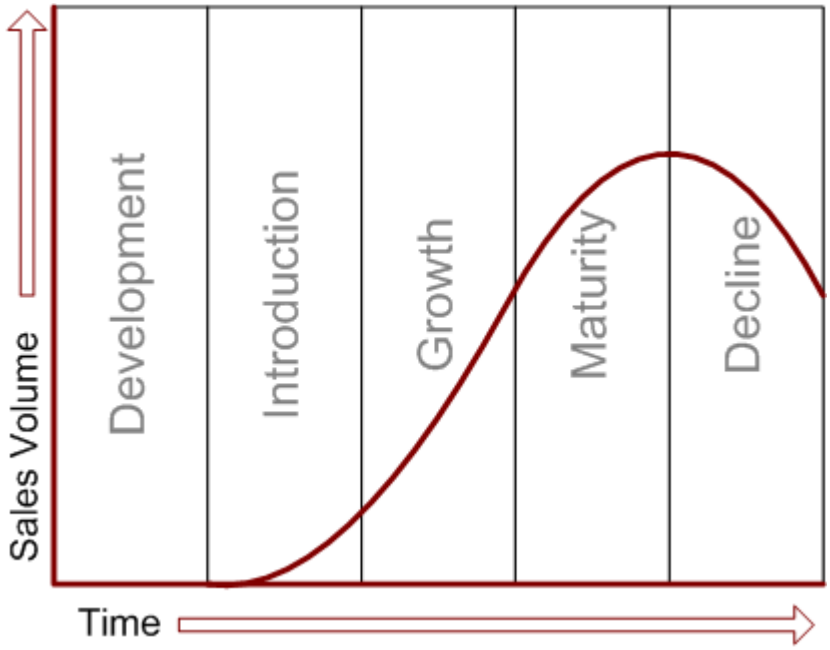
3.3 The concept and stages of Product life cycle

As consumers, we buy millions of products every year. When a company developed a new product and start commercializing it, it normally undergoes a series of step in the market. These steps follow each other chronologically and thus referred to as the product life cycle (PLC). The PLC sequence or series is closely linked with the dynamics in the market environment and has subsequent effects on the product marketing mix and marketing strategies. And just like us, these products have a life cycle. Older, long-established products eventually become less popular, while in contrast, the demand for new, more modern goods usually increase quite rapidly after they are launched. Because most companies understand the different product life cycle stages, and that the products they sell all have a limited lifespan, the majority of them will invest heavily in new product development in order to make sure that their businesses continue to grow.

Fundamentally, a PLC undergo five major stages. These are:

1. Product development
2. Introduction
3. Growth
4. Maturity
5. Decline

Figure-3.1: Different stages of Product Life Cycle



3.4 Product development stage

This stage begins when the firm finds and develops a new product idea. It follows new product idea generation, idea screening, concept development and testing, marketing-mix strategy development, business analysis, final product development, test marketing, and finally commercialization.

3.5 Introduction stage

During the introduction stage, the product is launched commercially and made available for acceptance and acquisition by the customers. At this stage, sales are low, high cost per customer, negative or nil profits, customers are innovators, and there might be absence of competition. The objective of the firm during this stage is to create product awareness and entice trial. The complexity of the problems and the duration of the stage depend upon the nature of the product, its price, its technological newness and the customer's perception of the product.

3.5.1. Characteristics during introduction stage

1. Because it takes time to roll out a new product and fill the dealer pipelines, sales growth tends to be slow at this stage. The causes for this slow sales growth are:
    a. Delay in the expansion of the production capacity
    b. Technical problems at the product point.
    c. Delay in obtaining adequate distribution through retail outlets.
    d. Customer reluctance to change their established behaviors.

2. Profits are negative or low. It is because of low sales and heavy distribution and promotional expenses.
3. Much money is needed to attract the dealers and distributors
4. Promotional expenditures are at their highest ratio to sales because of the need to:
    a. Inform potential customers.
    b. Induce product trials
    c. Secure distribution in retail outlets.
5. Price tend to be high because cost is high due to relatively low output rates, technological problems in production, and high required margin to support the heavy promotional expenditures.

