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Behavioral Models that Influence Consumers Purchase Decisions

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ABSTRACT

This article delves into the complexities of consumer behavior, offering an analysis of traditional and modern behavioral models to understand purchasing decisions. It begins with presentation of the Marshallian, Pavlovian, Freudian, and Veblenian models, which focus on economic, psychological, and social influences. Subsequently, the study explores contemporary frameworks like the Nicosia, Engel-Kollat-Blackwell, and Bettman models, highlighting their contributions to comprehending the consumer decision-making process in a dynamic market environment. By integrating insights from various models, the article underscores the significance of understanding consumer psychology, external stimuli, and individual roles in purchase activities. This review aims to equip marketers with the knowledge to devise effective strategies that address current market challenges and enhance consumer satisfaction and organizational profitability.

1. Introduction

Consumer behavior offers an insight into the process involved in selecting, purchasing, utilizing, and discontinuing products and services. This insight is driven by the fulfillment of the needs and desires of individuals or groups (Tešić and Bogetić, 2022). Consumer behavior should also be examined through the lens of an individual's role (initiator, influencer, decision maker, buyer, user) in the purchasing process (Kotler and Keller, 2016). Understanding consumer behavior necessitates comprehending the consumer behavior model and recognizing the impact of external stimuli, including marketing stimuli (products, services, prices, distribution channels, and communication – marketing mix). Additionally, other influences such as economic, technological, political, and cultural factors can shape consumer choices, which can be further affected by two aspects of consumer psychology (motivation, perception, learning, memory) and consumer characteristics (cultural, social, personal factors) (Kotler, 1965; Sihombing et al., 2023) (Figure 1).

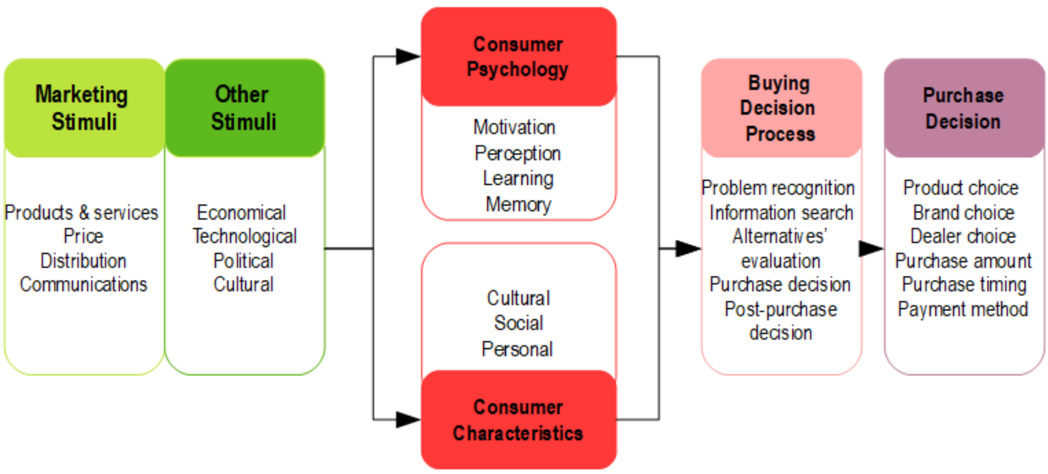

Figure 1. Behavioral model that influences consumer purchase decision
Source: Author, by using (Sihombing et al., 2023)

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The model is a representation of reality, built to prove the connections between the various elements of a system or a process under investigation. The elementary model of consumer behavior is a description of reality departing from the hypothesis that behavior is the result of a decision-making process, considered in turn as an adaptable (variable) system which may be influenced by both exogenous (environmental) and endogenous (psychological) elements (Schiffman and Kanuk, 2007). Consumer behavior models can be categorized based on various criteria such as: traditional models (the Marshallian, Pavlovian, Freudian and Veblenian models), early and modern models (e.g. Nicosia, Engel-Kollat-Blackwell, Bettman models) (Ladipo et al., 2014; Morariu and Pizmaş, 2001; Tešić and Bogetić, 2022). This article explores both reference behavioral models and prominent modern models of consumer decision-making related to purchases. The aim is to understand the importance of consumer behavior as a vital instrument for addressing current market challenges.

