



UNIVERSITY BABEŞ BOLYAI CLUJ NAPOCA FACULTY OF ECONOMIC AND BUSINESS ADMINISTRATION

PhD DOMAIN: MARKETING

STUDY ON THE ADOPTION OF NEW PRODUCTS BY CONSUMERS

- PhD THESIS -

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PRODUCT, ADOPTION OF PRODUCTS, DIFFUSION, INNOVATION, KNOWLEDGE, BELIEFS, ATTITUDES, DECISION-MAKING STYLE

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INTRODUCTION

We are living in a consumerist society under permanent development. The world around us evolves at a considerable speed and undergoes a technologisation with which it is very difficult to keep the pace. "I exist, therefore I buy, I buy therefore I exist" seems to have become the motto of modern man. Consequently, consumer society supposes an increasingly intense circulation of new products on the market, at a higher and higher speed and with an increasingly short lifespan. This means that each of us uses much more products, for shorter and shorter periods, at a higher and higher frequency. Furthermore, we should all be interested in the manner in which we make the decisions related to the purchase of new products on the market, for the mere reason that we are all consumers. The speeding up of technology has led to the reduction of the products' life cycle, determining the occurrence of a new generation of products. Each year, producers introduce to the market new versions of mobile phones, digital cameras and PCs. More frequently than in the past, consumers must face the dilemma of choosing between the preservation of the existing products and their improvement.

The process of adopting new products is a complex phenomenon of present interest, as the activity of products purchase is carried on along our entire life span, which influences our way of thinking, mood and the way we spend our leisure time.

In the literature, some of the most important writings about the process of adopting new products appear in the book written by Rogers (1995) "Diffusion of Innovations" (Sahin, 2006). In general, Rogers saw adoption as being the process by which an innovation is communicated through certain channels, along time, among the members of a social system. Rogers reached the conclusion that the sales of new products are slow in the beginning, and then they grow fast and then decrease in time. He claims that the early adopter is the first to select a new product or a technology, followed by the majority, until the technology or the new product become common. The adoption speed of a new product in his conception seems to be a function depending on several factors such as: relative advantage, compatibility, complexity, observability (divisibility), and communicability.

Lunching new services and processes to the market represents an implant source for increasing a firm's profit. The assurance of success to the market introduction of new products is an important preoccupation of the marketing programme. In this respect, there are two approaches as regards the market penetration of a new product. The first refers to the way in which a new product or a new idea is disseminated throughout the market, and this is called

"diffusion". The second approach refers to the adoption or the decision-making process which determines the consumer to accept or to refuse a new product or idea.

The marketing practice regards the market penetration of innovations taking into account two distinct levels: on macroeconomic level and on microeconomic level. On macroeconomic level interest is focused on the fact that the important resources allotted to manufacturing new products are wasted if consumers do not accept the new products. They are not accepted because they are either inferior to the existing products, or the afferent marketing strategies were inefficient.

As for the microeconomic level, surveys, (2003) concentrated on the market penetration of innovations underline that companies must influence the acceptance of new products, so that they might survive on the market and be profitable. The two concepts, "diffusion" and "adoption" is related to the two levels: microeconomic and macroeconomic. Diffusion is a macroeconomic concept referring to the way in which an innovation is disseminated on the market by means of communication (mass media, sales assistants, leaders of opinion or other members of a market segment) in a certain period. Adoption is a microeconomic concept and refers to the stages completed by consumers before accepting the new products.

The literature related to the adoption of an innovation comprises two research directions. The first, the dominant and traditional one, refers to the ways in which the adoption process takes place depending on the products characteristics (Zaltman et al., 1973; Mahajan et al, 2000), consumers' specific characteristics (Bass, 1969) and the risks perceived by them (Ostlund, 1974). The second research direction is focused on consumers' resistance to innovation (Gatignon, Robertson, 1991).

The need and implicitly the motivation of the theme choice are suggested by several aspects :

- The interest manifested by the literature as regards the manner in which consumers adopt new products on the market;
- The absence of research preoccupations regarding the decision-making styles of consumers in the context of Romanian consumers. On the international level there are diverse surveys debating this theme in countries such as: *the USA* (Lysonski et al., 1996), *India* (Canabal, 2002; Patel, 2008), *China* (Fan et al., 1997), *Germany* (Walsh et al., 2001; Walsh and Vincent, 2001), *Iran* (Hanzaee and Aghasibeig, 2008), *Macedonia* (Anić et al., 2010), *The Czech Republic* (Wanninayake Bandara, 2014);

- Consumers' tendency to adopt most of the new product occurred on the market;
- The significant impact of knowledge, beliefs and attitudes on the behaviour of adopting new products by consumers.

Starting from the idea that in Romania no research has been conducted meant to present the way in which consumers adopt new products from the perspective of the relations existing between the factors such as: knowledge, beliefs, attitudes and decisional style of consumers, the present investigation intends to bring an important contribution to the literature.

This thesis aims, by a critical assessment of the literature and the implementation of a specific survey, at investigating the process of adopting new products by consumers. Several objectives correspond to this purpose. Our first objective is to analyse the process of adopting new products by consumers through the prism of the following factors: knowledge, beliefs, attitudes and decision-making style. The second objective is represented by the identification of the relation existing among diverse constructs of the research model proposed.

These general objectives determine a series of secondary objectives such as:

- identification of the manner in which the knowledge about the product, use and purchase influences the adoption of a new product in the context of Romani's consumers;
- determination of the way in which Romanian consumers' beliefs influence their attitude when it comes to adopt a new product;
- Determination of the influence of attitudes in the process of a new product adoption;
- Analysis of the main styles of the purchasing decision-making by Romanian consumers.

