CHAPTER 2

THE CONSUMER DECISION-MAKING PROCESS

2.1 INTRODUCTION

"Nothing is more difficult and therefore more precious, than to be able to decide."

Napoleon I
Maxims (1804-15)

The classical citation by Napoleon I emphasises the difficulties consumers experience in making decisions. From early research, writers on the topic of consumer behaviour, although they used different terminology, agreed on the following assumptions regarding the decision-making process (Olshavsky & Granbois, 1979):

* Two or more alternative actions exist in decision-making and, therefore, choice must occur.

* The consequences of each alternative on the consumer's goals or objectives are forecasted by evaluative criteria.

* A decision rule or evaluative procedure determines the chosen alternative.

* Information retrieved from memory and/or information gained externally is processed in the application of a decision rule or evaluation procedure.

Olshavsky et al (1979) contradicted the above assumption by supporting Kasserjian (in Olshavsky et al, 1979) in raising the question whether or not a decision-making process actually does exist. According to these authors, the validity of their raised question lies in the fact that in applying an evaluation procedure to various alternatives on two or more evaluative criteria requires considerable information. Memory sometimes lacks
the necessary quantity and quality information required. Purchasing behaviour occurring without external search for information then supports the notion of nondecision behaviour postulated by these authors. The second condition is insufficiency of stored information suitable for alternative evaluation or nonuse of relevant stored information. Olshavsky et al (1979) concluded that for many purchases a decision process never occurs, not even on the first purchase.

Ursic (1980) commented on the above assumptions by explaining that the prepurchase process is very broad and not only encompasses search as suggested by Olshavsky et al (1979) but also needs recognition and alternative evaluation. Purchase and postpurchase evaluation occurs only after these elements have been used in some sequence.

More recent research acknowledges five different phases to the decision-making process. These phases are need recognition, search for alternatives, evaluation of alternatives, purchase and postpurchase evaluation.

Before attending to the decision process, it is important to define the word decision. Schiffman et al (1991) explain that a decision is the selection of an action from two or more alternative choices. For a consumer to make a decision, two or more alternatives have to be available. An exception would be if only one alternative were available. The consumer is then literally “forced” to use the available option. Important to note is that this does not support the statement that there is no decision-making process, since the consumer can still decide whether or not to choose the available option. An example may provide more clarity: A teenager lives in a very small town where there is only a tenpin bowling alley available for entertainment. He may decide to stay at home on a Friday night instead of going bowling with some friends.

Also important to note is that consumers use different levels of decision-making since all decisions are not equally important. These levels of decision-making will be discussed before the actual decision-making process is attended to.
2.2 LEVELS OF CONSUMER DECISION-MAKING

Peter & Olson (1994) note that the amount of cognitive and behavioural effort consumers put into their problem-solving/decision-making processes is highly variable (problem-solving refers to thoughtful, reasoned action undertaken to bring about the satisfaction of a need, Engel, Blackwell & Miniard, 1990). On a continuum of effort ranging from very high to very low, three specific levels of consumer decision-making can be distinguished. These levels are extended, limited and routinised decision-making. Before attending to the different levels it is important to note the factors influencing the extent of decision-making. Schiffman et al (1991) note three factors, namely

- how well-established the consumer’s criteria for selection are;
- how much information the consumer has concerning each brand being considered; and
- how narrow the set of brands (evoked set) is from which the choice will be made.

Engel et al (1990) add to these factors by providing an additional three factors that influence the extent of decision-making. These factors are the

- relevant way in which alternatives are differentiated;
- amount of time available for decision making; and
- degree of involvement accompanying the purchase.

Figure 2.1 provides a detailed assessment of the three different types of decision-making and the sequence of the phases associated with each type.
FIGURE 2.1: TYPES AND SEQUENCE OF DECISION-MAKING

Low-purchase involvement

- Routinised decision-making
  - Need recognition
    - Selective
  - Information search
    - Limited internal
  - Purchase
  - Postpurchase
    - No dissonance
    - Very limited evaluation

High-purchase involvement

- Limited decision-making
  - Need recognition
    - Generic
  - Information search
    - Internal
    - Limited external
  - Alternative evaluation
    - Few attributes
    - Simple decision rules
    - Few alternatives
  - Purchase
  - Postpurchase
    - No dissonance
    - Limited evaluation

- Extended decision-making
  - Need recognition
    - Generic
  - Information search
    - Internal
    - External
  - Alternative evaluation
    - Many attributes
    - Complex decision rules
    - Many alternatives
  - Purchase
  - Postpurchase
    - Dissonance
    - Complex evaluation

Source: Adapted from Hawkins, Best & Coney (1992, p. 440)
2.2.1 Extended decision-making

According to Engel et al. (1990) extended decision-making (referred to by numerous authors, e.g. Peter et al., 1994; Schiffman et al., 1991; and Wilkie, 1990 as extensive decision-making) may engage in the evaluation of many alternatives and the consultation of a wide variety of information sources. The decision on how and where to make the purchase may also require additional search and evaluation. Schiffman et al. (1991) explain that at this level consumers have no established criteria for evaluating a product category or specific brands within that category, or that they have not narrowed down the number of brands they will consider to some small manageable subset. The consumer needs a great deal of information to establish a set of criteria on which to judge specific brands, and a correspondingly large amount of information concerning each of the brands to be considered. Extended decision-making is therefore likely to occur with first-time purchases in an important product category, and is likely to take a long time because of the search and criteria involved (Peter et al., 1994 and Wilkie, 1990).

