Shaping Attitudes – Analysis of Existing Models

Daniela Steluţa Uţă*, Cătălin Popescu**

* The Bucharest University of Economic Studies, Piata Romana no. 6, Sector 1, Bucharest, Romania
e-mail: daniela.uta@gmail.com
** Faculty of Economic Sciences, Petroleum-Gas University of Ploieşti, Bd. Bucureşti 39, 100680,
Ploieşti, Romania
e-mail: cpopescu@upg-ploiesti.ro

Abstract

Consumer behaviour, seen as an integrated system, is a composite of five major processes: perception, information, attitude, motivation, and actual behaviour. During the last century, consumer behaviour specialists studied the different aspects of this behaviour considering the impact of each process and of all processes on consumers’ behaviour underlining its impact on products and services markets. Attitude is the process with the greatest stability in time and by its conative dimension influences directly the actual behaviour of the consumer. This is why the process is well studied and documented, specialists wanting to discover how attitude is formed and how it can be used, changed or influenced in obtaining the desired response from consumers. The present paperwork intends to summarise the main models developed in order to have a complete image of the attitude process.

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Introduction

Attitude was defined in 1935 by Allaport as “the mental process by which an individual – based on past experiences and information stored – organizes his perceptions, beliefs and feelings about a particular object and orients his future behaviour.”

Most experts in this field believe that attitude has three components:

- a cognitive (perceptual) component: attitude is based on a range of information on the subject being reviewed, information accumulated in time by the person who made this assessment;
- an affective component: attitude reflects the usual faces and feelings, positive or negative, or assessments of the object being evaluated;
- a conative component: attitude has predictive value, which can be defined as a predisposition to respond/act in a certain way.

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Psychologists and sociologists also believe that attitude persists, it can be modified, it is structured in the sense in which internal consistency is based on evaluation criteria, and its intensity can vary widely.

Many of the models developed by specialists are based on the theory of cognitive consistency (coherence). The usefulness of these models depends largely on their explanatory or predictive value.

According to the principle of cognitive consistency, consumers value harmony between thoughts, feelings and behaviour and need to maintain consistency between these elements, this need motivates the need to have certain behaviour. This desire for harmonization may make the consumers change their feelings, thoughts or behaviour to comply with lived experiences.

Cognitive consistency principle always reminds that attitudes do not form “out of nothing” but they are linked to other processes of consumer behaviour. An important factor in the formation of a new attitude is how it fits existing attitudes.

The explanatory value of the models presupposes a structural approach of the cognitive and affective components. The predictive value aims mainly at the relationship between the emotional component, the conative and that actual consumer behaviour.

**Defining Attitude through Specific Models**

Cognitive theorists\(^2\) define attitude to an object as a composite between the perceived usefulness of an object, as a means to achieve certain objectives and the relative importance of these objectives. The model takes into account the strength (power) of the individual beliefs about the object.

The usual form of additive models adapted to situations in marketing was developed by Fishbein (1967) and Bass and Tarlarzyk (1969)\(^3\) and can be used as follows:

$$A_{ij} = \sum_{k=1}^{n} W_{ik} \cdot X_{ijk}, \quad (1)$$

where:

- \(A_{ij}\) = the individual’s (j) attitude toward the brand (i);
- \(W_{ik}\) = the relative importance of attribute k for individual j;
- \(X_{ijk}\) = the extent to which the individual (j) believes that brand (i) possesses attribute (k);
- n = number of attributes taken into account.

Over time, this formula has undergone various changes, depending on how the experts felt that each individual component of attitude influences his decision to purchase.

Initially, Rosenberg (1956) – based on the functional approach to attitudes – started from the assumption that a consumer’s attitude towards a particular good is accompanied by a cognitive structure constructed from a consumer’s beliefs about the potential of a good to provide or not the expected value. The more a property leads to a positive state or a state does not lead to a

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significantly negative state, the more a consumer will have a positive attitude for the respective good. Rosenberg’s hypothesis has the following algebraic expression:

\[ A_{io} = \sum_{i=1}^{N} I_i V_i \]  

where:

- \( I_i \) = the extent to which a person is convinced that the object will lead or not to obtain the value (i);
- \( V_i \) = the importance of the value (i) as a source of satisfaction;
- \( N \) = number of values taken into account.

Note that Rosenberg considered \( V \) as a measure of satisfaction or evaluation. According to specialists, values, consequences, and attributes are important only insofar as they provide maximum consumer satisfaction or dissatisfaction.