As regards the structure of this work, it is composed of two parts, the first comprising two theoretical chapters meant to highlight the important aspects afferent to the topic investigated, whereas the second contains two chapters too, being focused on the detailed description of the research methodology, data analysis and results interpretation, and on the synthesis of the conclusions drawn, and finally underlining the main future research directions.

The first chapter presents in a systematic manner conceptual approaches regarding the new product concept and the process of its diffusion and adoption, forwards the main types of innovations and their diffusion models. Furthermore, the chapter presents in detail the

innovation-decision process and the adoption process, as well as the main categories of adopters encountered in the process of new products adoption.

The second chapter forwards a review of the literature approaching the theme of consumer behaviour in the context of adopting new products. More precisely, one takes into consideration the knowledge, beliefs, attitudes and consumers' decision-making styles when they purchase new products.

Chapter Three intends to present the methodological approach deemed to be adequate to the present research. This chapter highlights the purpose, objectives, conceptual model proposed, hypotheses, research method and research instruments used in the survey.

Chapter Four shows in detail the results of the research conducted. A first stage in the analysis of the research results is represented by the data preparation for analysis, whereas the second stage consists in the descriptive data analysis. After the analysis of all the information obtained in the survey, one started the actual verification of the hypotheses formulated for the present research.

The final part of the thesis discusses the conclusions of the survey. It contains a series of conditions related to the results obtained, describes the theoretical and managerial implications of the investigations conducted and identifies the main limits of the study and the possible future directions of research in the field.

Now that this stage of my life is completed, I wish to express my full gratitude to all those who guided me and granted me their support during the realisation of this PhD thesis. First of all I want to thank my scientific coordinator - Prof. dr. Ioan Plăiaș for his permanent support, guidance and encouragement throughout the period of my PhD preparation and thesis elaboration.

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SUMMARY CHAPTER I

THE NEW PRODUCT AND THE PROCESS OF ITS ADOPTION AND DIFFUSION

This chapter presents the overall theoretic aspects related both to the concept of new product, and the process of its adoption and diffusion.

The concept of new product has a very wide meaning. According to Mâlcomete (1979), a new product is a product which, by its characteristics, is distinct from the products on the market. A new product satisfies a new need of consumers or an already existing need, but in a new manner. The types of new products may constitute: (1) improvements and revisions of the existing products, (2) extensions of the products already on sale, (3) new products for the firm or new lines of products, (4) repositioning of products: existing products, adapted to new uses or applications; and (5) completely new products: new innovative products on the world level (Rogers, 2003).

The exploration of the frame related to the acceptation of the new products by the consumer is known in research under the name of "innovation diffusion". The marketing literature has intensely researched the diffusion process (understood as crossroad of new trends, ideas and behaviours, as well as innovations) and the adoption of the new products and services (Bass, 1969; Gatignon and Robertson, 1985; Mahajan, Muller and Bass, 1990; Van den Bulte and Lilien, 2001; Van den Bulte and Joshi, 2007), as well as the role of "mouth to ear" communication or of viral marketing (Godes and Mayzlin 2004, 2008).

The theory of innovation diffusion started to be developed in the 1950s decade. This theory was applied to very different topics, such as: farmers' innovations, family planning practices, medical technology, innovation of policies etc. As regards the diffusion process, it refers to the way innovations are disseminated, as well as the manner in which they are assimilated on a market. In other words, diffusion is the process by which the acceptation of an innovation (a new product, a new service, a new idea or new practices) is spread by communication (mass-media, sales agents or information conversations) to the members of a social system (a target market) for a period of time. Furthermore, the diffusion process is made of four basic elements: (1) innovation, (2) communication channels, (3) social system; and (4) time (Rogers, 1962).

The thesis continues by identifying a series of definitions of the types of innovation having led to ambiguity as regards the manner in which the terms "innovation" and "innovating" are operationalised and used in the literature about the development of the new

product (Garcia and Calantone, 2002). An early perspective regarding the relation between invention and innovation is based on the perspective of Joseph Schumpeter (1939). He considers invention as mere "act of individual creativity, with little importance for economic analysis". Nevertheless, it is important to clarify the fact that an invention does not become an innovation until the former is processed by manufacture and marketing activities, and then diffused on the market (Layton, 1977; Freeman, 1991; Smith and Barfield, 1996).

Beside the definition of the concept of innovation, the chapter also comprises a synthesis of the main types of innovations such as: "architectural" (substantial) innovations, "commercial niche" innovations, "regular" (current) innovations, "revolutionary" (rupture) innovations, technical innovations, administrative innovations, product-related innovations, radical innovations, incremental innovations, marketing innovations, process innovations, organisational innovations, paradigm innovations. Moreover, the chapter also presents the main models of innovations diffusion with application in the literature.

The last section of this chapter describes the process of innovation-decision and the process of adoption with its main categories of adopters. The innovation-decision process is the process by which a person (or another decision-making unit) passes from the initial accumulation of knowledge about an innovation to the formation of an attitude towards the initiation, to the making of a decision related to the adoption or rejection of innovation, to the putting into application of the new idea and confirmation of this decision. This process consists in a series of choices and actions along time, by which an individual or a system assesses a new idea and decides whether they are to include the innovation into practice or not (Rogers, 2003). According to Rogers (1995), the adoption of new products will be possible if it has the majority of the following attributes: (1) relative advantage, (2) compatibility, (3) complexity, (4) divisibility and (5) communicability (observability). Moreover, Rogers (2003) realised a classification diagram of innovation adopters into five categories: (1) innovators, (2) early adopters, (3) early majority, (4) late majority, and (5) slow (retrograde) adopters.

