In this chapter, various models of consumer behaviour are explained. These models explain how a consumer searches and gets the information and goes on to make a decision for himself, for his family or for the organisation. The student must understand the:

- Input, process and output model
- Individual decision-making
- Family decision-making

The only goose that lays golden eggs everyday... forever... is your customer.
20.1 Introduction

We have already seen that there are many factors which influence the decision-making of consumers. There are various consumers models which help in the understanding of consumer behaviour. These are listed below. We shall discuss these briefly.

1. Economic Model
2. Psychological Model
3. Pavlovian Model
4. Input, Process Output Model—Gandhi: Philip Kotler
5. Sociological Model
6. Howarth Sheth Model
7. Engel-Blackwell-Kollat Model
8. Model of Family Decision-making
9. Nicosia Model
10. A Model of Industrial Buying Behaviour.

1. Economic Model

In this model, consumers follow the principle of maximum utility based on the law of diminishing marginal utility. The consumer wants to spend the minimum amount for maximising his gains.

   Economic man model is based on:
   
   **Price effect:** Lesser the price of the product, more will be the quantity purchased.
   
   **Substitution effect:** Lesser the price of the substitute product, lesser will be the utility of the original product bought.
   
   **Income effect:** When more income is earned, or more money is available, more will be the quantity purchased.

This model, according to behavioural scientists, is not complete as it assumes the homogeneity of the market, similarity of buyer behaviour and concentrates only on the product or price. It ignores all the other aspects such as perception, motivation, learning, attitudes,
personality and socio-cultural factors. It is important to have a multi-disciplinary approach, as human beings are complex entities and are influenced by external and internal factors discussed in Chapter 2. Thus, price is not the only factor influencing decision-making and the economic model according to scientists have shortcomings.

2. Psychological Model

Psychologists have been investigating the causes which lead to purchases and decision-making. This has been answered by A.H. Maslow in his hierarchy of needs. The behaviour of an individual at a particular time is determined by his strongest need at that time. This also shows that needs have a priority. First they satisfy the basic needs and then go on for secondary needs.

The purchasing process and behaviour is governed by motivational forces. Motivation stimulates people into action. Motivation starts with the need. It is a driving force and also a mental phenomenon. Need arises when one is deprived of something. A tension is created in the mind of the individual which leads him to a goal directed behaviour which satisfies the need. Once a need is satisfied, a new need arises and the process is continuous.

![Maslow's hierarchy of needs](image)

3. Pavlovian Learning Model

This model is named after the Russian Physiologist Ivan Pavlov. He experimented on a dog and observed how it responded on the call of a bell and presenting it with a piece of meat. The responses were measured by the amount of saliva secreted by the dog. Learning is defined as the changes in behaviour which occur by practice and, based on previous experience. This is important to marketeers as well.

The learning process consists of the following factors:

**Drive**

This is a strong internal stimuli which impels action. Because of the drive, a person is stimulated to action to fulfil his desires.

**Drives**

Can be innate (in-born) which stem from physiological needs, such as hunger, thirst, pain, cold, sex, etc. Learned drive, such as striving for status or social approval.
Cause are weak stimuli that determine when the buyer will respond. We have:

(a) **Triggering Cues**: These activate the decision process for any purchase.
(b) **Non-triggering Cues**: These influence the decision process but do not activate it.

These are of two kinds:

1. *Product cues* are external stimuli received from the product directly, *e.g.*, colour of package, weight, style, price, etc.
2. *Informational cues* are external stimuli which provide information about the product, like advertisement, sales promotion, talking to other people, suggestions of sales personnel, etc.

*Response* is what the buyer does, *i.e.*, buys or does not buy.

**Reinforcement**

Thus, when a person has a need to buy, say clothing, and passes by a showroom and is attracted by the display of clothing, their colour and style, which acts as a stimulus, and he makes a purchase. He uses it, and if he likes it, an enforcement takes place and he is happy and satisfied with the purchase. He recommends it to his friends as well, and visits the same shop again. Learning part, thus is an important part of buyer behaviour and the marketeer tries to create a good image of the product in the mind of the consumer for repeat purchases through learning.

![Fig. 20.2 Input, process and ouput model](image)

**4. Input, Process and Output Model**

This is a simple model of consumer behaviour, in which the input for the customer is the firm’s marketing effort (the product, price, promotion and place) and the social environment. The social environment consists of the family, reference groups, culture, social class, etc., which influences the decision-making process. Both these factors together constitute the input in the mind of the consumer.