2.2.2 Limited decision-making

Limited decision-making is an intermediate type of decision-making with most consumer decisions probably falling in this category (Wilkie, 1990). Engel et al. (1990) add that consumers are not highly involved in the alternatives. Schiffman et al. (1991) continue by explaining that consumers have already established the basic criteria for evaluating the product category and the various brands within that category. Fully established preferences concerning a selected group of brands, however, have not been made. In search of information, the consumer has to gather additional brand information to discriminate between the various brands.

It is important to note (Engel et al., 1990) that extended and limited decision-making are not different decision processes per se for both processes involve the same stages. The difference lies in the extent to which time and effort are devoted to the external information search and alternative evaluation.
2.2.3 Routinised decision-making

According to Schiffman et al (1991), routinised decision-making (also referred to as habitual decision-making) occurs when consumers already have had some experience with the product category and have a well-established set of criteria according to which they evaluate brands in their evoked sets. Engel, Blackwell & Miniard (1986), supported by Peter et al (1994), add by explaining that consumers basically activate a previously learned decision plan from memory and relatively automatically pursue to produce purchase behaviour. There is no need for external search or additional alternative evaluation. Therefore, purchase intention and choice remain unchanged. An example would be to purchase your regular brand of toothpaste once your stock is depleted (Engel et al, 1990, term this the "buy the same thing" response). Interesting to note (Engel et al, 1986) is that regardless of how initial decisions are made (ie extended or limited decision-making), people attempt to establish repurchase routines as soon as possible. Assuming satisfaction levels have met or exceeded expectations, the same choice will be made in future. Continued satisfaction only reinforces intentions and strengthens the likelihood of continued response.

Peter et al (1994) conclude by explaining that the amount of effort consumers exert in decision-making tends to decrease over a certain period as they learn more about a product and gain experience in making decisions, and therefore tend to develop increasingly routinised, automatic decision-making processes.

2.3 THE CONSUMER DECISION-MAKING PROCESS

As mentioned earlier, the consumer's decision-making process consists of five phases, namely need recognition, search for alternatives, evaluation of alternatives, purchase and postpurchase evaluation. Figure 2.2 provides a generic consumer decision-making model.
FIGURE 2.2: A GENERIC MODEL OF CONSUMER DECISION-MAKING

1. **Need recognition**
   - Perceived difference between ideal and actual state of affairs

2. **Search for alternative solutions**
   - Seek relevant information about potential solutions to the recognised need from external environment, or activate knowledge from memory

3. **Evaluation of alternatives**
   - Evaluate or judge competing alternatives in terms of salient beliefs about relevant consequences and combine this knowledge to make a choice

4. **Purchase**
   - Buy the chosen alternative

5. **Postpurchase use and re-evaluation of chosen alternatives**
   - Use the chosen alternative and evaluate it again in light of its performance

Source: Adapted from Peter et al (1994, p. 158)
2.3.1 Need recognition

The consumer decision-process always commences with the recognition of a need (many authors refer to a problem, rather than a need). Wilkie (1990) explains that the consumer perceives a need and becomes motivated to solve the so-called "problem" recognised. Engel, Blackwell & Miniard (1993, p.508) add by defining need recognition as

"...perception of a difference between the desired state of affairs and the actual situation sufficient to arouse and activate the decision process."

Schiffman et al (1991) continue by suggesting two different need recognition styles among consumers. These styles are actual state types and desired state types respectively. Actual state types imply that consumers perceive a problem when a product fails to perform satisfactory (ie in the consumer's current situation). In contrast, consumers are desired state types when the desire for something new may trigger the decision process (ie the state the consumer wishes to be in).

Hawkins et al (1992) explain that need recognition essentially depends on how much discrepancy exists between the actual state and the desired state as well as the relative importance of the need. Engel et al (1990) add that when this discrepancy exceeds a certain threshold, a need is recognised (Figure 2.3). If the discrepancy is below the threshold level, then need recognition will not occur (thresholds are discussed in Section 3.3).

2.3.1.1 Causes for need recognition

A need must first be activated before it can be recognised. A host of factors will influence the likelihood that a particular need will be activated. These factors can be categorised as either a change in the consumer's actual state or a change in the desired state. Figure 2.4 provides a summary of the need recognition process.
Wilkie (1990) recognises four different causes in the actual state that can prompt need recognition. A depletion of stock, usually through consumption, will lead the consumer to recognise a need. Dissatisfaction is another factor which could lead to need recognition. This would occur when the consumer perceives that products currently used are insufficient to serve his needs, even though the product may not have been depleted. An example is fashion clothing. A third factor, decrease in finance, will guide the consumer to reduce spending and concentrate on necessities. The final factor is an increase in finance which will convey the consumer to consider the actual state and consider spending the new acquired money. Engel et al (1990) add to these factors by suggesting a generic factor, namely change in circumstances, where any change in the
FIGURE 2.4: THE PROCESS OF NEED RECOGNITION

Desired consumer lifestyle
The way the consumer would like to live and feel

Current situation
Temporary factors affecting the consumer

Desired state
The condition the consumer would like to be in at this point in time

Actual state
The condition the consumer perceives himself to be in at this point in time

Nature of discrepancy
Difference between the consumer's desired and perceived conditions

No difference
Satisfaction
No action

Desired state exceeds actual state
Need recognised
Search decision initiated

Actual state exceeds desired state

Source: Adapted from Hawkins et al (1992, p. 444)
consumer's life (e.g., the birth of a child, unemployment, transfer to another city, etc) will activate need recognition. Hawkins et al. (1992) mention yet another factor by stating that past decisions determine one's existing set of need satisfaction. The reason for the aforementioned is that the sum of one's past consumption decisions provides a framework for the actual state.