Fishbein (1972) defines an individual’s attitude toward an object as a function of cumulative individual’s beliefs about an object and evaluative aspect of those beliefs.

\[ A_o = \sum_{i=1}^{N} B_i a_i \]  

where:

- \( B_i \) = strength of belief “i” about the object of the attitude; “o” - the likelihood that the object will be in relation to another object x (i.e., the probability that a brand of soft drinks is carbonated);
- \( a_i \) = the evaluative aspect of \( B_i \) (assessment of carbonation);
- \( N \) = number of beliefs taken into account.

In 1975, George S. Day pointed out three weaknesses of the model developed by Fishbein:

- use of measurement or evaluation attributes requires comparative judgments rather than absolute judgments. For example, semantic differential - which is often used - tends to cause some confusion between the level of importance and the power of evaluation. Day proposes that the measuring instrument should be the constant sum scale that asks respondents to distribute a part of a predefined set of evaluation points for each attribute or object;
- another shortcoming of the model is that it neglects information on the stability in time of the attitude. However, it was demonstrated that the attitude stability may vary depending on the involvement of the respondent and the correctness of his judgment. Day (1975) believes that one should also take into consideration the confidence shown by the respondent prior to assessing his attitude toward an object. He suggests removing from the study group those people who have a low level of confidence, thus increasing the quality of research results;
- a third criticism is the fact that evaluation and affective judgments are not necessarily synonymous and that the choice of an object depends on how well it meets the qualities desired by the consumer.

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This approach was used by Lehmann (1973) to predict preferences for the TV shows and he created the following model:

\[ A_S = \sum_{j=1}^{n} W_j \left| P_{sj} - I_j \right|, \quad (4) \]

where:
- \( A_S \) = preference for the TV show measured as the distance to the ideal point;
- \( W_j \) = measure of the importance attached to attribute \( j \);
- \( P_{sj} \) = the extent to which the show meets the respondent’s needs in terms of attribute \( j \);
- \( I_j \) = the ideal position of the attribute \( j \);
- \( n \) = number of attributes taken into consideration.

A surprising result in Lehmann’s research was that placing an arbitrary show that was considered ideal, the extremes of each attribute on the rating scales functioned better than a question aimed at identifying the ideal show.

Beyond this particular model, specialists of the time have identified the need to move from modelling attitudes based on two components (a set of beliefs about an object and an evaluation of the importance associated with each belief) to a model that involves the use of three components.\(^6\)

These three components were defined as follows:

1) beliefs (\( B_i \)): the perceived measure in which an object or concept (o) is related to another object i, an attribute i and a value i or purpose and (objective) i-measured, for example, through a subjective probability scale or an instrumental scale relating to perception;

2) assessment (\( E_i \)): the degree of favourability of affect (the attitude to the other object i, attribute i, value i or purpose i), experts usually use to determine this assessment a semantic differential type scale;

3) salience (\( S_i \)): the measure of the importance of belief \( B_i \) and its association with evaluation \( E_i \) in determining the overall attitude \( A_o \) to a concept or an object (o) -measured by a bipolar scale of the type important-unimportant, or by providing a rank to each of the “n” objects, attributes, values and objectives.

The Rosenberg model (illustrated above):

\[ A_R = \sum_{i=1}^{n} B_i \cdot F(E_i, S_i), \quad (5) \]

Fishbein model (illustrated above):

\[ A_F = \sum_{i=1}^{n} B_i \cdot E_i, \quad (6) \]

The Columbia model:

\[ A_C = \sum_{i=1}^{n} B_i \cdot S_i, \quad (7) \]

The Columbia model is called as such because its first application was made apparently in a study on “instant breakfast” conducted at Columbia University in the mid 60s. This model omits its evaluation, implicitly assuming that attributes are evaluated positively. Such applications have revealed that weighting $B_i$ with $S_i$ does not contribute a great deal to anticipate attitude $A_o$.

The Purdue model:

$$A_o = \sum_{i=1}^{n} F(B_i, E_i) . S_i \quad (8)$$

Several researchers (Bass & Talaryk, 1972; Moinpour & MacLachlan, 1971, Kraft et al, Bass, et al., 1972, Beckwith & Lehmann, 1973), many of them associated in some way with Purdue University of Indiana, have developed patterns that can be synthesized in the above equation that relates to how satisfactory is a mark of a given attribute $i$. The proposed model strengthens the results obtained by applying the Columbia model, i.e. $S_i$ does not contribute a great deal to anticipate attitude.

