The Psychology of Consumers and the Behaviour Analysis: A Case of Romanian Refrigerator Market

Emmanuel Olusegun Stober
Bucharest University of Economic Studies
Romania, Piata Romana nr. 6, sector 1, Bucharest - code 010374
Tel: +4 021 319.19.00, Fax: +4 021 319.18.99
stober.emmanuel@gmail.com

Reviewers:
António CALEIRO, Universidade de Évora, Portugal;
David CANTARERO-PRIETO, University of Cantabria, Spain;
George VAGGELAS, University of the Aegean, Greece.

Abstract
What is the motive behind your choice of university? Why do you buy that new product? Where is your preferred shopping mall and when would you rather go shopping? Do your friends shop at the same place or in different locations? Marketing professionals always desire to have answers to these questions. Once they have these answers, they will have a much better chance of creating and communicating products that you and others that share the same preference will want to buy. This is what makes the study of consumer behaviour important. This paper is set out to understand what influences consumer behaviour in the refrigerator market. It is made of quantitative research, having a sample of 264 household consumers from 12 Counties of Romania. It reveals that in order for manufacturers to know consumers preference, they need to first understanding the customers' need, having in mind the current family size, the eating habit, the ease of acquiring such product, total family income and available credit facility. The study shows that among other factors, price and promotions are the first important factors considered in the acquisition process, according to 94% of the respondents; this is followed by energy consumption (89%), while fridge and freezer capacity (88%) are then considered. Surprisingly, respondents would rather buy a refrigeration appliance on the basis of warranty (87%) than brand name (78%).

Keywords: Budget constraint, Consumer behaviour, Consumer preference, Refrigerator, Romania.

JEL classification: C83, D01, D12, L68

Introduction

Marketing professionals spend a lot of their time studying consumers' behaviour. Why do you buy product *A* even when *B* (a close substitute) is available? They want to know how you decided to go to the college you're attending. Where you regularly go shopping and when? Do your friends shop at the same mall or a different mall? They know that once they have these answers, they will have a much better understanding and be able to create and communicate products that you and people like you will want to buy. This is what makes the study of consumer behaviour important. Consumer behaviour considers the many reasons why – personal, situational, psychological, and social – people shop for products, buy and use them, and then dispose of them (Tanner & Raymond, 2015). Consumer behaviour looks at the many reasons why people buy things and later dispose of them. Consumers go through distinct buying phases when they purchases products: (1) realizing the need or want, (2) searching for information about the item, (3) evaluating different products, (4) choosing a product and purchasing it, (5) using and evaluating the product after the purchase, and (6) disposing of the product when it no longer serves current need. A consumer's level of involvement is how interested he or she is in buying and consuming a product. Low-involvement products are usually inexpensive and pose a low risk to the buyer if he or she makes a mistake by purchasing them. High-involvement products carry a high risk to the buyer if they fail, are complex, or have high price tags. Limited-involvement products fall somewhere in between.

The general model of consumer behaviour illustrates that basic attitudes (formed by thought, emotion and intended behaviour) are influenced by personal and environmental factors to create actual behaviour. Marketers are able to influence this process at several points – they can influence thought processes by providing relevant information at the right time, they can influence emotion by using appealing communication and imagery, and they can provide suitable environmental stimuli (for example, pleasant shops or user-friendly websites) to stimulate purchase. On a more subtle level, marketers can even encourage greater consumption of the product – good marketing does not stop at the point of sale.

Studying people's buying habits is as much for small firms as it is for the big multinationals. Entrepreneurs can also study the behaviour of their customers with great success. For example, by figuring out what ZIP codes their customers are in, a business might determine where to locate an additional store. Customer surveys and other studies can also help explain why buyers purchased certain commodity and their experiences with a business or product. Even small businesses such as restaurants use coupon codes. For example, coupons sent out in newspapers are given one code. Those sent out via the Internet are given

Stober E.O. 2016. The Psychology of Consumers and the Behaviour Analysis: A Case of Romanian Refrigerator Market. *Eastern European Business and Economics Journal* **2**(1): 75-94.

another. Then when the coupons are redeemed, the restaurants can tell which marketing avenues are having the biggest effect on their sales.