Wilkie (1990) acknowledges four causes for changes in the desired state. The first is new "need" circumstances. Changes occur in our daily lives and are responsible for entirely new categories of consumer needs. New "want" circumstances occur when consumers recognize a want in changing circumstances. This is possible, for example, when changes are to occur in one's life with the accompanying desire for something. An example would be where a student moves away from home and desires to enroll in classical art classes (the recognition of a new "want"). A third factor is new product opportunities. Prior to becoming aware of a new product, consumers are unlikely to experience need recognition for that product. The final factor, purchase of a new product, could spark need recognition. The reason is that consumers become aware of additional products by acquiring a specific product (e.g., the purchase of a computer may spark the need for software packages, printers, modems, etc). Hawkins et al. (1992) add motives as another factor since the satisfaction of one motive (e.g., hunger) moves to other (sometimes higher order) motives. Peter & Olson (1993) support this statement by suggesting that consumers strive to achieve a certain goal. If the goal is too complex (or abstract) in nature it will be divided into subgoals, therefore forming a goal hierarchy. The end goal can be achieved by solving the subgoals in order.

In conclusion Engel et al. (1990) draw attention to the fact that the presence of need recognition does not automatically activate some action. This will depend on two factors, namely that the recognized need must be of sufficient importance and secondly that the consumer must believe that a solution to the need is within his means.
2.3.2 Information search

The second phase of the consumer decision process, information search, has long been regarded as a significant element of consumer behaviour (Wilkie & Dickson, in Kasserjian & Robertson, 1985) for consumers learn more about their potential purchases at this stage and tend to match their personal desires with external means of satisfying those desires. Information search commences with the perception of a need that might be satisfied with the purchase and consumption of a product. A consumer, therefore, enters this stage when a need is sensed for information upon which to base a choice.

Engel et al (1993, p. 511) provide a summary of the search process by defining it as

"...the motivated activation of knowledge stored in memory or acquisition of information from the environment."

As the definition suggests, search can be of an internal nature, an external nature or a combination of both. Engel et al (1993) differentiate between internal and external search by explaining that internal search involves the retrieval of knowledge from memory, whereas external search consists of collecting information from the marketplace.

2.3.2.1 Internal search

As portrayed in Figure 2.5, internal search succeeds need recognition. It therefore is a memory scan for decision-relevant knowledge stored in long-term memory. Schiffman et al (1991) support Engel et al (1990) by stating that if past experience (drawn from long-term memory) provides the consumer with adequate information for the present choice, then external search is unnecessary. This leads to the conclusion that the greater the relevant past experience, the less external information the consumer is likely to need to reach a decision. Yet, if no (or insufficient) prior experience exists, the consumer may have no alternative but to engage in external search. Consequently, the consumer's reliance on internal search will depend on the adequacy and quality of his existing knowledge and the degree of satisfaction regarding prior purchase.
2.3.2.2 External search

As illustrated in Figure 2.5, consumers may decide to collect additional information from the environment if internal search proves inadequate (or unsuccessful). Two types of external search can be distinguished (Bloch, Sherrell & Ridgway, 1986), namely prepurchase search and ongoing search. Prepurchase search refers to external search that is driven by an upcoming purchase decision. Engel et al (1990) suggest that the motive behind prepurchase search is to make better consumption choices. Similarly, ongoing search may be motivated by desires to develop a knowledge base that can be used in future decision-making since this kind of information acquisition occurs on a relatively regular basis, regardless of sporadic needs. Ongoing search, however, may occur simply because of derived enjoyment from the activity (e.g. a subscriber to Car magazine may read the magazine for entertainment only. Information obtained through this source may never be used).
Engel et al (1993) augment the discussion by proposing that consumer search is characterised along three main dimensions. These dimensions are the degree, the direction and the sequence of search.

* **Degree of search**

The degree of search implies the total amount of search. Search degree is reflected by the number of brands, attributes, information sources and stores considered during search as well as the time required to do so. Many consumers engage in very little external search prior to purchase. This leads to the suggestion that purchase can occur without being preceded by a decision process. This statement is unjustified because it fails to consider the role of internal search. As was noted earlier, internal search alone may suffice in making purchase decisions. It can therefore be said that the degree of search is directly related to the type of decision-making process. Extended decision-making will entail a considerable amount of search, whereas routinised decision-making will try to minimise search.