2. Traditional behavioral models

Marshallian (economic) model

The model, named after its creator A. Marshall, is based on the theory that purchasing decisions and their materialization in buying products and services are the consequence of conscious economic and rational calculations (Cristache, 2010; Gherasim and Gherasim, 2013; Morariu and Pizmaş, 2001). The economic concepts and elements making this model unique include: the hierarchy of needs satisfaction, price, measurement of needs intensity, and the obtaining of personal advantages through purchasing products and services (Gherasim and Gherasim, 2013; Morariu and Pizmaş, 2001). The Marshallian Model focuses on a single variable in the purchasing process, namely price, with other variables considered constant (Ashraf et al., 2014; Cristache, 2010; Gherasim and Gherasim, 2013; Morariu and Pizmaş, 2001). The model examines prices and incomes and the effects of their changes on consumer behavior during marketing operations, concentrating entirely on economic factors (Morariu and Pizmaş, 2001). According to this model, consumers will always buy the products that provide the highest benefit rate and satisfaction (utility) relative to the expenses incurred (price) (Cristache, 2010; Schiffman and Kanuk, 2007). Consumer will try to get the best value and thus will choose the best alternative, provided they have the proper budget. If preferences, income or prices of various products remain constant, consumers will have no reason to choose differently. The model connects incomes, benefits and the purchasing decision, making it a valuable tool for developing marketing strategies. It informs marketers that people are more sensitive to price and thus buy products that provide the most benefits for a given price (Ladipo et al., 2014). Hence, pricing should be given a lot of attention (Cristache, 2010; Ladipo et al., 2014). If a marketer sets a higher price than the competition without added value, he will likely lose customers. Marketers can segment the target market based on income to respond properly to the needs of the relevant segment. The model has its limitations. Consumers do not always fit the hypotheses of the model, which is centered only on one aspect of consumer behavior – the purchasing act – and they may act irrationally. To be rational in an economic sense, a consumer should know all the available alternative products, make an accurate classification for each option's advantages and disadvantages, and identify the best option. Consumers often lack accurate or sufficient information, and the proper degree of involvement of motivation to make the so-called perfect purchasing decision. Purchasing power and the information availability sometimes lead to uneconomic behavior from consumers. The model ignores the behavioral aspects of individual behavior (perception, motivation, learning, attitude, personality) and environmental influences, and it does not consider the influence of marketing variables on consumer behavior (e.g., distribution network, marketing communication). Thus, the model provides only a partial explanation of consumer behavior (Ladipo et al., 2014).

Pavlovian (experimental) model

The model, named after the physiologist and psychologist Ivan Petrovici Pavlov, is based on the learning theory, focusing on stimulus-response pair, focusing on repetition, motivation, conditioning and relationships [Cristache, 2010; Dayan and Berridge, 2014; Honey et al., 2020; Krugman, 1994; Ladipo et al., 2014; Morariu and Pizmaş, 2001; Pornpitakpan, 2012). Pavlov studied attitude formation by associating an originally neutral-conditioned stimulus with a biologically relevant unconditioned stimulus to generate an expected learned response (Pavlovian conditioning) using animals (dogs) (Mcleod, 2024; Paoli et al., 2023; Rehman et al., 2023). The physiologist noted that an unconditioned salivation response is produced by an unconditioned stimulus (food) (Mcleod, 2024). When the unconditioned stimulus is associated with another neutral stimulus (e.g., the sound of a bell, a fork pitch, the light of a lightbulb, or the steps of the assistant bringing the food), after a certain period during which the two stimuli occur simultaneously, the neutral stimulus triggers the same response (salivation) (Ladipo et al., 2014; Martin et al., 2009; Rehman et al., 2023). Classical (Pavlovian) conditioning also occurs in humans. The Pavlovian model operates with certain essential concepts such as impulse, suggestion, reaction, and reward, where consumer behavior and the decision-making process are an interaction of these four concepts (Cristache, 2010; Ladipo et al., 2014; Morariu and Pizmaş, 2001).

Impulse motivates a person to act in order to satisfy a certain need (Schiffman and Kanuk, 2007). Impulses are primary and secondary. Primary (inborn) impulses are universal and include biological or organic (e.g., hunger, thirst) and physiological or functional (e.g., movement, relaxation) needs, which are socio-culturally modeled in humans. Secondary impulses are formed by learning throughout life and include material needs (e.g., housing, comfort, money), spiritual needs (e.g., knowledge, achievement), and social needs (e.g., communication, group integration, rivalry, status).

Suggestions are environmental stimuli perceived by the individual (e.g., a new product on the market) (Cristache, 2010; Ladipo et al., 2014). It is important to know the conditions under which suggestions may trigger a certain type of response (Ladipo et al., 2014).

The response is the person's feedback or reaction to an impulse or a suggestion (Cristache, 2010). The individual should take specific measures to satisfy the need that acted as a stimulus, which in marketing is called purchasing decision (e.g., hunger may be satisfied by purchasing food products).

The reward consists of the events in the environment that increase the probability of response occurrence (e.g., consuming a product leads to meeting a need). If the same needs occur again, the individual tends to repeat the process of selecting and obtaining the same product or brand. Obtaining the same product or brand brings satisfaction (reward), increasing the likelihood of repeating the purchase in the future, thus turning the purchasing decision into a routine (learning).

