Analysis of consumer markets and buyer behavior in petroleum products entrepreneurship

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A B S T R A C T

Entrepreneurship in the marketing of petroleum products must meet the needs and desires of consumers. However, “knowing an understanding of consumers” is not an easy task. There might be cases when consumers express their needs and desires and nevertheless act in the opposite way; they might be unaware of their true motivations or may react to factors that change their purchasing decision at the last moment. For reasons such as the aforementioned ones, marketers must perform a deep analysis of consumers’ desires, perceptions, preferences, and buying behavior. Such a detailed examination will enable them to place on the market products with new features, set prices, choose distribution channels, elaborate advertising messages, and approach all the other elements of the marketing mix. In what follows, we shall focus on consumer’s behavior during the buying process.

1. Introduction

In order to be able to answer the key questions below, the entrepreneur needs to rely more and more on the research focusing on consumers. In this respect, some key questions are:

- Who forms the market? Occupants.
- What does the market buy? Objects.
- Why does the market buy? Objectives.
- Who participates in the act of purchasing? Organizations.
- How does the market buy? Operations.
- When does the market buy? Occasions.
- Wherefrom does the market buy? Outlets.

The starting point in understanding the buyer is the analysis of the model illustrating how buyers react to stimuli, such as the ones presented in Fig. 1 (Yin, 2005; Campbell, 1975; Ghenea, 2011).

The marketing and the environment stimuli influence customers’ consciousness. The customers’ features and the decision-making process lead to the adoption of specific buying decisions (Kotler, 2000; Kotler and Armstrong, 2000).

2. The main factors influencing buying behavior

Fig. 2 shows a detailed model of factors influencing the buying behavior in the case of petroleum products, complementary petroleum products, and LPG cylinders.

Cultural factors

Cultural factors exert the strongest and most extensive influence on consumer behavior.

1. Culture is the main factor influencing a person’s wishes and behavior. For example, a person’s interest in unleaded petrol might denote his/her formation within an ecological community. The person in question knows what this type of gasoline represents and that the emphasis is on the use of green fuels. In an isolated environment, such arguments would not prevail, and unleaded gasoline would not represent a product of interest.

2. Secondary culture, an integral part of the actual culture of a society, offers opportunities for identification and socialization to its members, including persons belonging to the same nationality, religion, race, or geographical region. These cultures form important market segments; in order to meet the needs of such market
segments, marketers elaborate on specific marketing products and programs.

3. Social class. Any society is characterized by the existence of social layers within it. Social classes are relatively homogeneous and long-lasting social divisions, placed hierarchically. Their members share the same values, interests, and forms of behavior.

![Fig. 1: A model of consumer behavior](image1)

![Fig. 2: Detailed model of factors](image2)

**Social factors**
1. The reference groups are those groups that have either a direct or indirect influence on the attitude or behavior of a person. The groups that exert a direct influence are those to which a person belongs, and the indirect groups are those with whom the person in question has tangential contacts.
2. The family is the most influential primary reference group. Every consumer is influenced by the family he/she comes from and the family he/she founded. The latter exerts a much more direct influence on everyday purchasing behavior.
3. The role and social status. Throughout their lives, individuals activate within various groups: The family, the workplace, clubs, and organizations. A person's position in these groups is defined by his/her role and status.

**Personal factors**
A customer's decisions are also influenced by personal characteristics, particularly age, life-stage, occupation, economic factors, lifestyle, personality, and self-esteem.

1. Age and stage in a person's life cycle. People buy different products and services throughout their lives, and consumption is influenced by the stages of the family life cycle. Marketers often turn these groups into targets for their market actions. The latest research in the field points out the existence of psychological stages in the life cycle; therefore, marketers should pay special attention to the changes that occur in a person's life and their effect on consumption behavior.
2. Occupation. The behavior of a consumer is also influenced by his occupation. Marketers strive to identify professional groups that are interested in their products and services.
3. The material situation of consumers influences their choice for the purchase of a specific product or service. The material situation is related to the income that can be spent (size, stability, duration), savings and the assets held (including liquidities), debts, borrowing power, and the inclination towards spending or saving.
Marketers follow the trends that are manifested in terms of the size of individual incomes, savings, and interest rates. If the economic indicators announce a period of recession, the marketers must take the necessary measures to redesign, reposition and change the price of the products, so as to maintain the value of the goods offered to the targeted consumers.