SUMMARY CHAPTER II

THE CONSUMER IN THE CONTEXT OF NEW PRODUCTS ADOPTION

The second chapter of this thesis is focused on the concepts of knowledge, beliefs, attitudes and decision-making style by consumers. A first step in its conceptual delimitation is represented by the definitions of the knowledge concept and their content.

The term "knowledge" is extremely frequently used, and there are many definitions thereof, with diverse roots and in different contexts. This concept is reflected by a multitude of terms which denominate an example or a process from the sphere of knowledge: skill. ability, finding, indication, idea, intelligence, interpretation, intuition, invention, talent, observation, opinion, effectiveness, tradition, understanding, wisdom (Leana, 1985; Weick, 1995; Grant, 1996; Alba and Hutchinson, 2000; Stankosky and Vandergriff, 2010). Thus, knowledge may be defined in diverse manners, such as "information stored in the memory" (Plăiaș, 2010, p. 46) or "sub-assemblage of all the memorised information relevant for products purchase and consumption" (Di Virgilio and Di Pietro 2014, p. 254).

As regards the content of knowledge, psychologist Anderson (1983) suggested that there are two types of basic knowledge:

- *Declarative knowledge*: involving subjective facts that are known.
- *Procedure knowledge*: referring to the comprehension of the way in which these facts may be used.

Furthermore, this knowledge of consumers may be examined taking into consideration three general fields (Plăiaș, 2010), more precisely:

- *Knowledge about product*: representing a conglomerate of several types of information;
- *Knowledge about purchase*: comprising different amounts of information possessed by the consumer, representing the starting point in the search for products;
- *Knowledge about usage*: contain the information available in the memory about the way in which a product may be used and what is needed to know to actually use the product.

The following section contains the definition of beliefs and general factors influencing them. Beliefs are defined as an association of an object to a certain quality (Fishbein and Ajzen, 1975). Beliefs are considered to be formed based on knowledge (Peter and Olson, 1994) and reflect consumers' interpretation and assessment as regards a store, a product or a brand (Schiffman and Kanuk, 1994). It seems that these beliefs are influenced by factors such

as: (1) information about the product; (2) enjoyment; (3) social role and image; (4) importance for economy; (5) materialism; (6) falsity, and (7) corruption index (Pollay and Mittal, 1993).

Beside knowledge and beliefs, this chapter also discusses the concept of consumers' attitude in making the purchase decision. The word "attitude" is easily used in daily conversations, but few are really capable to define it. However, for this term there is no exact definition which is generally agreed by social psychologists. Consequently, Academy members and researchers have different definitions for this term, among which: "attitude referring to the preparation of individuals regarding experiences and their influences in adopting objects" (Allport, 1935, p. 156), "a disposition by which one reacts favourably or unfavourably toward an object, a person, an institution or an event" (Ajzen, 2005, p. 59), "attitudes are learned from past experiences and exhibit a connection between thought and behaviour" (Fill, 2006, p. 62), "long-term assessment of persons, things, advertisements or anything else" (Ghorban, 2012, p. 244).

In the formation of attitudes one takes into account many external and internal factors which mould and create attitudes toward an object. Thus, the main modality of shaping attitudes toward the products and services is represented by the observation of one's own behaviour, in other words, from direct experience. Another extremely important factor in the formation of attitudes is represented by family and reference groups. According to Brătucu and Dima (2002) the formation of attitudes is a complex process comprising two series of factors: *individual factors* (age, gender, intelligence, emotional stability and instability, connative dispositions) and *social factors* (family, school, social, cultural and political organisations, economic conditions). Other important factors in the formation of attitudes are mass communication media (newspapers, magazines, TV, internet) and consumers' personality.

In the literature (Plăiaș, 1997; Schiffman, Kanuk, 2004; Dobre, 2005; Solomon, 2009) attitude is viewed as a multidimensional variable made of three components:

- **The cognitive component** (*learning*) reflects the opening and knowledge of a person in relation with a product or its qualities;
- The affective component (feeling) refers to sentiments or feelings of a person toward a product, either good or bad, pleasant or unpleasant;
- The behavioural or connative component (doing) refers to the trends or intentions of a person to act in a certain manner.

The last section of this chapter highlights consumers' decision-making styles. The style of consumers' decision-making was defined as being "a mental model, a cognitive orientation towards purchasers and purchase, which constantly dominates consumers' choices.[...] these traits are always present, predictable, driving forces focused on decision-making" (Sproles, 1985, p. 79). According to Sproles and Kendall (1986), the decision-making styles may be classified into three main approaches: (1) the psychographic or lifestyle approach; (2) the consumers' typology approach, and (3) the consumer's features approach. Most surveys used the Consumer Style Inventory (CSI) introduced by Sproles and Kendall in 1986 as a common instrument for the assessment of consumers' decision-making styles. This tool identified eight mental characteristics of consumers' decision, namely: perfectionism, attention to high quality, attention to brand, attention to the new and fashionable, orientation toward entertainment and hedonist character of purchaser, attention to low prices, impulsiveness / negligence, confusion created by the high number of offers, and habit, brand loyalty. Each style is presented in the final part of this chapter.