Companies are now put to the challenge to understand the pulses of new age policyholders and their buying pattern. In this era of intense competition where customer is the king, success depends a lot on the efficiency of the managers in delivering what they have promised and the responsibility lies on the organizations to develop such a culture where business ethics are followed, value for the services is provided and quality services are offered to achieve higher level of customer satisfaction. Therefore, understanding the dynamic of consumer behaviour is essential for achieving customer satisfaction.

We begin the study of the economic behaviour of the consumer by examining tastes. Understanding consumer purchasing decisions will help us to understanding how changes in income and prices affect the demand for goods and services, and why the demand for some products is more sensitive than others to changes in prices and incomes. To understand what is going on in the mind of a consumer or how they make their purchasing decision, this study will start the second section with theoretical analysis – giving us a background information of some of the variables that influences the decision making process. Section 2.2 is an empirical analysis, it present refrigerator main market players and the situation analysis. The methodology is presented in section 3, research results in section 4 and the paper concludes in the firth section.

Literature Review

Theoretical Analysis

The study of consumer behaviour occupies an important place in the study of economics. The problem of a consumer consists of three things: (a) the object – to maximize total utility (satisfaction), (b) the constraints – limited resources (income), and (c) the decision variable – the quantity purchased using limited resources.

The theory of consumer behaviour shows how the choices that individual makes when prices and income vary, it can also be used to determine their preferences. The theory begins with three basic assumptions about people's preferences for one market basket versus another. We believe that these assumptions hold for most people in most situations. One of the basic assumptions of consumer preference is that consumers always prefer more of any goods or services to less; that is, we assume that the commodity is a good rather than a bad, and the consumer is never satiated with the commodity because more is always better, even if just a little better.

Another point is that preferences are transitive. This means that if a consumer prefers basket A to basket B and market B to basket C, then the consumer also prefers A to C. For example, if a Ferrari is preferred to a Honda and Honda to a Dacia, then a Ferrari is also preferred to a Dacia. Transitivity is normally regarded as necessary for consumer consistency (Pindyck, et al., 2009).

Preferences are also assumed to be complete. In other words, consumers can compare and rank all possible baskets. Thus, for any two market baskets A and B, a consumer will prefer A to B, will prefer B to A, or will be indifferent between the two. By indifferent, we mean that a person will be equally satisfied with either basket, since he is presented with all the combinations of market baskets that provide the same level of satisfaction. Therefore, the consumer is indifferent among the market baskets. Note that these preferences ignore costs. A consumer might prefer steak to hamburger but buy hamburger because it is cheaper. In recent times, efforts to understand consumer attitudes or overall buying behaviour have been extensively explored. Research has shown that preferences can be triggered by a number of attributes from size, shape, colour, print, package, taste, special features, consistency, the statute attached to the person owning the product (Cătoiu & Teodorescu, 2004; Naidoo & Wiktor, 2005). Perceived quality or price, brand image, and promotion have shown to be positively related with purchase decision (Azhar, et al., 2014). Social media has also shown to have an impact on how consumers react towards a product (Ioanăş & Stoica, 2014).

Consumers' preferences are not always better defined, but formed along the process of choosing a constructive point of view which suggests that different tasks and contexts focus on different facets of the possibilities, hence, the consumer focussed on different considerations leading to inconsistent decisions (Bennett & Russell, 2001; Novemsky, et al., 2007). Given the assumptions about preferences, a consumer can always indicate either a preference for one market basket over another or indifference between the two. Indifference curves are a crucial tool of analysis because they are used to represent an ordinal measure of the tastes and preferences of the consumer and to show how the consumer maximizes utility in spending income. The technique of indifference curves was originally developed by (Edgeworth, 1881) and later elaborated by (Leontief, 1933; Hicks & Allen, 1934). It reveals how consumer can simply compare the utility of different combinations of goods within the constraints of his income. A consumer possesses a definite scale of preferences for goods and services. Each scale of preference consists of a number of alternative combinations of two or more goods, which gives the consumer same level of satisfaction. Therefore, the consumer is indifferent towards these combinations.