4. The lifestyle of a person represents his or her way of living, defined by his/her activities, his/her interests, and opinions. People who belong to the same secondary culture, the same social class, and have the same occupation may have different lifestyles. Marketers will seek to identify the relationships that are established between their products and the different lifestyles adopted by customers.

5. Personality and opinion about oneself. Each person has a distinct personality that influences buying behavior. Personality is the psychological trait of a person that leads to an appropriate and lasting reaction to environmental conditions. Personality is defined and analyzed in terms of self-confidence, mastery, independence, respect, sociability, capacity for defense, and adaptability. Marketers call for a concept related to personality, namely the self-image of the person.

**Psychological factors**

1. Motivation represents the needs that a particular person has at one point in life, i.e., needs that can be either biogenetic or psychogenetic.

2. Perception is the process whereby a person selects, organizes, and interprets the information received and motivated, in order to obtain a coherent image of the surrounding world. The way in which individuals act depends on how they perceive the situation.

3. Learning is reflected in the changes that occur in a person’s behavior as a result of the experience gained. Much of human behavior is the result of learning.

4. People’s beliefs and attitudes are those that derive from their actions and learning, influencing their buying behavior. Beliefs related to the explicit opinion a person makes about a certain thing. Attitude is formed based on cognitive evaluations and feelings; in addition, attitudes relate to either favorable or unfavorable tendencies towards action as regards an object or an idea. All the aforementioned factors resist in time (Kotler, 2000; Kotler and Armstrong, 2000; Magdoiu & Rada, 2018a, 2018b; 2018c).

3. **Decision to buy petroleum products, complementary petroleum products, and LPG cylinders**

The entrepreneur must start from the analysis of factors that influence consumption and get to the understanding of how consumers make the decision to purchase. They need to know all the factors that determine the behavior of buying a product.

### 3.1. The role played in adopting the decision to purchase

The identification of the buyer can be easily made in the case of many products; however, there are situations when a center for making decisions, made up of at least two persons, is necessary. A person can play five roles in the process of making the decision to purchase:

1. The initiator—the first person to generate the idea of buying a product or a service.

2. The influencer—the person whose opinions or advice influence the decision to purchase.

3. The decision maker—the person who decides on the forms of behavior associated with the decision to purchase (whether to buy or not, what to buy, how to buy and wherefrom to buy).

4. The buyer—the person making the purchase (the actual purchase).

5. The user—the person who consumes or uses the product or service.

The entrepreneur involved in the commercialization of petroleum products must identify these roles because they have implications upon (a) the action of purchasing petroleum products, complementary petroleum products, and LPG cylinders; (b) the elaboration of messages; and (c) the allocation of the advertising budget.

### 3.2. Types of purchasing behavior

The consumer decision differs depending on the type of purchase decision made:

- **Complex purchasing behavior:** Consumers exhibit such behavior when they are deeply involved in the buying process and aware of the significant differences between brands. Consumers are deeply involved in the purchase process when the product is expensive, not commonly used, and presents risks. The entrepreneur must know how these buyers collect and evaluate information and must develop strategies that would help the customer understand the attributes of the product, its importance, and the superiority of the brand. In addition, the marketer must differentiate the characteristics of the brand, use printed materials in which advantages related to the brand are clearly presented and motivate the sales staff in the stores to influence the consumer’s decision to buy.

- **Purchase behavior aimed at reducing discrepancies:** Sometimes, the consumer is deeply involved in the buying process but does not notice the differences between the brands. Such a situation is most likely to occur when the acquisition is expensive, rare, and risky. In general, the customer will visit several stations to see what products are available and, when finding that the differences between brands are not important, will quickly decide upon buying the desired product.
such a context, an important role is played by two factors: the price and ease to purchase.