SUMMARY CHAPTER III RESEARCH METHODOLOGY

This chapter forwards the methodological approach used for reaching the objectives of this thesis. Thus, in a first stage one presents the chosen research paradigm, and then the purpose and objectives of the research, and one elaborated the conceptual model underlying the present survey, followed by the hypotheses of research and one argues the choices related to the method of research, sampling technique, research instruments and data collection method.

The basis of the elaboration of a research must be the identification of a real problem existing in society. Consequently, the present research aims at analysing the behaviour of new products adoption by Romanian consumers. The importance of such a survey is relevant due to the very absence of studies of this nature among Romanian consumers. The idea of approaching such issues and of conducting this research originated from a series of personal queries, both from the researcher's perspective, and from the average consumers' point of view. More precisely, due to the profusion of new products introduced to the market, I was tempted to know the factors motivating and influencing consumers in adopting these products. Another important argument in the choice of the theme, consisted in reading an article by Sproles and Kendall published in 1986, article in which the authors attempted to identify the most important consumers' decision-making styles. This article represented a starting point in my search for other materials discussing the same main idea, i.e. consumers' decision-making style. Taking into consideration the purpose of the present research and its objectives, one may conclude that this survey falls within the *positivist* paradigm.

Each investigation has one or several objectives, and the research success is assessed depending on the manner in which these objectives are explicitly reached. The present work contains the following **general objectives**:

- *General objective 1*: Analysis of the process of new products adoption by consumers through the prism of the following factors: knowledge, beliefs, attitudes and decisional style.
- *General objective* 2: Identification of the relation existing among the diverse constructs of the research model proposed.

The secondary objectives of the present research represent more detailed aspects of the scientific investigation. They derive from the general objectives and lay at the basis of the formulation of the research hypotheses.

The specific objectives of this research are:

- Identification of the manner in which the knowledge about the product, use and purchase influences the adoption of a new product in the context of consumers in Romania;
- Determination of the manner in which Romanian consumers' beliefs influence their attitude in adopting a new product;
- Determination of the influence of attitudes in the process of a new product adoption.
- Analysis of the main style of purchase decision-making by Romanian consumers.

The following stage of the scientific approach is represented by the formulation of the research hypotheses, i.e. of clear, explicit and verifiable presumptions regarding the relations existing between two or several variables within the present research. Hypotheses will be grouped depending on the objectives aimed within the present research.

The first set of hypotheses, afferent to **O1**, refers to the identification of the way in which Romanian consumers' knowledge about the product, use and purchase influences the adoption of a new product.

H1: Consumers' knowledge has a significant and positive influence on their beliefs in adopting a new product.

H1a: Consumers' knowledge about a new product directly and positively influences their beliefs in the adoption of the product.

H1b: Consumers' knowledge about the use of a new product directly and positively influences their belief in the adoption of the product.

H1c: Consumers' knowledge about the purchase of a new product directly and positively influences their beliefs in the adoption of the product.

The second set of hypotheses, afferent to **O2**, aims at determining the manner in which consumers' beliefs influence their attitude in the adoption of a new product.

H2: Consumers' beliefs directly and positively influence their attitudes in the adoption of a new product.

The third set of hypotheses, afferent to **O3**, aims at determining the influence of attitudes in the process of adopting a new product.

H3: Attitudes have a significant and positive influence on purchasers' decision-making style.

H3a: There is a direct connection between the attitude preponderantly favourable to refusing the adoption of a new product and purchasers' decision-making style.

H3b: There is a direct connection between the attitude preponderantly favourable to rapidly adopting a new product and purchasers' decision-making style.

H3c: There is a direct connection between the attitude preponderantly favourable to delaying the adoption of a new product and purchasers' decision-making style.

The last set of hypotheses, afferent to **O4**, aims at analysing the main styles of making the purchasing decision by the Romanian consumers.

H4: Purchasers' decision-making style has a significant influence on the adoption of a new product.

As regards the research method, its choice was made taking into account both the specificity of the methods used in similar investigations on the international level, and the characteristics of the target segment. Taking into account the main purpose of the research, the present scientific endeavour falls within the category of *conclusive research*. The method allows the researcher to analyse the data with the help of statistic techniques, and the discoveries are used as inputs in the preparation of decisions.

According to the approach methodology, the present survey falls within the category of *cross studies*, which are "designed to yield research data in different contexts, but during the same period of time" (Collis and Hussey, 2009, p. 77). Thus, the present study comprises a conclusive research, based on a sample, on a numerical assessment of variables and statistic methods of data analysis, in the form of a *quantitative research*.

The data collection was made based on the method of the *polling inquiry*, starting from a complex questionnaire comprising five research topics structured into 29 variables and 83 items (see table 3.1.). This polling was performed in the period 16.08.2014 - 10.01.2015, and the questionnaire was applied both through interview operators and online, by distributing the questionnaire link among potential respondents. For the online collection of data one used the LimeSurvey application which offers the possibility of creating the questionnaire by generating a virtual address for it, which can be accessed by respondents.

The virtual address used for the online data collection was http://headidea.ro/survey/index.php?sid=95866&lang=en.