3.5.2. Marketing strategies at introduction stage:

In launching a new product, marketing managers can set a high or low level for each marketing variables such as product, price, distribution or place and promotion. Considering only price and promotion, the management can pursue one of the four strategies in the introduction stage. These are:

1. **Rapid skimming strategy** (High price high promotion to skim the market)
   Launching the new product at a high price and a high promotion level. This strategy makes sense when a large part of potential market is unaware of the product. Those who become aware about the product, are eager to have it and can pay the asking price. Here, the firm faces potential competition and want to build brand preference.

2. **Slow-skimming (**High price with low promotion)
   Launching the new product at a high price and low promotion. This strategy makes sense when the market is limited in size. Most of the market is aware about the product. Buyers are willing to pay a higher price. Potential competition is not about to happen.

3. **Rapid-penetration strategy** (low price and heavy promotion spend)
   Launching the product at a low price and spending heavy on promotion. This strategy make sense when the market is large and unaware about the product. Most buyers are price sensitive. There exists strong potential competition. The unit manufacturing cost fall with the company's scale of production and accumulated manufacturing experience.

4. **Slow- penetration strategy** (low price strategy with low level of promotion)
   Launching the new product at a low price and low level of promotion. This strategy makes sense when the market is large and is highly aware of the product. Most of the buyers are price sensitive. There is some potential competition.

   Table-3.1: Skimming and Penetration strategy at the introduction stage of PLC

Distribution and product quality remain constant		Promotion	
		High	Low
Price	High	Rapid skimming	Slow skimming
	Low	Rapid penetration	Slow penetration

3.6 Growth stage

Growth stage is marked by rapid climb in sales. During this stage, demand for the product increases and the size of the market grows. The customers are treated as early adopters since they adopt the product after the innovators and before the middle majority have adopted the same. Competitors may also get in at this stage. They introduce new product features and expand distribution. Cost of serving the customers may be average since sales have improved. Price remain where they are or fall slightly, depending on how fast demand increases. The firm's sales and profits start going up as promotion cost are spread over a larger volume. Unit manufacturing cost fall faster than price declines owing to the producer's learning or experience effect. Therefore, the firm have to watch for a change from an accelerating to a decelerating rate of growth in order to prepare new marketing strategies.

3.6.1. Marketing strategies during the growth stage:

The main objective of the firm at this stage of the PLC is to maximize market share. However, the other marketing strategies in this stage include:

- Improve product quality while adding new product features and improved styles
- Addition of new models with different size, flavors and so on that protect the main product.
- Entering into new market segment(s).
- Increasing distribution coverage and entering new channels of distribution.
- Shifting from product awareness advertising to product preference advertising.
- Lowering price to attract the next layer of price sensitive buyers.

3.7 Maturity stage

In this stage, demand tends to reach a saturation point. There is enough supply from several competing sources. Price competition becomes more pronounced. The product's rate of growth slows down during this stage of the life cycle. Another interesting feature of this stage is that this stage lasts longer than the earlier stage and the marketer is confronted with formidable challenges.

The maturity stage is divided into three phases. These are:

- Growth maturity,
- Stable maturity, and
- Decaying maturity.

During the growth maturity the sales growth rate starts to decline because of distribution saturation. In stable maturity stage, sales become level on a per capita basis because of market saturation. In the last phase, i.e. decaying maturity, the absolute level of sales starts to decline and customers start moving towards other products and substitutes.

3.7.1. Marketing strategies during maturity stage

In the maturity stage the objective of the pioneer (firm) is to maximize profit while defending the market share.

Three broad strategies are followed during the stage are:

A. Market modification
B. Product modification
C. Product mix modification

A. Market modification

The company might try to expand the market for its mature brand by working with the two factors that make up sales volume.