- **Common buying behavior**: When there are no significant differences between brands, the buyer is less involved in the buying process. A good example in this respect would be that of "premium" gasoline. This is bought based on a habit and not due to some loyalty to the brand. It is known that consumers are less involved in the purchasing process when products are cheaper and bought on a common basis. Therefore, in such cases, the consumer's behavior does not follow the natural "trajectory": belief-attitude-behaviour. That is, the consumer does not try to get information in relation to a specific brand, does not evaluate its characteristics, and does not seek to find out the consequences of its decision. The marketer calls for price and sales promotion to stimulate product testing by consumers, knowing that consumers are not very loyal to a particular brand.

- **Purchase behavior oriented towards the variety of products**: Some buying situations are characterized by a low level of involvement on the part of consumers and by frequent changes in customers' preference for specific brands, in conditions when there are significant differences between the brands. A relevant example in this respect would be that of bottled engine oils. The consumer chooses an oil brand without an analysis of its characteristics, taking into account only the time period in which the use of that type of oil is guaranteed. At the next exchange of the oil, the consumer can choose another brand. The transition from one brand to another would not necessarily reflect dissatisfaction with the product that was used previously; instead, it might reflect the preference for variety. Therefore, the marketing strategy is different in this case for the market leader and for the minor brands. The market leader will try to encourage the common buying behavior, by taking full advantage of the store's display space, avoiding stock depletion and focusing on advertising aimed at refreshing memory in relation to the product, while competing companies will try to encourage the attitude of searching for variety, offering price reductions, coupons, free samples and focusing on the importance of trying a new product.

### 3.3. Analysis of the decision-making process

The entrepreneur will focus on understanding the process of making the decision to purchase petroleum products, complementary products, and LPG cylinders. The Marketing Service will have to find out from consumers when they became aware of the existence of the products that their agent sells, what is their degree of involvement with them, what criteria they take into account when choosing a product, and how satisfied they are with it.

Consumers differ in terms of their purchasing behavior. In the case of "premium" petrol, some consumers will spend more time collecting information and making comparisons. Other consumers will probably enter the first distribution station and buy any kind of petrol that will be recommended. From this point of view, consumers can be divided into two categories-circumspect and impulsive; for each of these categories, different strategies should be developed.

How can marketers identify the specific steps in the process of buying a given product? They can start by inspecting their own buying behavior, interviewing a number of buyers who purchase for the first time a product, asking them to recall the steps they went through before buying and identify those consumers who actually intend to buy the product, again asking them to recall the steps they went through until they actually bought the product or asking them to describe the ideal way in which they could buy the product. Each of these methods presents a specific image of the consumer during the different stages of the purchasing process.

Marketers need to gather this information and identify, for the product in question, one or more typical purchasing processes.

### 3.4. Stages in making the decision

Before actually buying a product, consumers go through five stages, as presented in Fig. 3.

It is obvious that the buying process begins well before the actual time of purchase and has effects after the purchase was made.

Basically, things can take place in a different way, especially in the case of purchases with minimal involvement. In such cases, buyers may go through specific stages or follow the stages mentioned above in a different order.

#### 3.4.1. The identification of needs

The buying process begins when the consumer identifies a problem or a need. The need can be triggered by internal or external stimuli. The external stimulus appears when a driver passes by a fuel distribution station or when he/she looks at the fuel level indicator.

The marketer must identify the elements that trigger a certain need and, by collecting information from consumers, can identify the most frequent factors that determine consumers’ interest for petroleum products, complementary petroleum products, and LPG cylinders, thus being able to develop an appropriate strategy for generating the consumer's interest.

#### 3.4.2. The information stage

A consumer is interested in petroleum products, complementary petroleum products, or LPG cylinders will intend to find out more information about such products. As part of this stage, two distinct levels may be identified: increased attention (the "premium" gasoline buyer becomes receptive to
information about this type of gasoline) and active information (the “premium” gasoline buyer pays close attention to advertisements, comments made by other buyers, etc.).

![Fig. 3: The five stages of the buying process in the case of petroleum products](image)

The consumer will start to look for information, from both direct and indirect sources and get involved in other activities meant to increase his knowledge in the field. His research effort will depend on the strength of the impulse, the initial information he/she has, the degree of accessibility of the additional information, the importance he/she gives to it, and the satisfaction he/she obtains from the documentation.