Table 3.1. Research themes and variables

No.	Research theme	Research variable	No. of items
	KNOWLEDGE	Knowledge a consumer must have to buy a new product	5
1.		Knowledge about product	

		Knowledge about use	4
		Knowledge about purchase	2
		Influence of the product knowledge degree	
		inginience of the product this montes go dog. co	3 1
2.	BELIEFS	What a new product represents	
		Criteria considered in the adoption of a new product	
3.	ATTITUDES	Favourable attitude toward a certain product	
		Unfavourable attitude toward a certain product	1
		Attitudes toward the refusal of adoption	
		Attitudes toward a rapid adoption	
		Attitudes toward a delayed adoption	5
4.	PURCHASERS'	Agreement of adopting a new product	1
	DECISION-MAKING	Perfectionism, attention to high quality	6
	STYLE	Dissatisfaction toward the purchasing process	
		Impulsiveness	
		Attention to low prices	
		Confusion created by the high number of offers	
		Attention to brand	
		Attention to what is fashionable	
		Orientation toward entertainment and hedonist character	3 3 2 2
		of purchase	2
		Brand loyalty	
		Loyalty to the store	2
		Orientation from the exterior	
5.	CONSUMER'S	Gender	1
	IDENTIFICATION	Age	1
	DATA	Education	1
		Occupation	1
		Income	1

As for the sampling technique used for the present research, one chose a *non-random non-probabilistic method*, namely the *convenience* method. The non-probabilistic methods are based on the researcher's judgement in choosing the target population , and may offer good estimates of the characteristics of the studied population (Malhotra and Birks, 2008).

Considering the limited period of time for data collection, the relatively large size of the questionnaire and the financial restrictions, the investigated population was restricted to the level of the inhabitants aged over 18, of masculine and famine genders, residing in the Caraş-Severin county.

All the data collected were processed with the help of the data statistic analysis software Statistical Package for Social Sciences (SPSS).

SUMMARY CHAPTER IV RESEARCH RESULTS

This chapter has the role to highlight the essential results obtained from the realisation of the quantitative study. Thus, a first stage in the analysis of the research results is represented by the preparation of the data for analysis. Then one proceeded to the description of the chosen sample, made by calculating the relative frequencies of the descriptive variables.

For the analysis of the data one preponderantly used: uni-varied analyses (frequencies, averages), bi-varied analyses (Kendall coefficient, ANOVA), significance tests (T test, Tukey test). After the analysis of all the scales used in the questionnaire, one passed to the actual verification of the hypotheses formulated for the present research. For this purpose one used the linear regression necessary to specify the nature of the relation between two variables. In order to identify the existence of a connection between two variables one calculated Pearson's correlation coefficient.

The demographic variables used within the present research were the respondent's gender, age, educational level, occupation and average income. In the following section each will be represented by calculating the relative frequencies also using graphic elements..

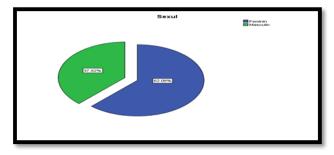


Figure 4.1. Distribution of respondents by gender

In Figure 4.1., one may remark the distribution of the respondents in the sample depending on their gender. Thus, the largest weight is represented by women (62.08%) compared to only 37.92% men.

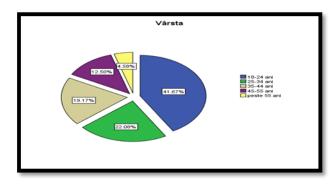


Figure 4.2. Distribution of respondents by age

As regards the age of the interviewed person, as seen in Figure 4.2. most respondents are young people aged between 18 and 24 (41.67%) and between 25 and 34 (22.08%). The rest of the respondents, approximately one third of the total number of interviewed person, are aged over 35, the highest percentage belonging to those over 55 (4.58%).

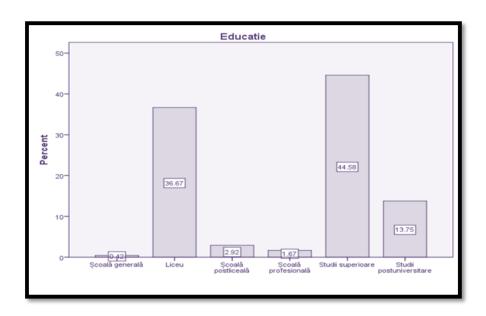


Figure 4.3. Distribution of respondents by education

Figure 4.3. presents the sample distribution depending on the respondent's level of studies. As remarked in the graph, more than half of them have higher education (44.58%) or post-graduate education (13.75%). Over one third of the interviewed subjects graduated only from high school (36.67%), whereas the graduates of middle school, post-secondary school or vocational school exhibit extremely low percentages in the total sample.

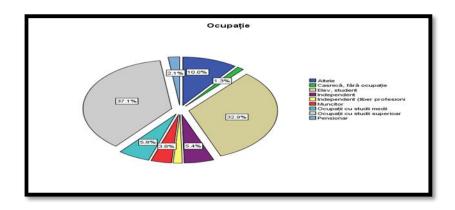


Figure 4.4. Distribution of respondents by occupation

As for the respondents' occupation, one may remark that it is correlated with the level of studies, and thus most of the interviewed people have occupations afferent to higher education (37.1%), or are still school pupils/students or college students (32.9%). The other occupations represent much lower weights in the total answers offered by the persons interviewed in the sample.

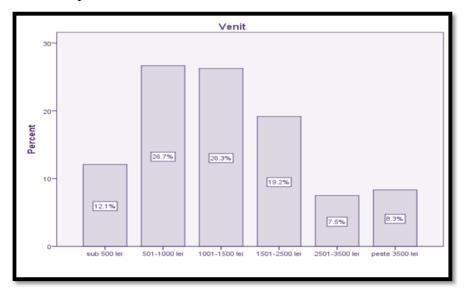


Figure 4.5. Distribution of respondents by income

The last demographic variable recorded for the studied sample refers to the level of respondents' incomes. The distribution of answers is presented in figure 4.5., where one can remark that most of the interviewed subjects have at their disposal between 501 and 1000 lei per month (26.7%) and between 1001 and 1500 lei per month (26.3%). The following category of income as importance in the totality of respondents is that comprised between 1501 and 2500 lei (19.2%), whereas the extreme categories of incomes (very high or very low) have a lower percentage in the total of responses.