Preferences do not explain all of consumer behaviour. Consumer maximum satisfaction is subject to budget constraints due to limited income, which limits an individual's ability to consume in light of the prices they must pay for various goods and services. A consumer would like to go to the highest indifference curve to gain maximum satisfaction. However, in the real world, the power of decision making is confined in the given constraints of the consumer – the opportunity factors. These factors consist of given money income, price of commodity X, and price of commodity Y. There may be a number of combinations of X and Y which can be purchased by the given budget constraint. Hence, consumers will choose a combination of goods or services that will maximize the satisfaction they can achieve, given the limited budget available to them. The budget constraint is not just about money, it can also be in terms of time – it takes time to board and shop (Morey, 2014). Hence, you can also have a time constraint in addition to money constraint. What is your opportunity cost of embarking on another trip to Rome? The answer will depend on where you are on your budget constraint.

A change in income or price can also have direct or indirect effect on consumer spending behaviour, for example, let say John spends 25% of his income on food and another 25% on entertainment. But when his company decided to lower his salary, he is forced to spend less on entertainment. This is a direct change in income, resulting in him or her spending less due to the income effect. Now let assume his salary does not change, but the price of food goes up; indirectly John's income has gone down since he now has less money to spend on other things after paying more for food. So he reduces his spending on entertainment. This is also the income effect. In other words, when income increases, it effectively increases a person's or economy's discretionary income. Therefore, the person or economy will likely spend more on goods and services. The inverse is also true; any decreasing income will cause a decrease in consumption due to the income effect. The substitution effect is closely related to the income effect. An increase in price of one goods will cause people to purchase substitute goods instead and vice versa. Therefore, a rising price will have two effects. It will cause people to reduce overall consumption and to move to other goods. Because the consumer's wants are unlimited, and sometimes exceed his ability to satisfy them all; it is important that the consumer spend income so as to maximize satisfaction (Investopedia, 2015).

For organizations to know where consumer preferences and budget line is tangent, they will use marketing and statistical studies to learn how different groups of consumers value a broad set of attributes. Combined with information about how these attributes will affect manufacturing costs, the company can design a production and marketing plan. Let look at a case of automobile consumer groups as cited by (Pindyck, et al., 2009); these groups' different preferences for automobiles can affect their purchasing decisions. Suppose that each consumer has an overall car budget of $20,000, but has decided to allocate $10,000 to interior size and acceleration; and $10,000 to all the other attributes of a new car. Each group, however, has different preferences for size and acceleration. By finding the point of tangency between a typical individual's indifference curve and the budget constraint, consumer in this group would prefer to buy a car whose acceleration was worth $7000 and whose size was worth $3000. Individuals in the second group would prefer cars with $2500 worth of acceleration and $7500 worth of size. The consumer in the first group will be willing to trade off a considerable amount of interior space for some additional acceleration. Given a budget constraint, they will choose a car that emphasizes acceleration. The opposite is true for consumers in second group. In the context of this example, one potentially profitable option is to appeal to both groups of consumers by manufacturing a model emphasizing acceleration to a slightly lesser degree than preferred. A second option is to produce a relatively large number of cars that emphasizes size and a smaller number emphasizing acceleration. In a related strain, consider a consumer thinking of buying a calculator for $15 and a jacket for $125 are more likely to agree to travel for 10 minutes to save $5 on the calculator than to travel the same 10 minutes to save $5 on the jacket (Kahneman & Tversky, 1984; Kahneman, 2011).

Companies are now getting to understand consumer's behaviours and their sensitivity to price. Hence they have set strategies in capturing consumer's surplus. More than half the revenues in many department stores come from promotional sales. Based on observation in the market, most retail stores often post extremely high regular prices for goods but then immediately put them on sale – be it for summer sales, Black Friday sales or Christmas sales at substantial discounts, while displaying the original prices and percentage discounts prominently for consumers.