**Need recognition**

When one is aware of a want, tension is created and one chooses a product to satisfy his needs. There is also a possibility that a person may be aware of a product before its need is recognised. This is indicated by the arrows going both ways from the need to the product and vice-versa.
**Product awareness**

Product awareness can be had from advertisement or exposure to different types of media or by the social circle. The awareness and the need leads to the building of interest. In some cases, the interest may also breakdown and, the decision process also stops or may be postponed for the time being.

**Evaluation**

Evaluation may consist of getting more information about the product and comparing and contrasting it with other products. This can be done theoretically or by taking a trial. Once the evaluation is completed, the consumer's interest may either build up and he has intentions to buy, or he may lose interest and the decision process may again stop or be postponed.

**Intention**

Once there is intention to purchase the product, the consumer goes ahead and acts or purchases the product. Once the product is purchased, it is used to fulfil the need and, the more the product is used, the more the consumer becomes aware of the positive and negative points of the product.

**Post-purchase behaviour**

If, after the purchase and use of the product the customer is satisfied, he is happy and goes in for repeat purchases or recommends the same to his friends and acquaintances. If, however, the customer is dissatisfied, he discontinues further purchase of the product and builds a negative attitude towards it, which may be harmful to the company.

The post-purchase behaviour is very important for the marketeer and the company because it leads to proper feedback for improvement and maintaining the quality and features desired by the product. If the customer is very happy with the purchase, he forms a good impression about the product and the company.

![Buyers Black Box Model](image-url)

The above figure shows three stages in terms of stimuli buyer's black box and buyer's response.

The consumer gets the input from the marketing effort of the firm (4 Ps) and the other stimuli. This input is processed in the mind (Black Box), which constitutes the characteristics...
of the buyer and the process of decision-making. Once the buyer has decided to buy then, he responds in terms of his choice of product, brand, dealer, timing and amount.

The post-purchase behaviour of being satisfied or dissatisfied is also important, and is shown in the decision-making process.

5. Sociological Model

This is concerned with the society. A consumer is a part of the society and he may be a member of many groups in a society. His buying behaviour is influenced by these groups. Primary groups of family friends and close associates exert a lot of influence on his buying. A consumer may be a member of a political party where his dress norms are different. As a member of an elite organisation, his dress requirements may be different, thus he has to buy things that conform to his lifestyles in different groups.

6. Howarth Sheth Model

This model is slightly complicated and shows that consumer behaviour is a complex process and concepts of learning, perception and attitudes influence consumer behaviour. This model of decision-making is applicable to individuals. It has four sets of variables which are:

(i) Input
(ii) Perceptual and learning constructs
(iii) Outputs
(iv) Exogenous or external variables.

Input

Some inputs are necessary for the customer for making decisions:

These inputs are provided by three types of stimuli as shown in Fig. 20.4.

(a) Significative stimuli: These are physical tangible characteristics of the product. These are price, quality, distinctiveness, services rendered and availability of the product. These are essential for making decisions.

(b) Symbolic stimuli: These are the same as significative characteristics, but they include the perception of the individual, i.e., price is high or low. Quality is up to the mark or below average. How is it different from the other products, what services can the product render and, what is the position of after sales service and how quickly or easily is the product available and, from where.

(c) Social stimuli: This is the stimulus provided by family, friends, social groups, and social class. This is important, as one lives in society and for the approval and appreciation of the society, buying habits have to be governed.

Perceptual and learning constructs

These constructs are psychological variables, e.g., motives, attitudes, perception which influence the consumer decision process.

The consumer receives the stimuli and interprets it. Two factors that influence his interpretation are stimulus-ambiguity and perpetual bias.