* **Direction of search**

The direction of search represents the specific content of search. Emphasis falls on the particular brands and stores involved during search rather than simply the number. It entails the brands, stores and information sources the consumer considers during decision-making. Information sources can either be personal or impersonal, while the type of the source is commercial or noncommercial. Table 2.1 distinguishes among the different sources of information.
TABLE 2.1: SOURCES OF INFORMATION

<table>
<thead>
<tr>
<th></th>
<th>Impersonal</th>
<th>Personal</th>
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</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>Advertising</td>
<td>Sales people</td>
</tr>
<tr>
<td></td>
<td>In-store information</td>
<td></td>
</tr>
<tr>
<td>Noncommercial</td>
<td>General purpose media</td>
<td>Social others</td>
</tr>
</tbody>
</table>


* Sequence of search

Sequence of search reflects the order in which search activities occur. Consumers can follow one of two different sequences when confronted with a set of brands described along several attributes. One alternative is to follow a brand search sequence (often referred to as processing by brand), where each brand is examined along various attributes. This process is completed before search proceeds to the next brand. Alternatively, an attribute search sequence (referred to as processing by attribute) may be followed where brand information is collected on an attribute-by-attribute basis.

2.3.3 Evaluation of alternatives

Engel et al (1993, p. 534) define the evaluation of alternatives as

"...the process by which a choice alternative is evaluated and selected to meet consumer needs."

Schiffman et al (1991) express the opinion that consumers tend to employ two types of information when potential alternatives are evaluated. The consumer has to decide which choice alternatives to consider as well as the criteria used to evaluate each brand. Engel et al (1993) add that after these two initial stages, the consumer has to judge the relative performance of the considered alternatives along the evaluative criteria. A decision rule is then applied to these judgements to select a particular alternative. Figure 2.6 presents an overview of the alternative evaluation process.
2.3.3.1 Evaluative criteria

Engel et al (1993), supported by Schiffman et al (1991) explain that evaluation criteria are the specific attributes used by the consumer to judge choice alternatives. These evaluative criteria vary from person to person as well as from decision to decision. Therefore, the same person may use different evaluative criteria for the same product, but in different situations. As an example, the evaluative criteria in the evaluation of a personal computer would be price, quality, brand name, speed, etc.

The impact of different evaluative criteria during the evaluation process differs. Therefore, some criteria will have a greater impact than others. The concept of salience refers to the potential influence each criterion may exert during the comparison process. Important to note (Engel et al, 1993) is that although salient criteria influence the evaluation process, exceptions do take place. For example, if price is considered a very
important attribute, but all the brands are of the same price, the impact of price essentially falls away. This phenomenon occurs when alternatives under consideration perform equally well (or poor for that matter).

According to Engel et al (1990), evaluative criteria selection is determined by factors such as the situation (eg the purchase of Nescafé coffee for guests while Frisco is usually used) and similarity of choices. If the decision involves noncomparable alternatives, the consumer needs to use more abstract evaluative criteria (Corfman, 1991 and Johnson, 1989), eg when considering to buy either a television or a refrigerator. Motivation (eg buying the cheapest or the most prestigious brand), involvement (more criteria enter the decision process as involvement increases) and knowledge (knowledgable consumers will already have criteria stored in memory to assist them in decision-making while novices need more information to complete their criteria) also influence the selection of evaluation criteria.

2.3.3.2 Determining choice alternatives

Besides determining criteria used during alternative evaluation, consumers also have to determine the alternatives from which the choice will be made. Hauser & Wernerfelt (1990) supported by Nedungadi (1990) explain that these alternatives define what is known as the consideration set (evoked set) and usually forms only a subset of all possible alternatives.

Roberts & Lattin (1991), supported by Hawkins et al (1992) draw attention to the fact that all potential alternatives available to the consumer can be divided into an awareness set (alternatives of which the consumer is aware) and an unawareness set (unaware-off alternatives). The awareness set is again compiled from three different sets, namely the evoked, the inert and the inept set. The evoked set forms the set of acceptable alternatives to the consumer from which the final choice would be made. The consumer is indifferent towards the inert set because it is not perceived as having any particular advantages, but may be used as backup alternative (Hawkins et al, 1992). Brands falling in the inept set will be entirely excluded from purchase consideration.
Although Peter et al. (1994) consider the consideration set to be compiled from an evoked set and unknown brands - Figure 2.7 - (consisting of brands accidentally found and brands found through intentional search), the determination of choice alternatives is essentially the same process as described above.

A possible explanation for the difference in the two viewpoints is that Hawkins et al. (1992), Schiffman et al. (1991) and Engel et al. (1990) explain their process from an origination point after previously unknown brands have been considered. Roberts et al. (1991) suggest another explanation by stating that the composition of the consideration set can be modelled at any point in time. For the purpose of this study, the viewpoint of Hawkins et al. (1992), Schiffman et al. (1991), and Engel et al. (1990) will be followed (with consideration of the possible explanation as cited above). Figure 2.8 provides a detailed assessment of the process of determining choice alternatives that will be used for the purpose of this study (note that unknown brands portrayed in Figure 2.8 result from after external search was conducted).
FIGURE 2.8: CATEGORIES OF DECISION ALTERNATIVES

All potential alternatives
(brands, products)

Awareness set
Alternatives the consumer is aware of

Unawareness set
Alternatives the consumer does not know about

Evoked set
Alternatives given consideration

Inert set
Backup alternatives

Inept set
Avoided alternatives

Specific alternative purchased

Alternatives considered, but not purchased

2.3.3.3 Assessing choice alternatives

Engel et al (1990) express the opinion that the performance of choice alternatives needs to be judged along salient evaluative criteria. Often consumers already have judgements or beliefs stored in memory which may strongly affect which alternatives they will eventually choose. Consumers lacking such stored knowledge need to rely on external information by forming the necessary beliefs or judgements. In judging alternatives, consumers can rely on either the use of cutoffs or signals.