For marketers, an element of maximum importance is represented by the sources of information used by buyers and the influence of such sources upon the decision to buy. Thus, four categories of information sources were identified:

- Personal sources-family, friends, acquaintances, neighbors.
- Commercial sources-advertisements, sales staff, distributors, packaging, and exhibitions.
- Public sources-mass-media, consumer organizations, etc.
- Direct experimental sources-examination and use of specific products or services.

The number and power of influence associated with these sources of information vary depending on the category of products and the personal characteristics of the buyer. In general, a buyer receives most of the information about a product or service from commercial sources, that is, from those sources that are controlled by marketers. On the other hand, information may also be gathered from personal sources. Each of these sources plays a certain role in making the decision to purchase.

It should be pointed out here that when the consumer collects information about a particular product or service, information also comes from the competition, an aspect that needs to be taken into account by the agents who market petroleum products when setting the strategy for attracting customers.

### 3.4.3. Evaluation of alternatives

During the process of purchasing a product, the customer goes through several stages in the evaluation of a specific product or service.

In most situations, when the consumer aims at satisfying one of his/her needs (she/he wants to buy a product), she/he also expects certain benefits from it. The consumer regards the product as a set of attributes, which might contribute to the satisfaction of his/her needs in varying ways. Consumers’ interests differ from one product to another:

- “Premium” petrol: Quality in engine operation, corresponding octane number, little pollutant, etc.
- Engine oil: Adequate degree of lubrication, to withstand the specified number of kilometers, price, etc.;
- Windscreen washer fluid: Efficient washing, pleasant smell, price, etc.
- Tires: Safety in operation, wear resistance, price.

The difference among consumers is determined by the relevance and degree of attractiveness they associate with specific attributes of the product. The market for a product can, therefore, be segmented according to the attractiveness perceived by different categories of consumers in relation to the attributes of a product.

There are situations when the most relevant attributes of a product may not be the most important attributes of that product. Therefore, marketers should pay much attention to the importance of attributes associated with a specific product, rather than focus strictly on product-related relevance. Thus, they should weigh the degree of importance that buyers associate with a specific product.

In general, consumers tend to form a set of beliefs about the brand and its image through its own evaluation procedures.

Consumers associate each attribute with a certain utility function. For example, they might expect that their satisfaction in relation to a “premium” petrol tank will increase with the kilometers traveled, with the proper functioning of the engine and decrease with the increase of the price.

Consumers rely on an evaluation procedure when they form attitudes (value judgments, preferences) in relation to different brands.

### 3.4.4. The decision to purchase

In the evaluation stage, the buyer sets his preference for a specific brand in the selection set, and then intends to buy the product she/he chose. There are two factors that influence customers in the period between the generation of the purchase intention and the decision to purchase. Fig. 4 shows the factors that act in the evaluation of alternatives when making a decision to buy petroleum products.

The first factor that determines the decision to purchase is the attitude of those forming the entourage of the buyer. For example, a colleague might recommend the purchase of unleaded “premium” petrol; the natural consequence will be that the probability of buying normal “premium” petrol will be lower. The extent to which a person’s attitude may influence the choice made by the buyer depends on two elements: The intensity of the negative attitude of the buyer’s colleague towards his/her alternative and the reason that determines
the buyer to comply with his/her colleague’s recommendation.

Fig. 4: Factors that act in the evaluation of alternatives when making a decision to buy petroleum products

The intention to purchase can also be influenced by certain unforeseen situations: The anticipated family income, the price of the product, the expected benefits associated with the product. When the consumer is about to act, a number of unforeseen factors may change his/her intention. For example, the buyer might become annoyed, either because the purchase of a petrol tank would involve spending less money if the product were bought from the competition, or because the purchase of some other product is significantly urgent; in other situations, the opinions of friends, dissatisfied with the product, might hinder the adoption of a decision to buy. Therefore, preferences and even the intention to buy are not predictive factors that provide a total guarantee on purchase behavior.

A consumer’s decision to modify, delay, or avoid making a decision to purchase is largely determined by the risk perceived in association with a product. Marketers need to be aware of this and provide consumers with the information and support they need to reduce their perceived risk.

Inputting the purchase intention into practice, a buyer will make at least five types of secondary purchase decisions:

- choosing the agent for the commercialization of petroleum products,
- choosing the distribution station,
- choosing the amount of fuel to buy,
- choosing the time of purchase and
- choosing the payment method.