Volume = (Number of brand users) X (User rate per user)

However, the company can try to expand the number of brand users in three ways.

a. Convert non-users
b. Enter new market segments
c. Win competitor's customer

The volume can also be increased by convincing current brand users to increase their usage of the brand. Here are three strategies:

a. The company can try to get customers to use the product more frequently.
b. The company can try to interest users in using more of the product in each occasion.
c. The company can try to discover new product uses and convince people to use the product in more varied ways.

B. Product modification

Managers can try to stimulate sales by modifying the product's characteristics through quality improvements, feature improvements and style improvements.

a. Quality improvements aims at increasing the product's functional performance like durability, reliability, speed and taste.
b. Feature improvements aims at adding new features to the existing product. For example, size, weight, material, additives, accessories etc. which expand the product's adaptability, safety or convenience.
c. The style improvement aims at increasing the product's aesthetic appeal or look. For example, the periodic introduction of new car models amounts to style competition rather than quality or feature competition.

C. Product mix modification

Product managers can try to stimulate sales by modifying other marketing mix elements. They should ask the following questions.

a. Price: Would a price cut attract new buyer? If so, should the list price be lowered, or should price be lowered through various promotional tools such as special price, volume discount, early purchase discount, freight cost absorption or easier credit terms etc.
b. Distribution: Can the company obtain more product supports and display in existing outlets? Can more outlets be presented? Can the company introduce the product into the new distribution channel?
c. Advertising: Should advertising expenditures be increased? Should the message or copy be changed? Should the media mix be changed? Should the timing, frequency, or size of ads be changes?
d. Sales promotion: Should the company step up sales promotion like trade deals, coupons, rebate, warranties, gifts, contests etc.?
e. Personal selling: Should the number or quality of sales people be increased Should the basis for sales force specialization be changes? Should sales territories be revised? Should sales force incentive be revised? Can sales-call planning be improved?
f. Service: Can the company speedup delivery? Can it extend more technical assistance to customers? Can it extend more credit?

3.8 Decline stage

During this stage sales decline which may slow or rapid. The reasons for decline in sales may be not adapting to technology advancement, not taking care of consumers shift in tastes, not coping with competition. Profits, as a result decline. (In this background some firms withdraw from the market. Those who sustain

may reduce the no. of product offerings and also may reduce the promotion budget).

In summary, the sales decline during this stage is due to number of reasons as given below which lead to increase price cutting and profit erosion.

a. Technological advances
b. Shift in consumer taste
c. Increased domestic and foreign competition

3.8.1. Marketing strategies during the decline stage

The strategic objective of this stage is to reduce expenditure and milk the brand. Keeping this objective in view the marketer may phase out weak items from the product line, cut price, close down unprofitable outlets, etc. The advertising may reduce to retain hard core loyal and sales promotion may be reduced to the minimum.

3.9 Product life cycle relevance

The knowledge that a product passes through different stages of the life cycle is helpful in evolving proper product, price, promotion & place strategies. More specifically the uses of PLC analysis help the marketer in the following ways:

The study of PLC helps a company to manage its product portfolio proactively instead of letting market forces shape it. The marketer has to ensure that there are not too many products in any one stage of PLC. The need to replace old products with new ones may be felt necessary. Thus PLC analysis helps in maintaining a balanced product portfolio.

a. PLC analysis reminds a company that a time may come when the customer will no longer need its product(s). It has to learn to move on- to serve the customer needs in the way that has come up, or simply exceed and start a new business.
b. PLC analysis also reminds a firm that its market will stagnate, and that it cannot grow at the pace that it has been doing in the past. Therefore, it should plan its expansion with prudence.
c. A firm need to follow different strategies in different stages of PLC, and therefore it needs to know when a stage that is likely to end. It has to believe that the strategy that has worked in one stage will not hold well in the next stage. In other words, it needs to be ready with a new strategy before the product enters the next stage.