Sometime choices are difficult or even complicated. Imagine a situation where the government is preparing for the outbreak of an unusual Asian disease, which is expected to kill 600 people. There are two proposed alternative programs to combat the disease. Assume that the exact scientific estimates of the consequences of the programs are as follows: If Program A is adopted, 200 people (72%) will be saved. If Program B is adopted, there is a one-third probability that 600 people will be saved and a two-thirds probability (28%) that no people will be saved. In this case, which of the two programs would you favor? The formulation of Problem 1 implicitly adopts as a reference point a state of affairs in which the disease is allowed to take its toll of 600 lives. The outcomes of the programs include the reference state and two possible gains, measured by the number of lives saved. As expected, preferences are risk averse: A clear majority of respondents prefer saving 200 lives for sure over a gamble that offers a one-third chance of saving 600 lives (Kahneman & Tversky, 1984).

Bordalo, Gennaioli, and Shleifer (2013) suggest that these and several other phenomena can be explained in a unified way using a model of salience in decision making. They explores the context effects that arise from manipulations of the choice set, such as changes in price levels and violations of independence of irrelevant alternatives such as decoy and compromise effects. Instead of firms manipulating their consumers, the focal point should be given by the satisfaction level derived from the quality of services provided and information on goods and services. Since consumer satisfaction attained from goods and services quality is an important tool for retaining consumers (Ali, et al., 2010).

Empirical analysis

Romanian consumption behaviour has changed a lot after 1990 and mostly after its accession into the European Union (EU) in January 1st, 2007. With a 2.6% increment during the last quarter of 2014, and 5% forecast for 2015, consumption is at this point the main growth factor in Romania, after a long period of stagnation that followed the global crisis – a time when domestic consumption in Romania decreased by approximately 10% (Martian, 2015). Consumers are now psychologically ready to the reality of growth in price level as quality of appliances including refrigerators shift towards the EU standard. Volume sales of refrigeration appliances started to rise again after 2 years of consecutive decline; the total decline of the market from 2011-2013 was 11.2% or at 5.8% Compound Annual Growth Rate (CAGR) before an increase of 13.5% in 2014(see figure 1). The total market size increased at 0.2% CAGR from 2011 to 2014, as a result of the decreased from 2011 to 2013. As a result of this moment, all the market leaders lost some market share shares in favor of Samsung from 2011 to 2014 as revealed in (figure 1a, & 1c). Cooling appliances salea increased by 14.8% in Q1 2015 when compared with Q1 2014. Models with one door greater than 90cm leading the sales by recording 43.9% increase from Q1 2014-Q1 2015. 3+ doors recorded 35.1% increase, 2 doors Bottom Freezer is 22.4%, 2 doors Side by Side is 16.4%, 1 door 81-90cm is 4.7%, 2 doors Top Freezer is 4.5% while 1 door up to 80 cm/Boxes registered 47.5% decrease in sales. SC Arctic SA one of Romania's strongest and most efficient companies maintained its leading position in consumer refrigeration appliances, with 36% volume share in Q1 2015. Samsung stayed in second position with 12.4%, a position occupied by Beko in Q1 2014, which is currently in 3rd position with 9.3% market share. At 9.1%, Indesit is very close to Beko, while Whirlpool is in 5th position with 6.7% (GfK, 2015).