In other news, the choice of strictly necessary products is based on a much simpler decision process.

4. Conclusions

4.1. Behavior after purchase

After buying a product or service, the consumer will show a certain degree of satisfaction or dissatisfaction in relation to the products/services purchased. He/she will also be involved in a series of post-purchase and product use actions, which are of particular interest to the marketer.

4.2. Satisfaction following the purchase

After the moment of the purchase, the consumer can identify certain defects of the purchased product. As a result, some customers will refuse that product, and others will show indifference while others will consider it dangerous.

The satisfaction of most buyers depends on the extent to which the performance of the product corresponds to their expectations: If there are important differences between the performance of the product and the expectations of the buyer, the latter will express dissatisfaction in relation to the product; when customers’ expectations are met, they will declare themselves satisfied; when the performances of a product exceed customers’ expectations, buyers will be pleased. These feelings will determine whether the consumer will buy the product in question again and whether she/he will send positive/negative messages in relation to the product.

Consumers’ opinions in relation to the performance of a particular product are formed by messages that are found in advertisements or come from sellers, friends, or other sources of information. If any of the messages overestimate the performance of a product, the result will be strong dissatisfaction on the part of the consumer.

Therefore, a product should be presented objectively and without statements that exceed its actual performance. Besides, statements about a product should not necessarily present all its performances; in such cases, if customers discover new performances in relation to a product/service, their degree of satisfaction is very likely to increase. For example, the head of a marketing department (seller), by delivering a product at 2 pm, instead of 3 pm, would generate more satisfaction in a customer than in the case when the product would be delivered at 4 pm.
4.3. Actions subsequent to the purchase

The satisfaction or dissatisfaction of the buyer, generated by the purchase of a product, determines his/her subsequent behavior.

A satisfied buyer will continue to purchase the product that gave him/her satisfaction and will express his/her satisfaction when communicating with his/her acquaintances. In this way, marketers’ claim that "the best advertisement is the satisfied customer" can be justified. The buyer who is not satisfied in relation to a product and service would probably want to: Return the product, send a letter of complaint to the management of the agent for the commercialization of oil products, appeal to justice, complain on different forums, use different means of boycotting the seller or choose products offered by the competition.

Marketers should be familiar with the full range of means whereby consumers can express dissatisfaction. Fig. 5 shows a model of customer dissatisfaction expressed in relation to the petroleum products, complementary petroleum products, and LPG cylinders purchased.

Consumers have two types of responses available: To react or not. In the first case, they can act at the public or on a personal level. Among the public actions that a dissatisfied customer may take one can mention: Sending letters of complaint to the company, hire a lawyer, express dissatisfaction in front of other groups that might help him/her reach the expected level of satisfaction–private or governmental organizations. On the other hand, the consumer may choose to stop buying or inform friends and acquaintances about the low quality of the product/service (making use of communication). Irrespective of the form of reaction chosen by the customer, the seller loses since he/she was unable to ensure the buyer with the expected level of satisfaction.

In order to limit the degree of dissatisfaction after the moment of the purchase, marketers can try different solutions. For instance, the agent who sells petroleum products can send letters to the new customers, congratulating them for their good choice in terms of the products/services purchased. In addition, the satisfaction of customers may be presented by means of advertisements. Customers themselves may be asked to suggest solutions for improving the respective product or service. It has been noticed that good communication with customers, after the moment of the purchase, has reduced the number of complaints significantly. Thus, the creation of efficient channels of communicating with customers would help buyers express their dissatisfaction in a way that allows the agent to solve more rapidly the problems signaled. Marketers would benefit from providing customers with as many communication channels as possible, so the latter might use them to express dissatisfaction.

4.4. The destination of the product after its purchase

It is the duty of marketers to look at the way customers use a certain product. Understanding both their needs and the purchasing processes would help in the elaboration of an efficient marketing strategy. Understanding the way in which customers identify their own needs, how they get information about products, how they evaluate existing alternatives,
make the decision to buy and how they behave after buying a product can help marketers identify types of actions that would help them satisfy consumers’ expectations and elaborate the most efficient marketing programs for the markets they aim at.

**Compliance with ethical standards**

**Conflict of interest**

The authors declare that they have no conflict of interest.

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