A cutoff is a certain restriction or requirement for acceptable attribute values. Alternatives that do not meet a specific cutoff will therefore be rejected regardless of how well they perform on other attributes (e.g., a consumer who only has the financial means to purchase a Citi Golf, will not be able to buy a Golf GTI, regardless of the better performance, quality, etc. of the GTI.) Signals (cues) are also often used to judge alternatives. A classic example is the use of price as a signal of quality.

2.3.3.4 Selecting a decision rule

Engel et al (1990) explain that decision rules represent the strategies consumers use to make a selection from choice alternatives and range from very simplistic procedures that require little time and effort to very elaborate ones that involve considerably more time and processing effort on the part of the consumer. According to Schiffman et al (1991) these decision rules (also referred to as heuristics) serve to reduce the burden of making complex decisions.

Decision rules can be classified in two major categories, namely compensatory and noncompensatory decision rules. Other prominent decision rules are affect referral and various combinations of different decision rules.
2.3.3.4.1 Compensatory decision rules

Hawkins et al (1992) and Schiffman et al (1991) explain that in following a compensatory decision rule, consumers evaluate brands in terms of relevant attributes and compute a summated score for each brand. The score for each brand reflects its merit as a potential purchase choice. An assumption with the compensatory rule is that the brand with the highest score among the alternatives would usually be selected.

Interesting to note (Rice, 1993 and Peter et al, 1994) is a unique feature of a compensatory decision rule, where a positive evaluation of a brand on one attribute is allowed to balance out a negative evaluation on some other attribute.

Engel et al (1990) add to the discussion by providing two types of compensatory rules. They are the simple additive and the weighted additive. In terms of a simple additive rule, consumers simply add the number of times each alternative is judged favourably regarding the set of salient evaluative criteria. The result is that the alternative perceived as having the largest number of positive attributes is chosen. The weighted additive rule is far more complex in nature than the simple additive. The consumer now engages in more refined judgements about the alternatives' performance irrespective of whether it is favourable or unfavourable. The relative salience of relevant evaluative criteria is also incorporated into the decision rule.

2.3.3.4.2 Noncompensatory decision rules

In contrast with the compensatory decision rules, noncompensatory decision rules are characterised by the fact that a weakness in one attribute cannot be offset by a strength in another attribute. For example, if the decision rule is "buy the cheapest brand", a brand that is not the cheapest will not be chosen, no matter how well it performs on other attributes. The brand's weakness in price is, therefore, not compensated by its favourable performance in other attributes. Four types of noncompensatory decision rules are the conjunctive, disjunctive, lexicographic and elimination-by-aspects decision rules.
**Conjunctive rule**

The conjunctive rule is commonly used by consumers as a means of eliminating a number of alternatives in a fast and simple manner and can be defined (Hawkins et al., 1992, p. 509) as

"... establishes minimum required performance standards for each evaluative criterion and selects all brands that surpass these minimum standards."

Peter et al. (1993) and Schiffman et al. (1991) support the definition by arguing that an alternative is rejected if a minimum acceptable level as a cutoff point for any one attribute is not met.

Since the conjunctive rule can result in several acceptable alternatives, it becomes necessary in such cases for the consumer to apply an additional decision rule in order to arrive at a final selection. Engel et al. (1990) stress the importance of noting that if none of the alternatives considered meet the cutoff requirements, the consumer either has to alter the cutoffs or the decision rule. If decision making is still impossible, then choice must be delayed.

**Disjunctive rule**

In employing a disjunctive decision rule, consumers establish a separate, minimally acceptable level as the cutoff point for each attribute (this cutoff, however, may be higher than the one normally established for a conjunctive rule). Therefore, if a brand alternative meets or surpasses the cutoff established for any one attribute, it is accepted (Hawkins et al., 1992 and Schiffman et al., 1991).
By using the disjunctive rule (similarly to using the conjunctive rule) a number of brands might surpass the cutoff point, producing a situation where another decision rule is required. If this occurs the consumer may accept the first satisfactory brand as the final choice or use some other decision rule.

* **Lexicographic rule**

Peter *et al* (1993), Hawkins *et al* (1992), and Schiffman *et al* (1991) explain that in following a lexicographic decision rule, consumers first rank attributes in terms of importance. The consumer then compares the various alternative brands in terms of the single attribute that is considered most important. If one brand is perceived as superior on that one attribute, it is selected. If two or more brands are perceived as equally good, they are then compared on the second most important attribute. This process continues until the tie is broken and only one alternative brand remains.

* **Elimination-by-aspects decision rule**

Hawkins *et al* (1992) and Engel *et al* (1990) explain that, as with the lexicographic rule, the elimination-by-aspects rule requires the consumer to rank the evaluative criteria in terms of importance. Now however, cutoffs are established for each individual criterion. All alternative brands are then considered on the most important attribute (criterion). Alternatives not surpassing the cutoff point are expelled from consideration. If more than one brand passes the cutoff point, the process is repeated for those brands on the second most important attribute. This process continues until only one brand remains.