CONCLUSIONS

This thesis aimed at offering a perspective on the manner in which consumers adopt a new product. More precisely, in the adoption of a new products, consumer behaviour may be influenced by knowledge, beliefs, attitudes and decision-making style. Attitudes are essential for the research of consumer behaviour, and marketing often searches for modalities to determine and change attitudes related to products, brands and services.

From the theoretical perspective, the paper attempted the delimitation, as accurate as possible, of the concept of new product, together with the processes of its diffusion and adoption. Reaching this objective was possible by conducting a review of the literature in the field, and by its presentation in a structured manner in the first chapter. The importance of new products resides in the benefits they bring to the manufacturing companies both from financial perspective and as method of development and improvement of the firm's image. From the analysis of the literature one also identified the main elements contributing to the success of a new product. Among these, the most important and in fact the most frequently mentioned were the high qualitative level of products, their technological superiority and innovativeness. Regarding the process of products adoption, numerous authors who approached this topic realised a series of models thereof. The common point of all the models analysed were repressed by the fact that they all draw the attention on the long time necessary for adopting new products and on the stages through which a person completes this process.

The second chapter of the work continues by analysing in detail the consumer behaviour in the context of adopting a new product. This analysis referred to four essential aspects of consumer behaviour, and their impact on the process of new products adoption. The four aspects presented were knowledge, beliefs, attitudes and decision-making style, each of them being analysed in the context of adopting innovative products. .

Following the analysis of results, one remarked a series of aspects important in the context of the topic approached. A first aspect that must be mentioned is related to the beliefs of the questioned consumers regarding the significance of a new product. Thus, the members of the sample mainly associate new products with an improvement of the existing products or an innovation, and only to a small extent they consider that new products represent an imitation of the existing ones. As regards the criteria taken into consideration by consumers in the choice of new products, the first position, by far, was occupied by the quality of products.

Thus, for the questioned persons, quality represents the main criterion in the choice of a new product, whereas innovativeness, brand prestige and information received remain on an secondary plane.

A second aspect analysed refers to the consumer's knowledge regarding new products. Among the main information consumers have regarding the new products appeared on the market, the most important for the decision-making process are considered to be the data about the product benefits, general information about the product and information related to its use. On the opposite pole, the least important were considered to be the data related to prices and commercial information. Thus, it seems that for the investigated population the knowledge about the product is important when they make the purchasing decision, whereas the knowledge related to the use of the product, commercial data (i.e. purchase location and time) and the information about the use of the product play a limited role in the purchasing process.

Regarding the importance of knowledge in determining the attitude toward a new product, a significant majority of respondents confirmed the fact that the information detained influences their attitude toward new products.

Among the demographic variables identified, one remarked that gender, education and income of respondents have significant influences on the level of the knowledge possessed by the respondents. Thus, women tend to have more knowledge than men, and one may appreciated they make more informed purchasing decisions than men. Moreover, the knowledge level tends to increase with age, which is somehow obvious, and in parallel with the increase of respondents' incomes.

Based on the literature review one identified three potential attitudes toward the adoption of new product, measured through the factors: refusal of adoption, rapid adoption and delayed adoption. Following the analysis of the results obtained, it resulted that the analysed sample members tend to have an attitude favourable to the adoption of new products, most being aware of the fact that attitudes toward new products influence their purchasing decision.

As regards the differences existing between diverse categories of consumers questioned, contrary to expectations, the results of the statistic analysis showed than men have an attitude more favourable to the adoption of new products than women. Furthermore, one remarked the existence of a direct and negative connection between age and education of the participants in the survey and their general attitude toward the adoption of new products.

Thus, the consumers' attitude toward the adoption of new products becomes more negative as their age and educational level increase. In other words, the persons with higher education and higher ages will be more reluctant to new products than the younger and less educated subjects.

Another aspect approached in the questionnaire was the identification of the decision-making style of the questioned consumers. In the questionnaire one takes into consideration all 11 factors of the purchasers' decision-making style, identified in the study of the literature, more precisely: (1) perfectionism, attention to high quality, (2) dissatisfaction to the purchasing process, (3) impulsiveness, (4) attention to low prices, (5) confusion created by the high number of offers, (6) attention for brand, (7) attention for the fashionable, (8) orientation toward entertainment and hedonist character or purchases, (9) brand loyalty, (10) store loyalty, and (11) orientation from the exterior. Each of the analysed factors has an impact in the consumers' decision to buy a new products, and after the analysis or the answers received from the persons questioned one could make a ranking of these factors, as follows:

Among the 11 factors included in the questionnaire, the strongest influence is exercised by brand loyally, followed by orientation toward entertainment and hedonist character of purchase perfectionism, attention to high quality, attention to low prices, orientation from the exterior, attention to the fashionable, confusion created by the high number of offers, attention to brand, brand loyalty, store loyalty, dissatisfaction toward the purchasing process, and impulsiveness.

One may remark thus that the decision-making style of the sample members is largely determined by brand loyalty (but less by purchase store loyalty). They shop for pleasure rather than out of impulsiveness, are particularly interested in quality and low prices and influenced to a certain extent by the external environment and fashion trends, whereas the multitude of offers tend to create confusion in their purchase process.