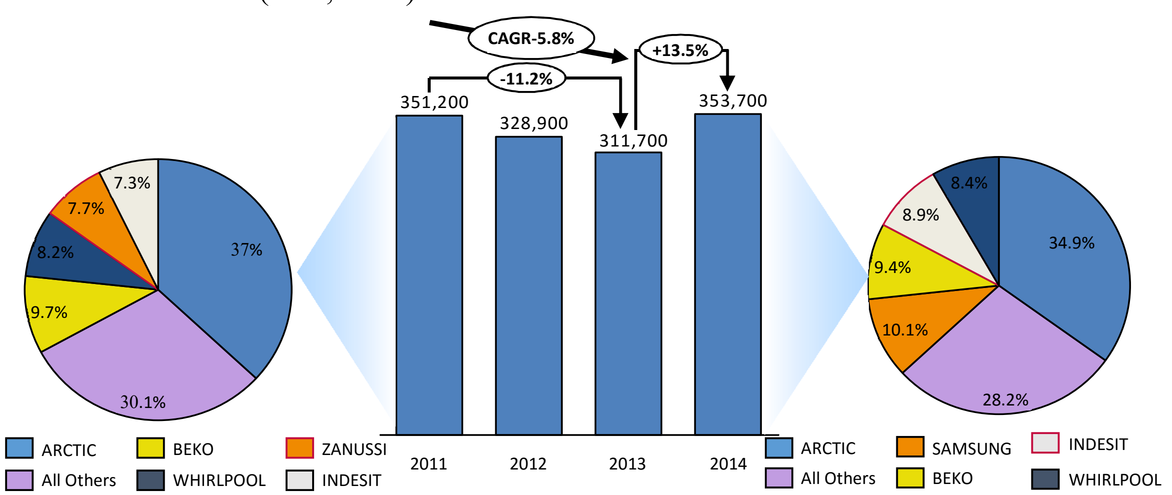


Figure 1a Figure 1b Figure 1c

Fig. 1. Romanian Cooling Market Size and Shares (Data Source: GfK Romania)

The sales volume at the end of 2015 is expected to increase at 3% CAGR and by 5% value CAGR at constant 2014 prices over the forecast period, after the recovery of all refrigeration appliances categories. The most popular category, fridge freezers, is expected to have the highest volume CAGR over the forecast period. SC Arctic is the only domestic producer within this category and enjoys growing popularity due to its proper price positioning and long experience in the Romanian market (Euromonitor International, 2015). In June 2015, SC Arctic reached the threshold of 25 million refrigerators produced at its plant in Gaesti, in its 45th year of activity. The plant in Gaesti is the second-largest refrigerator plant in Europe, just behind the Arcelik plant in Eskisehir, Turkey. The Gaesti plant has a production capacity of 2.6 million units per year and offers products at international standards of complexity and safety. For more thab 8 years, Arctic has sustained its market leader position in Romania, and 85% of its production is exported to more than 60 countries. In Romania one Arctic product is sold every minute and 80% of Romanian families have at least one Arctic product in their homes (Radut, 2015). The increase in sales derived from replacement purchases and the development of online retailing stores is boosted by the reinvigorated consumer credit market. The flow of new consumer credit has gathered momentum again after the crisis, as financial institutions are under pressure to cover for the losses due to non-performing loans and have started to provide more credit, though with somewhat more stringent conditions.

Methodology

This study is made of quantitative research, carried out through online direct survey method, based on a sociological questionnaire. The survey was conducted from March 15th, 2015 to April 20th, 2015. The method of analyzing the data is of simple percentage obtained by converting responses from respondents in each question. The responses were collected from 264 household customers from 12 counties in Romania, who had purchased a refrigerator in the last 3 years. The study contains 21 questions, from which we analyzed 16 relevant questions and 5 profiling questions as revealed in Table 1.

Table 1. Socio-demographic profile of respondents

Respondents'characteristics	**N**	**Percent %**
Gender:		
Male	86	32.6%
Female	178	67.4%
Residential location:		
Bucuresti	170	64%
Targoviste	68	26%
Pitesti	6	2%
Titu	4	2%
Voluntari	2	1%
Breaza	2	1%
Uliesti	2	1%
Balteni	2	1%
Bacau	2	1%
Cluj-Napoca	2	1%
Târgu Jiu	2	1%
Suceava	2	1%
Age group:		
18 – 25 years	48	18.2%
26 – 45 years	180	68.2%
46 – 65 years	36	13.6%
Income level:		
< 500 RON	18	6.8%
501 – 1000 RON	60	22.7%
1001 – 1700 RON	70	26.5%
1701 – 2500 RON	34	12.9%
> 2500 RON	82	31.1%
No. of family member:		
1 person	20	7.6%
2-3 persons	172	65.2%
4-5 person	56	21.2%
> 5 persons	16	6.1%

Source: author's contribution

Research Results: Buying Behavior

According to the survey, 53.8% of the respondents own a bottom freezer, of which 42.3% are Arctic brand, 14.1% Beko brand, 9.9% Indesit, Samsung and Electrolux both have 5.6%. Side by side two doors refrigeration appliances are owned by 2.3% respondents; of which

Stober E.O. 2016. The Psychology of Consumers and the Behaviour Analysis: A Case of Romanian Refrigerator Market. *Eastern European Business and Economics Journal* **2**(1): 75-94.