Important to note once again, is that if none of the brands are acceptable, the consumer must revise the cutoffs, or use a different decision rule, or postpone the choice.
2.3.3.4.3 Affect-referral decision rule

Engel et al (1990) and Schiffman et al (1991) explain that the affect-referral rule assumes that consumers have previously formed overall evaluations of each choice alternative. The consumer would, therefore, simply retrieve established evaluations from memory rather than judge alternatives on various evaluative criteria. The alternative perceived as having the highest affect is then chosen. In essence, overall evaluation serves as the single evaluative criterion used in decision-making (supported by Bahn, 1986) and may represent the simplest of all rules.

2.3.3.4.4 Combination of decision rules

Various authors (eg Peter et al, 1993; Schiffman et al, 1991 and Engel et al, 1990) are of the opinion that consumers combine different decision rules. Examples are conjunctive-compensatory, disjunctive-conjunctive and conjunctive-disjunctive decision rules. The reason for combining decision rules is to assist the consumer in deriving a single acceptable alternative during evaluation. Engel et al (1990) suggest two specific combination rules used most often by consumers. These are the phased and constructive decision rules.

* Phased decision rule

A phased decision rule, consisting of a two-phased process, involves the sequential use of at least two different decision rules as a means of coping with a large number of alternatives. In the initial stage, one type of rule is used to help narrow down the choice set to a more manageable number. A second decision rule is then applied to the remaining alternatives to make the final choice.
Constructive decision rule

Consumers may find it necessary to construct a decision rule when alternatives are to be evaluated, i.e., consumers build a constructive decision rule using elementary processing operations (i.e., "fragments" of rules), retrieved from memory that can accommodate the choice situation.

In conclusion to decision rules it is important to note two different phenomenon that may drastically alter the choice in rules chosen as well as the alternative chosen. The first is that a distinction has to be made between a necessity (e.g., a refrigerator) and a more discretionary (e.g., a second or third wrist watch) purchase situation, and the second is the concept of satisficing.

The importance of differentiating between a necessity and a discretionary purchase situation (Schiffman et al., 1991) is that if a product is considered a necessity and none of the alternatives evaluated are perceived as offering sufficient benefits to warrant purchase, the consumer has to lower his expectations (i.e., cutoff points) and settle for the best of the available alternatives. If still no choice is eminent, the consumer has to seek additional alternatives, hoping to find one that more closely meets his criteria. If a purchase is more discretionary, the consumer can simply postpone decision-making and transfer acquired information experienced from search to long-term memory to be retrieved when and if the consumer regains interest in making such an acquisition.

The concept of satisficing, combined from satisfy and suffice (Rice, 1993) could also alter the decision rule used by the consumer. Wilkie (1990) supported by Herrmann (1988) explains that the consumer does not always attempt to optimise (i.e., the best available alternative is sought and chosen) decision procedures. Instead, the consumer only seeks for an alternative that is good enough to be considered acceptable. Rice (1993) concludes by adding that through satisficing, the consumer simply does just enough to obtain satisfaction. It indicates a degree of settling for something rather less than perfection.
2.3.4 Purchase

The fourth stage in the decision-making process, purchase, can be defined as the phase (Engel et al, 1993, p. G-10):

"... in which the consumer acquires the preferred alternative or an acceptable substitute."

Purchase is a function of two determinants, environmental influences and/or individual differences (the situation is especially important in the latter category) and intention. Influences in the situation that affect the purchase process are among other factors such as the availability of information (internal and external - discussed earlier as search), the retail environment (e.g. store atmosphere, layout and display and point-of-purchase materials) and time available for decision-making purposes.

A purchase intention can be categorised as being fully planned, planned and unplanned as well as either a trial or a repeat purchase.

Engel et al (1990) explain that a purchase is fully planned once a consumer has decided precisely which brand within a product category he wishes to purchased. If he only decides on the product category (without a specific brand within that category), the purchase is classified as planned. Unplanned purchases should not be misunderstood as occurring without a decision process. The mere fact that the purchase intention was not articulated prior to purchase (either verbally or on a shopping list) does not mean that the so-called unplanned purchase was not "planned" in a sense. This phenomenon can be explained by the fact that consumers use product displays (especially in mass-merchandising outlets) as a surrogate shopping list. In other words, the display provides a reminder of a need, and a purchase is triggered. This is referred to as an impulse purchase.
Rook (1987, p. 191) defines impulse buying as

"... a sudden, often powerful and persistent urge to buy something immediately."

Important to note (Rook, 1987) is that behaviour is not impulsive simply because it occurs swiftly. Routinised decision-making enables the consumer to almost automatically evaluate and choose an alternative. Furthermore, in emergencies consumers often act immediately, but this may be more an instinctive than an impulsive response.

Schiffman et al (1991) distinguish between trial and repeat purchase by explaining that a trial purchase is considered to be a first-time acquisition and of a smaller quantity than usually bought. Therefore, trial can be considered to be an exploratory phase of purchase behaviour in which consumers attempt to evaluate a product through direct use. If a product used during trial is perceived to be satisfactory (or simply better than other brands), the consumer is likely to repeat the purchase.

Important to remember is that trial, unfortunately, is not feasible in every situation. For example, with expensive or durable products (fridge, car, etc) consumers move directly from evaluation to a long-term commitment (through purchase), without the opportunity for actual trial.

2.3.5 Postpurchase evaluation

Engel et al (1990) explain that in the final phase of the consumer decision-making process, postpurchase evaluation, it is not uncommon that the consumer may experience an immediate and often transitory period of postdecision regret or doubt (especially in high-involvement situations) whether the right decision was made. The impact of such a doubt, referred to as postpurchase cognitive dissonance, is that it can have an influence on whether the consumer is satisfied or dissatisfied with the chosen alternative. On its part, satisfaction and dissatisfaction formed in this stage have a
direct influence on consumer beliefs and attitudes, future purchase intentions, word-of-mouth communication and complaint behaviour.