The results of this survey are in accordance with the previous research as regards the identification of the decision-making style of consumers. For instance Baoku et al. (2010) found that among the decision-making styles adopted by Chinese farmers consumers one may enumerate: confusion brought about by the high number of offers, attention to fashion, impulsiveness and perfectionism. Kavkani et al. (2011) identified seven styles of decision-making influencing the consumers' satisfaction, i.e.: perfectionism, attention to the new and fashionable, orientation toward entertainment and hedonist character of purchase, confusion created by the high number of offers, impulsiveness, attention to prices and brand loyalty.

Furthermore, Lysonski and Durvasula (2013) reached the conclusion that four of the eight styles of decision-making underwent changes from the statistic point of view in the period 1994 - 2009.

As for the decision-making style of the purchaser and his/her intentions to refuse the adoption or to adopt a new product fast or late, one remarks, from the results of the analysis performed, a positive connection between attitudes and the decision-making style, which means that there is a mutual influence relation between attitudes and decision-making style. A last aspect investigated referred to the impact of the decision-making style on the intention to purchase a new product. The results of the analysis showed that the sample subjects are interested in buying new products to the extent they correspond to their expectations and preferences.

From the analyses conducted one finds a positive correlation between the factors included in the conceptual model and the decision-making process related to a new product. Nevertheless, the testing of the model with specialised software (SPSS, AMOS) have not confirmed its validity. Among the causes having led to this situation, I forward the following:

- 1) use of a sample comprising all the categories of respondents, which contributed to the obtaining of too diversified information;
 - 2) relatively reduced size of the sample used in the research;
 - 3) especially the combination between the first two causes mentioned.

In fact, all the validated models described in the literature (Bakewell and Mitchell, 2006; Geng et al., 2009; Rashid et al., 2014) included less factors of influence on the purchasing decision than the number we proposed in the present research, took into consideration only certain segments of potential buyers (purchasers focused on the search of perfectionism, impulsive purchasers, purchasers focused on the search of innovating products), even if they did not use larger samples (a number of 20 respondents were used in the research conducted by Geng et al., 2009; Rashid et al., 2014).

The correlation coefficients obtained in the present research among the elements of the proposed model, and the reasoning used at the basis of its construction, gives me the hope it will be validated in a larger sample and possibly restrained by a lower number of respondent categories.

Based on the review of the literature one elaborated and proposed a series of hypotheses, whose testing was made by a primary research based on a questionnaire, whose results were analysed and interpreted in the empirical section of the thesis.

As regards the results obtained from the research, one may remark that the hypotheses of the present survey were reasonably validated. Realising a summary of the analyses conducted, one may remark that all forwarded hypotheses were confirmed, as one can remark in the following table.

Table 4.1. Centralisation of hypotheses and results obtained

No.	HYPOTHESIS	STATEMENT CONTENT	CONCLUSION
1.	H1	Consumers' knowledge has a significant influence on their beliefs in adopting a new product.	CONFIRMED
2.	H1a	Consumers' knowledge about a new product influences their beliefs in adopting the product.	CONFIRMED
3.	H1b	Consumers' knowledge about the use of a new product influences their belief in the adoption of the product.	CONFIRMED
4.	H1c	Consumers' knowledge about the purchase of a new product influences their beliefs in the adoption of the product.	CONFIRMED
5.	H2	Consumers' beliefs influence their attitude in adopting a new product.	CONFIRMED
6.	Н3	Attitudes have a significant influence on the decision-making style of the purchaser.	CONFIRMED
7.	НЗа	There is a direct connection between the attitude preponderantly favourable to refusing the adoption of a new product and the purchasers' decision-making style.	CONFIRMED
8.	НЗЬ	There is a direct connection between the attitude preponderantly favourable to the fast adoption of a new product and the purchasers' decision-making style.	CONFIRMED
9.	НЗс	There is a direct connection between the attitude preponderantly favourable to the decision of adopting a new product and the purchasing decision-making style.	CONFIRMED
10.	H4	The purchaser's decision-making style has a significant influence on the adoption of a nee product.	CONFIRMED

As regards the contributions that the present research brings to the literature, more precisely to the adoption of new products from the perspective of the Romanian consumer behaviour, one may mention:

1. The realisation of a survey approaching a new topic in the context of Romanian consumers

One of the main contribution brought by this work is represented by the approach of a theme less studied in the context of the Romanian consumer, namely the process of adopting new products. As the studies related to the adoption of new products by consumers through the prism of factors such as knowledge, beliefs, attitudes and decision-making style, were realised almost exclusively in the Western countries, the approach of this topic in the Romanian context became necessary, as a result of the high importance it exhibits. Thus, the present paper attempted to sketch a theoretical and empirical frame for the research on the manner of adopting new products by the Romanian consumers. The survey conducted represents a first step in the understanding of the factors influencing the purchase of this particular type pf products.

2. Introduction of a new decision-making style

As mentioned in sub-chapter 2.4. of the thesis, decision-making styles are included in a wider category of cognitive styles (Galotti et al., 2006). In order to identify the decision-making style of the consumer, the literature used the Consumer Style Inventory (CSI) introduced by Sproles and Kendall in 1986, which aims at identifying the way in which the products are adopted on the market. This instrument identified eight styles or the consumers' decision-making, i.e.: (1) perfectionism, attention to high quality, (2) attention to the brand, (3) attention to the new and fashionable, (4) orientation toward entertainment and hedonist character of purchase, (5) attention to low prices, (6) impulsiveness, (7) confusion created by the high number of offers, and (8) habit, brand loyalty (a detailed description of these characteristics is made in sub-chapter 2.4.2).