Samsung has 33.3% of the market share according to survey, while 66.7% goes to other brands other than the main players. Two doors freezer on top revealed to be owned by 28% of the household, of which 48.6% of this number is Arctic brand, Beko and Indesit 10.8% each, Electrolux 8.1%, Samsung 2.7% and others brands account for 18.9%. 15.9% of the total refrigerators own by the respondents are one door refrigerator. Arctic is the highest brand with 52.4% from this number, Indesit is 19%, and Electrolux 4.8%.

Table 2. Owned refrigeration appliances by brand and type

Brand names	**What style of refrigerator do you have?**			
	With 1 door	**With 2 doors (freezer on top)**	**With 2 doors (freezer in downside)**	**Side by side (with 2 side doors)**
Others	6	14	32	4
Arctic	22	36	60	0
Samsung	0	2	8	2
Beko	4	8	20	0
Indesit	8	8	14	0
Electrolux	2	6	8	0
Total	**42**	**74**	**142**	**6**

Source: author's contribution

Fifty-six respondents out of 264 (21.2%) own other brands of which Bosch (5%) mostly bottom-freezers and LG (4%) equally top-freezers and bottom-freezers. Regarding the importance of the characteristics of a refrigerator given by respondents in Table 3, we find that 94% of respondents consider price as important and very important in the decision to purchase a refrigerator. Eighty-nine percent of them consider energy as important and very important. while freezer and fridge capacity are important to 88%. Fifty-seven percent of respondents think that the LCD display is somewhat important or very less important while 33% consider special functions less/not important.

Table 3.

The importance of the characteristics of the refrigerator in the acquisition process

Features	**Very important**	**Important**	**Somewhat important**	**very less important**	**Not important**
Brand	32%	46%	15%	6%	1%
Design	20%	43%	29%	6%	2%
Price	59%	35%	6%	0%	0%
Energy consumption	57%	32%	7%	2%	2%
Display LCD	3%	13%	34%	23%	27%
Special functions	8%	29%	31%	16%	17%
Freezer capacity	41%	47%	7%	4%	2%
Fridge capacity	45%	43%	9%	2%	2%
Warranty	50%	37%	9%	2%	2%

Source: author's contribution

In the table provided below, we see that between 35.6% and 39.4% of respondents are very satisfied with each of the features of the refrigerator currently own (energy consumption, noise, fridge capacity and freezer capacity) and between 44.7% and 55.3 % are satisfied. By summing the percentages, between 84.1% of respondents are satisfied and very satisfied with the main features of the refrigerator. For other functions, 40.2% of the respondents considered automatic defrost as very important function, while 32.6% of them considered Non frost to be on top of their wanted list. It is then followed by fast freezing, quick cooling, antibacterial filter and 24hour autonomy.

	Energy consumption		**Noise**		**Fridge Capacity**		**Freezer Capacity**	
Degree of satisfaction	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
Very satisfied	94	35.6%	104	39.4%	102	38.6%	102	38.6%
Satisfied	146	55.3%	118	44.7%	134	50.8%	120	45.5%
Somewhat	20	7.6%	28	10.6%	24	9.1%	24	9.1%
Unsatisfied	4	1.5%	14	4.5%	4	1.5%	18	5.3%
Very unsatisfied	0	0%	2	0.8%	0	0%	4	1.5%
Total	264	100%	264	100%	264	100%	264	100%

Table 4. The degree of satisfaction with the characteristics of the refrigerator owned

The main reason mentioned by the respondents for the replacement of the refrigerator is malfunctions (39.4%), while 23.5% mentioned insufficient capacity and 9.8% of respondents have changed their refrigerator due to high energy consumption (see table 5).