2.3.5.1 Postpurchase cognitive dissonance

Schiffman et al (1991) suggest that the reduction of postpurchase cognitive dissonance is an important component of postpurchase evaluation since consumers try to reassure themselves that their choice was a wise one. Engel et al (1990) support this statement by providing two options that the consumer may follow in reducing dissonance experienced, first, a confirmation of the choice and secondly a conclusion that an unwise decision was made. Schiffman et al (1991) express the opinion that the consumer can confirm his choice by seeking advertisements that support this choice and actively avoid those of competitive brands. They may attempt to persuade friends to purchase the same brand (and thereby confirm their own choice) or they may turn to other satisfied users for assurance.

2.3.5.2 Consumer satisfaction/dissatisfaction

Engel et al (1990) explain that the consumer enters a purchase situation with certain expectations about the performance of a product once used, trusting that the outcome will be satisfactory. Satisfaction therefore implies that the expectations of the product used are at least met or exceeded. Dissatisfaction is the outcome of negatively confirmed expectations. Hawkins et al (1992) add another possible outcome, namely nonsatisfaction. Nonsatisfaction occurs when a brand’s performance confirms a low-performance expectation. The consumer is not likely to feel disappointed and will probably search for better alternatives the next time the problem arises.

Wilkie (1990) summarises postpurchase evaluation by dividing the process of deriving at a satisfaction/dissatisfaction outcome into five components. These are expectations, performance, comparison, confirmation/disconfirmation and discrepancy (refer to Figure 2.9).
Expectations are developed during the prepurchase phase when consumers develop expectations or beliefs about what they expect to receive from the product. These expectations are carried forward into the postpurchase phase where they are again activated at the time of consumption.

During consumption of the product, its performance is perceived along dimensions important to the consumer.

Comparisons can be made after the product is used between the prepurchase expectations and the postpurchase actual performance.

The comparison results in either confirmation of expectations (when the two performance levels are equal) or disconfirmation of expectations (actual performance is either greater than or less than the expected level).
Unequal performance levels are shown by a discrepancy measure. Negative disconfirmation results in larger discrepancies and are likely to produce higher levels of dissatisfaction.

In conclusion to the postpurchase process, Hawkins et al. (1992) note that evaluation of routinised and many limited decisions are actively evaluated only if there is a noticeable product failure. If no failure is perceived, postpurchase evaluation may be disregarded entirely, resulting in repurchase of the same product.

2.4 AN EXPANDED DECISION-MAKING MODEL

2.4.1 Introduction

Although a number of comprehensive consumer decision-making models are documented in literature (e.g., the Nicosia, Howard-Sheth, Engel-Blackwell-Miniard, Sheth family decision-making, and Bettman's consumer choice models, etc.) only the Engel-Blackwell-Miniard model will be discussed. This model is chosen since it provides a detailed assessment of the consumer decision-making process and includes variables influencing the decision process. Input (especially the influence of attributes, discussed in Chapter 4) to the decision process and the information processing component is also featured.

The generic decision-making model discussed in this chapter portrays a detailed assessment of all the components relevant to decision-making. The Engel-Kollat-Miniard model will, therefore, not be discussed to replace the generic model, but rather to display the comprehensiveness of decision-making with the emphasis on extended decision-making (and to a lesser extent limited decision-making since the decision-making processes, as mentioned earlier, are essentially the same, differing only in the time and effort devoted to external search and alternative evaluation). Before turning to the model, it is necessary to explain the importance of studying expanded consumer decision-making models.
Engel et al (1990) explain that a model is nothing more than a replica of the phenomenon it is designed to represent. It specifies the variables, the way in which it is interrelated and the outcomes when the model is set in motion by various forces. Several advantages are also offered in using models of this type:

* Explanations for behaviour is provided, i.e., a change in variables and circumstances can be seen visually.

* A frame of reference is provided for research, i.e., it is possible to establish research priorities since gaps in knowledge and understanding become apparent.

* A model provides a foundation for management information systems, i.e., essential insights are provided for marketing strategy because the proper use of a model disclose information required to understand differing consumer decision processes.

According to Assael (1992) consumer behaviour models in general also provide the marketer with a basis for market segmentation. While limitations of models are that a model may vary among individuals in the same market, components of a model may not be equally important to all product categories or usage situations. He adds that all purchase decisions are not equally complex.

2.4.2 Engel-Blackwell-Miniard model

The Engel-Blackwell-Miniard model (also known in previous versions as the Engel-Kollat-Blackwell model) portrays an extended decision-making procedure and is based on actively reasoned decisions. This is likely to occur in high involvement situations with considerable brand differentiation and an absence of time pressure. The discussion will be based on the literature of Engel et al (1990) with reference to Engel et al (1993) and Engel et al (1986). Note that the Engel-Blackwell-Miniard model (1993 & 1990) is only a refinement of the Engel-Blackwell-Miniard (1986) and Engel-Kollat-Blackwell model.
2.4.2.1 Need recognition

Figure 2.10 portrays the need recognition process as a subcomponent to the total Engel-Blackwell-Minniard model.