3.10 Limitation of product life cycle

- Products do not have a predictable life cycle like living organisms.
- Life cycle curves followed by different products vary substantially.
- All stages may not be applicable for all products.
- Slowing sales may also be the result of fluctuations and not necessarily decline.
- PLC model is inefficient when dealing with brands or services although brands and products are closely related.

3.11 Summary of the PLC characteristics, objectives and marketing strategies (See APPENXIX-I)

3.12 Let's sum up

1. When we say that a product has a life cycle (PLC) we assert four things: i) A product has a limited life cycle; ii) Product's sales pass through distinct stages, each posing different challenges, opportunities and problems to the marketer; iii) Profits rise or fall at different stages of the PLC; iv) A product requires different marketing strategies in each stage.
2. Fundamentally, a PLC undergo five major steps. These are: Product development stage; Introduction stage; Growth stage; Maturity stage; and Decline stage.
3. The product development stage begins when the firm finds and develops a new product idea. It follows different product development stages.
4. In the introduction stage, launched commercially and made available for acceptance and acquisition by the customers.
5. Growth stage is marked by rapid climb in sales.
6. In the maturity stage, demand for the product tends to reach a saturation point.
7. During the decline stage, the sales decline which may slow or rapid.

3.13 Key terms

Product Life Cycle
Product development
Introduction stage
Growth stage
Maturity stage
Decline stage
Marketing strategy

3.14 Self-assessment questions

Q1: Explain the concept of PLC. Discuss the characteristics & marketing objective; and marketing mix strategy to be followed in the introduction and growth stage of PLC.

_____
_____
_____
_____
_____
_____.

Q2: Point out the characteristics and marketing objective in the maturity stage of the PLC. What marketing strategies are followed during this stage?

_____
_____
_____
_____
_____

Characteristics	Introduction	Growth	Maturity	Decline
Sales	Low Sale s	Rapid rising sales	Pea k sale s	Declining sales
Cost	High cost per customer	Average cost per customer	Low cost per customer	Low cost per customer
Profits	Negative	Rising profits	High profits	Declining number
Customers	Innovators	Early adopters	Middle majority	Laggards
Competitors	Few	Growing numbers	Stable numbers	Declining numbers
Marketing Objectives	Create product awareness and trial	Maximize market share	Maximize profit while defending market share	Reduce expenditure and milk the brand
Marketing Strategy	**Introductio n**	**Growth**	**Maturity**	**Decline**
Product	Offer a base product	Offer product extensions	Diversify brand and service warranty	Phase out weak item model
Price	Use cost plus pricing	Price to penetrate market	Price to match or beat competitors / Price parity	Cut price
Distribution	Build selective distribution	Build intensive distributio n	Build more intensive distribution	Go selective phase out of unprofitable outlets.
Advertising	Build product awareness among early adopters and dealers.	Build awareness and interest in the mass market.	Stress brand difference and benefits	Reduce to level needed to retail hard core loyal.

Sales Promotion	Use heavy sales promotion to entice trial	Reduce to take advantage of heavy consumer demand	Increase to encourage brand switching	Reduce to minimum level

3.15 Further readings

1. Kotler, P., Armstrong, G., & Cunningham, M. H. (2005). *Principles of marketing*. (6th edition), Toronto: Pearson Prentice Hall.
2. Kotler, P., Keller, K. L. (2009). *Marketing Management. (13th edition), New Jersey*: Pearson Prentice Hall.
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4. Ramaswamy, V. S. and Namakumari, S. (2010). Marketing Management. (3rd and 4th Edition), Macmillan India.

3.16 Model questions

1. Discuss the alternative marketing strategies that can be followed in the introduction stage of the PLC.
2. Critically evaluate the importance of studying PLC with limitations, if any.
3. Point out the stage through which each of the following products/ services are passing through. Suggest appropriate marketing-mix strategy to manage the relevant stage.
    a. CTVS
    b. Tourism
    c. Insurance
    d. Radio

APPENDIX-I

Summary of the PLC characteristics, objectives and marketing strategies