The model attempts to explain how consumers develop purchasing habits. In general, products are the stimuli that satisfy needs. People have needs and desires that lead them to products and services (stimuli and suggestions), which they purchase (response) and from which they expect a satisfactory experience (reward). If a reward occurs, the individual repeats the behavior, depending on the reward obtained. The model significantly contributes to understanding consumer behavior (Ladipo et al., 2014). Its importance lies in the introspective possibilities it provides especially in launching new products on the market and in advertising (Morariu and Pizmaș, 2001). Marketers can create suggestions that lead to the right stimuli to get the proper responses. To produce changes in the buyer's behavior, impulses, stimuli and responses should match the buyer's attitudes and perceptions (e.g., advertising is a stimulus, and the purchase is the response). When the commercial is repeated, the consumer can grasp the product information due to the stimulation of attention and interest. Persistent advertising may significantly increase the market share. Also, product characteristics (e.g., price, quality, brand, package) may act as stimuli influencing consumer behavior. However, the model is limited as learning is not the only factor determining the purchasing and decision-making process (Ladipo et al., 2014). Although it contributes to understanding consumer behavior, it offers only a partial explanation, as it does not consider the diversity of responses generated by consumers exposed to identical stimuli. It ignores other determiners such as the subconscious, perception, personality, attitudes, interpersonal and group interactions, and economic considerations, and challenges the consumer's autonomy in making decisions, suggesting that consumers can be manipulated and controlled (Ladipo et al., 2014; Morariu and Pizmaș , 2001].

Freudian (psychoanalytical) model

The model, derived from Sigmund Freud's psychoanalytical theory, approaches the study of consumer behavior through biological and cultural elements. The Freudian model presupposes motivational research focusing on the study of attitudes (Cristache, 2010; Morariu and Pizmaș, 2001). Freud originally divided the psyche into three superposed levels: the conscious (logical thinking, mediated by conceptual language), the subconscious (the repository of memories and thoughts we are not aware of but can easily bring to the conscious level), and the unconscious (the essential, unseen part responsible for the instincts and desires that determine human behavior). Later, Freud proposed a new structural model divided into three major systems: the Self (Id), Superego and Ego (tripartite theory) (Tarzian et al., 2023; Urhahne and Wijnia, 2023). The self (Id) is the repository of all instinctual drives, oriented towards the instant gratification of needs (such as thirst and hunger) without concern for the manner of gratification (Ladipo et al., 2014; Martin et al., 2009; Solomon, 1999]. It operates in to avoid pain and increase pleasure, without delays or cancellations, irrespective of the nature of needs, and is the the source of desires that constantly influence the consumer in the form of unconscious fantasies and images. The Superego is the moral side of the personality, placing moral perfection above all, and sometimes being as irrational and intense as the Id's. The Superego acts as an internal filter, inhibiting but not suppressing the Id's impulses, and does not admit compromises. The consumers satisfy their needs through socially acceptable processes (Ladipo et al., 2014). The Ego perceives and manipulates the individual's environment, operating according to the reality principle and deciding when and how the instincts will be gratified (often attempting to postpone them) (Ladipo et al., 201; Martin et al., 2009). The Ego is the conscious manager of impulses, ensuring consumer satisfaction in a socially acceptable manner, and orienting the consumer's activities towards appropriate products that may satisfy the Id and the social processes through which they are obtained. The Ego is mainly concerned with the organism's short- and long-term survival. The model reveals that a consumer's self-image is a significant motivator, persuading them to buy certain products. According to the model, the consumer has a complex set of deep reasons leading to specific purchasing decisions. The buyers exist in a private world with hidden fears, suppressed desires and subjective wishes, and their purchases are influenced by these desires. The model focuses on the consumer as an individual, information-processor and decision-maker. The principles of this model can be applied to various marketing aspects, such as publicity, market segmentation, sales management, and developing new products. For instance, the pleasure principle underlines the design of products for high-income consumers. However, the model only considers the individual characteristics that influence purchasing behavior, without examining other factors involved in what, where, when, and how to buy. It is challenging for an observer to understand the an individual's behavior, as the individual often has difficulty understanding it himself (Ladipo et al., 2014).