**The theory of reasoned action**

M. Fishbein and I. Ajzen, 1975 extended the original model by three components, including what other (relevant) people might think about the object in question (they introduce the notion of “subjective norm”) as shown in the model in the following figure:

![Model of the theory of reasoned action](image)

Fig. 1 Model of the theory of reasoned action

The theory of planned behaviour

The TPB was developed by Icek Ajzen (1985) in order to improve theory of motivated action by including perceived behavioural control\(^8\).

![TPB model](http://people.umass.edu/aizen/tpb.diag.html)

**Fig. 2. TPB model.**

Source: personal website of the author (Icek Ajzen), [http://people.umass.edu/aizen/tpb.diag.html](http://people.umass.edu/aizen/tpb.diag.html)

In addition to attitudes and subjective norms, the model proposed by Ajzen added the concept of perceived behavioural control in the theory that is rooted in SET (Self-efficacy Theory) proposed by Bandura\(^9\) in 1977. According to it, expectations such as motivation, performance, and feelings of frustration associated with repeated failures have a behavioural effect and response. Bandura separated expectations into 2 distinct types: self-efficacy and outcome expectancy. He defined self-efficacy as a person’s belief that he can successfully execute the behaviour required to achieve the desired results.

Outcome expectancy refers to a person estimating that a certain behaviour will produce specific anticipated results. Bandura stated that self-efficacy is the most important prerequisite for behaviour change because it determines the intention to copy the behaviour.

According to the model proposed by Ajzen human behaviour is guided by three kinds of considerations: behavioural beliefs, normative beliefs and beliefs about control. Behavioural beliefs lead to the formation of a favourable or unfavourable attitude towards certain behaviour, normative beliefs result in subjective norms and beliefs about control induce the perception of behavioural control. The attitude towards behaviour, subjective norm and perceived behavioural control leads to the formation of behavioural intentions\(^10\).

As a general rule, the more favourable the behavioural attitude, subjective norm and perceived behavioural control are perceived the stronger will be the person’s intention to behave

\(^8\) Icek Ajzen, *From intentions to actions: A theory of planned behaviour*. In J. Kuhl & J. Beckman (Eds.), *Action-control: From cognition to behaviour*. Heidelberg: Springer, 1985, pp. 11-39


acquiringly. Thus, the higher the degree of effective control over behaviour, the more the consumer will implement intentions when an opportunity arises.

The mathematical formula associated with the model:

\[ BI = (W_1)AB [(b) + (e)] + (W_2)SN [(n) + (m)] + (W_3)BC [(c) + (p)] \] (9)

where:

- \( BI \) = behavioural intention (indicates the availability of the individual to perform a certain behaviour)
- \( AB \) = attitude to behaviour
- \( b \) = strength of each belief
- \( e \) = evaluation of the expected outcome or of the attribute
- \( SN \) = subjective norm
- \( n \) = strength of each normative belief considered
- \( m \) = motivation to comply with referent
- \( PBC \) = perceived behavioural control
- \( c \) = the individual belief about control
- \( p \) = perceived power of control
- \( W_i \) = empirically derived coefficient

As compared to previous models, this model has several strengths:

1. By adding perceived behavioural control, the theory of planned behaviour may explain the relationship between behavioural intentions and actual behaviour;
2. Studies carried out by Ajzen have demonstrated that this model can help in better predicting health-related behavioural intentions;
3. Similarly to the theory of reasoned action, TPB can explain much of the social behaviour of an individual as it takes into account subjective norm as the variable of the model.

One of the most important limitations of the model is that it does not consider the emotional aspects of behaviour such as threats, fear, feeling, positive or negative feelings towards an object etc.

The ‘Trying-To-Consume’ model

Researchers such as Bagozzi and Warshow\[11\] have extended the presented model in order to include the objective(s) of a customer in trying to consume. Thus, the two researchers challenge the differences between reasoned and objective behaviour showing how the latter is important in the study of consumer behaviour.

This model reflects the consumer’s attempts to consume. In attempt to consume, the consumer can often encounter personal constraints (consumer trying to lose weight but he is crazy about chocolate) and/ or environmental constraints (only the first 50 customers will receive a 10% discount when purchasing product x) which can be hindering.