Stimulus ambiguity occurs when the consumer cannot interpret or fully understand the meaning of the stimuli he has received, and does not know how to respond. Perceptual bias occurs when an individual distorts the information according to his needs and experiences.
Fig. 20.4 Simplified version of the Howarth-Sheth model of buyer behaviour

Inputs
- Stimulus displaysignificative stimuli
  - (a) Quality
  - (b) Price
  - (c) Distinctiveness
  - (d) Service
  - (e) Availability

Symbolic Stimuli
- (a) Quality
- (b) Price
- (c) Distinctiveness
- (d) Service
- (e) Availability

Social Stimuli
- (a) Family
- (b) Reference groups
- (c) Social class

Physical Stimuli
- (a) Tangible
- (b) Intangible
- (c) Perceptual

Outputs
- Intention
- Purchase
- Satisfaction
- Attention
- Brand comprehension
- Attitude
- Motives
- Confidence
- Stimulus ambiguity
- Over search
- Overt search
- Stimulus displaysignificative stimuli

Perceptual Constructs
- Perceptual bias
- Confidence
- Attention
- Intention
- Brand comprehension
- Attitude
- Motives

Learning Constructs
- Perception which influences decision making process (Psychological variables)
These two factors influence the individual for the comprehensions and rating of the brand. If the brand is rated high, he develops confidence in it and finally purchases it.

**Output**

By output we mean the purchase decision. After purchase there is satisfaction or dissatisfaction. Satisfaction leads to positive attitude and increases brand comprehension. With dissatisfaction, a negative attitude is developed. The feedback shown by the dotted line and the solid lines shows the flow of information.

**Exogenous or external variables**

These are not shown in the model, and do not directly influence the decision process. They influence the consumer indirectly and vary from one consumer to another. These are the individual’s own personality traits, social class, importance of purchase and financial status.

All the four factors discussed above are dependent on each other and influence the decision-making process. The model though complicated, deals with the purchase behaviour in an exhaustive manner.

7. Engel-Blackwell-Kollat Model

It consists of four components:

(i) Information processing
(ii) Central control unit
(iii) Decision process
(iv) Environmental influences.

**Information processing**

A shown in the diagram the information processing consists of exposure, attention, comprehension and retention of the marketing and non-marketing stimuli. For successful sales, the consumer must be properly and repeatedly exposed to the message. His attention should be drawn, such that he understands what is to be conveyed and retains it in his mind.

**Central control unit**

The stimuli processes and interprets the information received by an individual. This is done by the help of four psychological factors.

(a) Stores information and past experience about the product, which serves as a standard for comparing other products and brands.
(b) Evaluative criteria which could be different for different individuals.
(c) Attitudes or the state of mind which changes from time to time, and helps in choosing the product.
(d) The personality of the consumer which guides him to make a choice suiting his personality.

**Decision process**

This chapter is dealt with later in the text, and consists basically of problem recognition, internal and external search, evaluation and the purchase. The decision outcome or the satisfaction and dissatisfaction is also an important factor which influences further decisions.
Fig. 20.5 Engel-Blackwell-Kollat model of buyer behaviour
The decision process may involve extensive problem solving, limited problem solving or routinised response behaviour. This depends on the type and value of the product to be purchased.

**Environmental influences**

The environmental influences are also shown in a separate box and consist of income, social class, family influences, social class and physical influences and other considerations. All these factors may favour or disfavour the purchase decisions.

8. Model of Family Decision-making

In a family decision-making model, it is important to understand how the family members interact with each other in the context of their consumer decision-making. There are different consumption roles played by various members of the family. These roles are as follows:

**(i) Influencers**

The members who influence the purchase of the product by providing information to the family members, the son in a family may inform the members of a new fast food joint. He can influence the family members to visit the joint for food and entertainment.

**(ii) Gate keepers**

These members control the flow of information for a product or brand that they favour and influence the family to buy the product of their choice. They provide the information favourable to themselves and, withhold information about other product which they do not favour.

**(iii) Deciders**

These are the people who have the power or, money and authority to buy. They play a major role in deciding which product to buy.

**(iv) Buyers**

Buyers are the people who actually buy. A mother buying ration for the house etc. Father buying crayons for his children.

**Preparers**

Those who prepare the product in the form it is actually consumed. Mother preparing food by adding ingredients to the raw vegetable. Frying an egg for consumption, sewing clothes for the family, etc.

**User**

The person who actually uses or consumes the product. The product can be consumed individually or jointly by all members of the family. Use of car by the family, use of refrigerator, TV, etc.

The roles that the family members play are different from product to product. Some products do not involve the influence of family members—vegetables bought by the housewife. She can play many roles of a decider, preparer as well as the user. In limited problem solving or extensive problem solving there is usually a joint decision by family members.