In the case of the present survey, one took into account, beside the styles included in the CSI, another two, identified by Anubhav A. Mishra in a study conducted in 2010, namely brand loyalty and store loyalty. These ten styles of consumers' decision-making were completed by another one, representing the personal contribution of the author, i.e. "Orientation from the exterior". It refers to the influence of acquaintances (friends, family, colleagues) and advertisments when a new product is purchased.

3. Concomitant approach of several variables which may influence the adoption of new products

So far, there are no studies in the literature using at the same time all the factors used in this research: knowledge, beliefs, attitudes and decision-making style. There are however several models of the process of products adoption which included in their structure some of the aforementioned factors (see Figure 1.10 in chapter 1).

In order to identify the way in which consumers adopt a new innovation, some researchers (Trope and Liberman, 2003) used as criteria for adopting new products their

features, others made appeal to the consumers' attitudes and beliefs (Cui, Bao and Chan, 2009).

Consequently, another specific contribution of the present research is represented by the concomitant approach of the factors: knowledge, beliefs, altitudes and decision-making style in the process of adopting new products.

4. Inclusion in the sample of population segments less analysed in previous studies

Most studies in the field of consumers' decision-making styles used the segment of students with ages ranging between 19 and 25 years to identify the way in which they acquire the products from the market (Hafstrom, Hae and Chung, 1992; Durvasala, Lysonski and Andrews, 1993; Canabal, 2002; Lu and Rucker, 2006; Yao Zeng, 2008; Bae, Lam and Jackson, 2009; Mokhlis, 2009; Tarnanidis et al., 2015). Nevertheless there were surveys using as sample only women (Choi, 2002; Tai, 2005; Holmberg, 2010) or population segments aged between 30 and 50 (Bandara W., 2014). Nevertheless, the use of a sample comprising all categories of age may reveal important aspects in the study of new products adoption. As it follows from the results of this research as well, age represents an important factor of influence on the behaviour of new product purchase. Thus, the extension of the research sample to all age categories (Romanian consumers aged between 18 and 70), although it did not result into a representative sample on the regional or national level, may contribute however to the development of knowledge in the domain, offering a starting point for future surveys which also approach the demographic categories less studied in the literature.

RESEARCH IMPLICATIONS, LIMITS AND FUTURE DIRECTIONS OF RESEARCH

As for the implications of the present study, they are both theoretical and managerial. Thus, *from the theoretical point of view*, the research succeeds in:

- Approaching a less studied theme in the context of the Romanian consumers;
- Clarifying certain theoretical aspects in the literature and confirming some results recorded in other pervious researches, in the context of consumers in our country;

- Confirming the fact that factors such as knowledge, beliefs, attitudes and decision-making style of the purchaser contribute to the process of adopting new products;
- Including the factor "Orientation from the exterior" into the list of consumers' decision –making styles.

From the managerial point of view, the present paper draws the attention upon several aspects, among which:

- The results obtained in the construct "Impulsiveness" should make marketers be more preoccupied about the manner in which the consumer performs its products purchase. More precisely, they should take into account the gender of consumers when they debate the adoption of new products in the market. In the literature there is a series of research regarding the comparisons of the purchasing behaviour between men and women. For instance, Sondhi and Singhvi (2006) found that women, unlike men, have the tendency to rely more on the aspect of the product when they buy clothes. According to Birol and Nuri (2007), the sensitivity to the price of a product seems to be more relevant among women, whereas Lam and Bae (2014) reached the conclusion that women, as purchasers, have higher chances to buy by impulse. Consequently, the marketing specialists must know these differences between male and female purchasers, so that they couldadapt to their preferences;
- The study identifies the need for educating and supplying information to consumers related to the concrete benefits of a new product. This contributes to the consumers' conviction that the new product can better satisfy their needs;
- The information regarding the consumption decision-making style will be very useful for the companies because it is very likely that these consumers who recorded a high score in certain characteristics of the decision-making style have clear needs associated to these characteristics and thus allow marketers to focus on them and segment them;
- Romanian consumers grant a special attention to the orientation toward entertainment and hedonist character of purchase, brand loyalty and attention for high quality. In other words, they enjoy the purchasing process of new products, remain loyal to certain brands and have high standards and expectations for the products they acquire.

As for the limits of our research, they are due mainly to the financial and time restrictions and can become very easily constructive and appropriately transformed into future directions of research. Thus, the table below forwards the main limits of the study performed, as well as the possible future directions of research in the field.

Table 4.2. Limits and future research directions

LIMITS	FUTURE DIRECTIONS
Small size of the sample used in the research and its non-representative character.	 Investigation of larger samples, representative on the regional or national level.
• Use of a non-probabilistic sampling method.	 Performance of surveys using probabilistic sampling techniques
 Generalist approach of the theme and of the empirical study which analyses the factors of a new product adoption. 	 Particularisation of the research by certain domains or categories of products, in the analysis of the factors of the process of new product adoption, for the identification of specific particular aspects.
Use of an extended sample providing too general information.	Investigation of certain particular segments of consumers who have different orientations of decision-making (for instance teenagers in contrast with pensioners) or other particular demographic categories which may exhibit a specific interest for a certain field or a certain category of products
Short period of research performance.	Elaboration of panel surveys, meant to periodically investigate the process of new products adoption in dynamic domains, with fast changes, such as the technological field.

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