**FIGURE 2.10: THREE DETERMINANTS OF NEED RECOGNITION**

As displayed in the figure, there are three determinants of need recognition, namely information stored in memory, individual differences and environmental influences. Need recognition can be triggered by any of these factors working individually or in combination.

Extended decision-making is generally initiated by activation of motives centrally related to self-concept because of the high level of involvement. Normative social influence can also become relevant in buying situations where the response of others assumes importance. Need recognition is therefore likely to be complex and multifaceted.
2.4.2.2 Information search

Only when a need is recognised, the consumer must decide what to do. The initial step is a search of internal information contained in memory to determine whether enough is known about alternatives to make a choice without further effort. If insufficient information is contained in memory, the consumer will turn to external search and make use of a variety of outside information sources. As indicated in Figure 2.11, the propensity to engage in external search is affected by individual differences and environmental influences.

2.4.2.3 Consumer information processing

As displayed in Figure 2.12, external input is processed and stored in memory following the information-processing stages. Engel et al (1986) explain that persuasive communication must be revealed to the consumer where he happens to be. This is depicted in the figure as exposure. Exposure does not necessarily guarantee that attention will be attracted. Attention to stimuli implies that the consumer has allocated information-processing capacity to incoming messages.

Once attention is attracted, the message is analysed further (in what is referred to as short-term memory) against categories of stored meaning in order to attach meaning to messages. During the next phase, the message is comprehended or perceived, hopefully as originally intended. Focus can only now be directed at the effects of the message. Since the comprehended meaning is compared against existing beliefs, evaluative criteria, attitudes and other factors stored in memory, any or all of these could be modified in some way. If change in any of these occurred, then it can be concluded that acceptance has taken place. The final stage, retention, implies that the message or its effects are retained in long-term memory (Chapter 3 is devoted to the perception process).
FIGURE 2.11: SEARCH FOR INFORMATION

Environmental Influences
- Culture
- Social Class
- Personal Influence
- Family
- Situation

Individual Differences
- Consumer Resources
- Motivation and Involvement
- Knowledge
- Attitudes
- Personality
- Lifestyle
- Demographics

2.4.2.4 Alternative evaluation

During the evaluation of alternatives, different products and brands are evaluated along certain evaluative criteria. These evaluative criteria are the consumer's desired outcomes of purchase and consumption of a product, expressed in the form of preferred attributes. As indicated in Figure 2.13, the evaluation process is influenced by individual differences and environmental influences. Figure 2.13 also expresses that beliefs, attitudes and intentions influence the evaluation process. This occurs when judgement is formed and changed regarding the extent to which various options measure up when alternatives are compared with the evaluative criteria (resulting in a corresponding change in beliefs, attitudes and intentions).
FIGURE 2.13: ALTERNATIVE EVALUATION

Source: Adapted from Engel et al. (1990, p. 481) and Engel et al. (1986, p.31)
2.4.2.5 Purchase and its outcomes

Figure 2.14 portrays the detailed Engel-Blackwell-Miniard model with all the subcomponents and the interactions thereof. As can be seen in the figure, the final phase in the model, purchase and its outcomes, feeds back to other subcomponents. Note that in the figure variables influencing others directly are shown by a solid arrow. Feedback to the model is depicted by a dotted arrow.

After evaluation of alternatives, the consumer purchases his specific choice. The process does not terminate with purchase, however. Comparisons are first made between actual and expected product performance. A matched outcome will lead to satisfaction, while a perceived shortcoming results in dissatisfaction. The broken feedback arrow displayed in the figure shows how future purchases are strengthened by a satisfactory outcome, while dissatisfactory outcomes may lead to further information search and also influence held beliefs. Rice (1993) comments on dissatisfaction displayed in the model by suggesting that dissatisfaction is likely to result from post-purchase cognitive dissonance.

As conclusion to the Engel-Blackwell-Miniard model, Rice (1993) criticises the model because, while it includes useful environmental and social factors, it does not specifically define the relationship between the factors. He furthermore comments that the separation of information search and alternative evaluation is relatively unrealistic. Rice (1993) concludes that, as with most models, the predictive power is also somewhat limited.
FIGURE 2.14: THE ENGEL-BLACKWELL-MINIARD MODEL

Source: Engel et al (1990, p.482)
2.5 SUMMARY

The consumer decision-making process plays a very significant part in studying consumer behaviour since consumers need to decide among different alternative actions every day. They have to decide between going to work and staying at home, watching television or reading a book, purchasing brand X or brand Y, etc.

As discussed, consumers engage in different levels of decision-making ranging from extended to limited decision-making. The extent to which a consumer engages in decision-making depends on a host of factors, including the consumer’s experience with the product category, the quality of stored information in memory, the level of involvement in the purchase situation and the time available for external search for alternatives.

Although it has been argued (in historical research) that no decision-making process exists, more recent research acknowledges five different phases in the decision-making process, namely problem recognition, search for alternatives, evaluation of alternatives, purchase of the chosen alternative and postpurchase evaluation. Impulse purchases also require the use of a decision-making process, although it often does not seem to be the case. With impulse purchases, the consumer does recognise a need and often makes use of stored information to base a decision on.

The Engel-Blackwell-Miniard model discussed above portrays an extended decision-making process and provides a detailed overview of the total consumer decision-making process including external variables influencing the process. Chapter 3 is devoted to the consumer perception process.