The diagram shows the predisposition of various family members, which when influenced by other factors leads to joint or individual decisions. These factors are shown in the diagram.
Fig. 20.6 A model of family decision-making
and consist of social class, lifestyle, role orientation, family life-cycle stage, perceived risk, product importance and time pressure.

9. Nicosia Model

This model explains the consumer behaviour on the basis of four fields shown in the diagram. The output of field one becomes the input of field two, and so on.

Field one consists of subfields one and two. Subfield one is the firm's attributes and the attributes of the product. The subfield two is the predisposition of the consumer and his own characteristics and attributes, which are affected by his exposure to various information and message, and is responsible for the building of attitude of the consumer.

Field two is the preaction field, where the consumer goes on for research and evaluation and gets motivated to buy the product. It highlights the means and end relationship. Field three is the act of purchase or the decision-making to buy the product. The customer buys the product and uses it. Field four highlights the post-purchase behaviour and the use of the product, its storage and consumption. The feedback from field four is fed into the firms attributes or field one, and the feedback from the experience is responsible for changing the pre-disposition of the consumer and later his attitude towards the product.

Nicosia Model is a comprehensive model of dealing with all aspects of building attitudes, purchase and use of product including the post-purchase behaviour of the consumer.

10. A Model of Industrial Buyer Behaviour

The purchases made in an industrial organisation involve many more people of different backgrounds and it is more complex.

There are three main features in this model:
1. There are different individuals involved who have a different psychological make up.
2. Conditions leading to joint decision-making by these individuals.
3. Differences of opinion on purchases or conflicts that have to be resolved to reach a decision.

These are shown in Fig. 20.8 as (1), (2) and (3).
Fig. 20.8 An integrative model of industrial buyer behaviour
The persons involved in the decision-making are from quality control, manufacturing, finance, research and development and other possible areas. These may be named as purchase agents, engineers, and users, as referred to in the model.

These constitute a purchasing committee. They have:

(1a) Different backgrounds
(1b) Different information sources
(1c) Undertake active search
(1d) They have perceptual distortion
(1e) Satisfaction with past purchase.

With these characteristics, they develop certain expectations from the product to be bought. The obvious ones are product quality, delivery time, quantity of supply, after sales service and price. These are known as explicit objectives. There are other objectives as well, which are the reputation of the supplier, credit terms, location of the supplier, relationship with the supplier, technical competence and even the personality, skill and lifestyle of the salesman. These are known as implicit objectives.

Different individuals in the purchasing committee give emphasis on different aspects of the product. Engineers look for quality and standardisation of the product.

Users think of timely delivery, proper installation and after sales service. Finance people look for maximum price advantage. Thus, there are conflicting interests and view that have to be resolved. If autonomous decisions are made, these issue do not surface. There are conditions leading to autonomous or joint decisions.

(2a) Product specific factors

Perceived risk: With higher risks joint decisions are favoured.

Type of purchase: Items involving heavy investments are made jointly, routine and less costly decisions can be made independently.

Time pressure: If goods are urgently required, individual decisions are favoured.

(2b) Company specific factors

Size of the organisation: Larger the size of the organisation, the more the emphasis laid on joint decision.

Organisation orientation: In a manufacturing organisation, the purchases are dominated by production personnel and in a technology oriented organisation, the decisions are based on engineers.

The conflict that arises for buying decision has to be resolved. The resolution can be done by:

(a) Problem solving
(b) Persuasion
(c) Bargaining
(d) Politicking

The fourth aspect is the influence of situational factors which must be considered. These are economic conditions such as inflation, recession or boom, price contracts, rationing foreign
trade, strikes or lock outs. Organisational change such as a merger, acquisition change of key personnel, etc. Sometimes these factors outweigh the realistic criteria of decision-making.

This model explains how purchase decision are made in an industrial organisation.

All the models discussed in this chapter give us an idea of the buying behaviour in diverse situations. An understanding of these models gives the marketeer clues to formulate his strategies according to the target audience, e.g., an individual, a family or an industry, etc.

Questions

1. What is the significance of the Pavlovian Model? Discuss in brief.
2. Discuss and illustrate the Input, Output Process Model by means of a diagram.
3. Discuss the Howarth Sheth Model, the Engel-Blackwell-Kollat Model as applicable to individuals.
4. Discuss the model of family decision-making and its importance.
5. Discuss the various fields of the Nicosia Model.
6. How is industrial buying different from individual buying? Illustrate by means of an industrial buyer model.