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The theory of trying to consume replaces actual behaviour (as defined by the theory of reasoned action - Fishbain) with trying to behave in a certain manner. Trying to act or to achieve a particular objective is preceded by the intention to which, in turn, is determined by the attitude of the attempt. This in turn is influenced by the success of consumer attitudes and expectations about the success or the failure attitudes and expectations about the failure and attitude about the process. Attitude to the process refers to an individual’s assessment of how the act she was trying to accomplish something makes him feel, regardless of the outcome of the action.

Fig. 3. The „Trying to consume” model

Source: Shiffman L, LL Kanuk „Consumer behaviour” Season 9, Pearson Prentice Hall, 2007

Modelling attitudes towards advertising

In an effort to understand the impact of advertising or other promotional medium on the formation of consumer attitudes towards certain products or brands, special attention was given to developing a model of attitude on the commercials (advertising in general).

Lutz (1985) defined attitude towards ads (A_ad) as a predisposition to respond in a favourable or unfavourable manner to a particular advertising stimulus during a particular exposure occasion.

Attitude towards ads has been studied in detail by a number of specialists (Mitchell and Olson 1981, Cacioppo and Petty, 1895, Lutz, and Belch MacKinzie 1893 and 1986, Park and Young 1986) that gave rise to a number of models such as: perception of advertisement, attitude toward
the ad maker and involvement of the viewer and the mood which was considered when he sees an advertisement. The ad maker and involvement of the viewer and the mood which was considered when he sees an advertisement. 

As the model describes, the consumer creates various feelings and judgments as a result of exposure to an advertisement. These feelings and judgments affect consumer attitudes to advertising itself and beliefs about a brand.

Finally, consumer attitudes to advertising itself and beliefs about a brand will influence the attitude towards the brand. Researchers have noted a strong relationship between attitude towards ads and the actual purchase intention.

![Diagram of Modelling attitudes towards advertising](source)

**Fig. 4. Modelling attitudes towards advertising**


**The ELM**

In connection with shaping attitudes towards advertising, Petty, Cacioppo and Schumann (1983) have developed a model of the probability of completion or achievement of persuasion, known in literature as ELM (elaboration likelihood model) (Figure 5). According to this model, attitude formation or change depends on the nature and intensity of processing relevant information, a process that takes place in response to a persuasive message.

A high level of processing means that the consumer engages in a careful process of thinking and evaluating information and arguments contained in the message, while the low level of processing is characteristic to non-involvement in an active process of information search, the

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attitude relying mainly on interaction with the main idea of the message, based on positive or negative signs.

The ELM assumes that there are two main routes of persuasion:

1. Central route – the consumer is actively engaged as a participant in the communication process with a high level of motivation and ability to receive, understand and evaluate messages. Cognitive processing activity is intense and persuasion may achieve its purpose depending on the perception of the quality of the arguments presented. Cognitive processing results can transform into positive or negative attitudes; in both cases, attitudes are resistant to subsequent attempts to change them;

2. Peripheral Route – the consumer does not have the necessary motivation or ability to process information and is not willing to engage in a cognitive process in detail. Rather than evaluating the information and arguments presented in messages, the consumer considers only peripheral factors (music, pictures, graphics, etc.) on which he can accept or reject the message13 (Petty, Cacciopo and Schumann, 1983).

![Central Route of Persuasion Diagram]

**Fig. 5.** The ELM


### Conclusions

All models presented above offer different perspectives on attitude formation, change and impact on actual behaviour.

Developed by economic or psychology specialist they underline the complexity of the studied process as well as its various implications in the consumer behaviour.

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Attitude is formed as a result of the learning process, as a result of the influence of an external factor (i.e. family or friends) or as a result of the use/consume of a product/service.

Once formed the attitude is hard to be influenced and harder to be changed. Nevertheless it can be used by companies in selling their products or services. For example, it is easier to sell beauty products to women that have a positive attitude to make-up, considering it a factor of social success than to sell the same product to women who have a negative attitude to make-up considering it harmful for skin health.

Consumer attitude research cannot ignore the other elementary processes that define consumer behaviour. The basic process of researching consumer behaviour cannot ignore the decision-making process that accompanies the purchase of an economic good.

In authors’ consideration, modelling attitude should include the main factors that influence attitude formation (with directly observable influence on behaviour’s processes and the endogenous influences), the other processes composing the consumer behaviour (perception, information and learning, motivation and actual behaviour) and the main phases of the decision-making in buying products and services process.

References