Veblenian (social) model

Thorstein Veblen was a significant figure in the establishment of original institutional economics, a major branch of economic science during the early decades of the 20th century (Almeida, 2016). The model initiated by Veblen is based on the theory of ostentatious consumption. According to this theory, the consumer consumers buy products not out of necessity but to obtain prestige and social status (Cristache, 2010; Ladipo et al., 2014; Morariu and Pizmaș, 2001; Thomas-Comenole, 2024). In Veblen's model, individuals are member of society, whose decisions, behavior and development are influenced by the social category and culture, which in turn influences their product choices. Purchasing decisions are influenced by social restrictions from family, friends, colleagues, social classes, reference groups, culture and subculture. These decisions are not solely governed by utility, personality and stimuli, but by the consumer's desire to emulate and blend in with their environment. The model centers on the social character of consumption, which is why many organizations consider social interactions in their marketing activities, especially in advertising and marketing relations. However, the model does not provide a complete explanation of consumer behavior, as personal income, motivation and learning, attitude, and personality also play significant roles that cannot be overlooked (Campbell, 1995; Moraru, 2011; Ladipo et al., 2014).

3. Modern behavioral models

Nicosia (seller perspective) model

The Nicosia model, developed by F. Nicosia in the 1960s, is a framework that delineates the process by which a consumer decides to purchase a product or service. It was among the first models to elucidate the intricate interactions between consumers and marketing messages (Andapalli, 2024). The model is organized into four primary stages:

- *i.* sending a message by the seller (seller's marketing and communication activities influence consumer attitudes, while psychological characteristics and predispositions of consumers affect how they perceive the seller's messages)
- *ii.* process of seeking information and evaluation by consumers (consumers gather and evaluate information to decide on purchasing)
- *iii.* act of purchase (the decision to purchase is made)
- *iv.* feedback (it provided through sales reports, reflecting consumer satisfaction or dissatisfaction, which influences future responses (Andapalli, 2024; El Gozmir et al., 2024; Milner and Rosenstreich, 2013; Reina Paz and Rodríguez Wargas, 2023; Tešić and Bogetić, 2022).

Nicosia's model, due to its simplicity, may not suit complex variables. Major criticisms include: the assumption that consumers lack prior product knowledge, limited insight into consumer psychology in decision-making, insufficient support and research, and lack of updates for task complexity (Nicosia Model of Consumer Behaviour and its Limitations, 2021).

Engel-Kollat-Blackwell (compensatory alternatives) model

The Engel-Kollat-Blackwell model, established in 1968 and based on consumer behavior theories, treats shopping as a problem-solving process. Revised multiple times, the model now proposes two forms: one for high-involvement purchase decisions and another for low-involvement decisions. Both forms are grounded in a hierarchy of effects, where changes in attitude lead to changes in purchase intention and consumer behavior. The model consists of four parts:

- *i.* decision-making process (a five-stage decision-making process including problem recognition, search, evaluation, choice, and output)
- *ii.* external information input
- *iii.* information process (involves perception and memory activation from marketing stimuli)
- *iv.* internal and external influences on the decision-making process (internal factors include beliefs, attitudes, and personality, while external factors include culture, values, and family) (El Gozmir et al., 2024; Rau and Samiee, 1981; Reina Paz and Rodríguez Wargas, 2023; Tešić and Bogetić, 2022).

Bettman's (information processing) model

According to Bettman's information model (1979), the consumer possesses a limited capacity to process incoming information. When faced with selecting from multiple available options, consumers infrequently engage in a thorough evaluation of each alternative. Instead, they tend to adopt the simplest possible decision-making process. Bettman's purchase selection process does not progress in simple and sequential manner, it based on seven fundamental components:

- *i*. consumer information capacity (consumers typically adopt a choice strategy that simplifies the process of selecting a product)
- *ii*. motivation (drives goal hierarchy and subgoals, easing the buying process)
- *iii*. attention and perception (attention can be voluntary – conscious or forced – unexpected stimuli; perception influences information search about alternatives)

- *iv*. information collection and evaluation (consumers use external sources until they feel informed or until the costs outweigh the benefits)
- *v*. memory (stored information in memory initiates the consumer's purchase decision process)
- *vi*. decision-making process (personality traits and situational factors influence the purchase decision process)
- *vii*. consumption and learning (experiential information significantly influences future purchase decisions) (Bettman Information Processing Model of Consumer Choice, 2024; El Gozmir et al., 2024; Reina Paz and Rodríguez Wargas, 2023; Razzouk and Gaulden, 2015; Tešić and Bogetić, 2022).

This model has limitations: it assumes linear, rational decision-making, ignoring real-world complexities, external influences, emotional aspects, sensory information, and product-related factors like brand and price (https://ceopedia.org/index.php/Bettman_model).

4. Conclusions

The consumer has a central role in the market, with all marketing decisions predicated on assumptions about consumer behavior. To generate value for consumers and profitability for organizations, it is imperative for marketers to comprehend the reasons behind consumer reactions to various products and services. Consumer behavior encompasses the actions and associated activities of individuals engaged in the purchasing and utilization of economic goods and services. Gaining insight into consumer behavior facilitates an understanding of diverse market segments and the development of strategies to effectively penetrate the markets.

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