Table 5. Frequency distributions - main reason for replacing the old refrigerator

Replacement reasons	Frequency	Percent
Others	36	13.6%
Malfunctions	104	39.4%
High noise level	6	2.3%
Insufficient Capacity	62	23.5%
Dimensions inappropriate	16	6.1%
High energy consumption	26	9.8%
Need special functions	14	5.3%
Total	264	100%

Source: author's contribution

The figure below revealed that price and promotions (64.4%) are the most important reason for the chosen refrigerators. According to 56.8% of the respondents, energy consumption is the second important factor to put in consideration in the purchasing decision. Meanwhile, 53% consider the refrigerator capacity in the acquisition process, and 40.2% are brand-loyal.

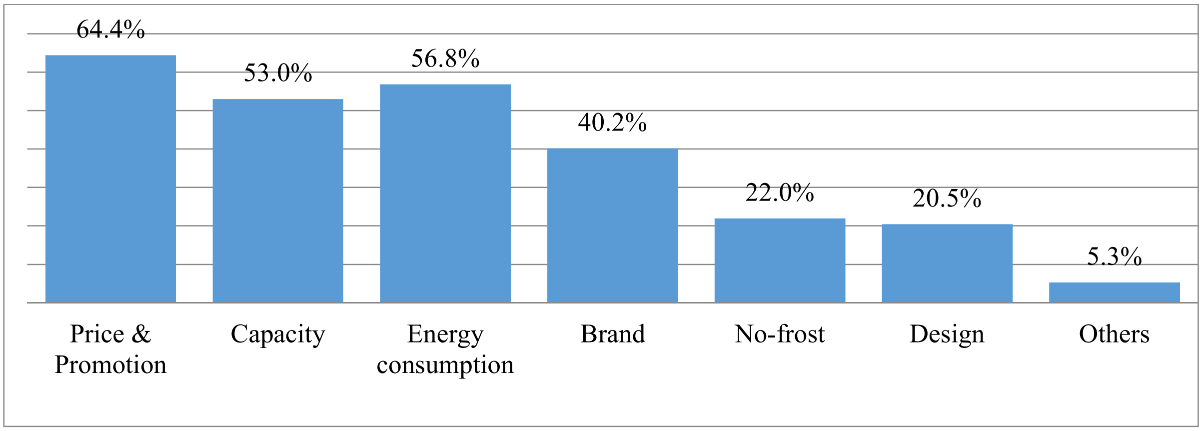
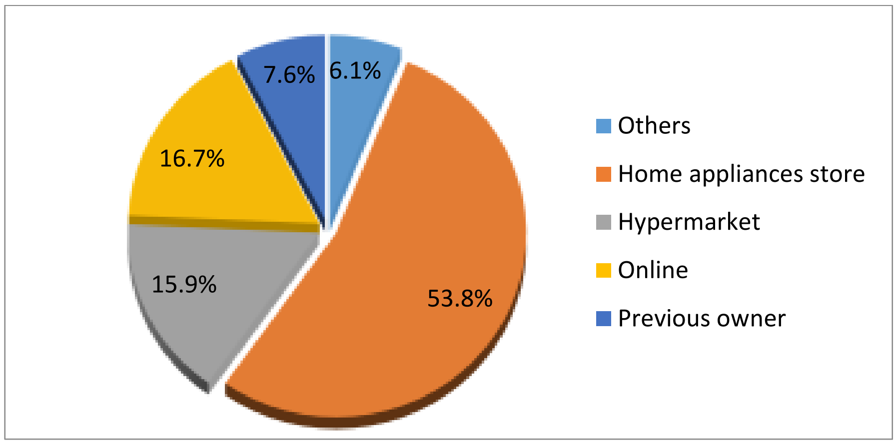


Fig. 2. The main reasons for the purchase of current refrigerator (Source: author's contribution)

The survey shows Home appliance stores (specialized retail store) as the main place of refrigerator purchase, followed by online retail stores, and hypermarkets in the place.

Fig. 3.
Place of Purchase



Source: author's contribution

Table 6 reveals that irrespective of the income per family member, 44% of the respondents will not spend more than 1200 RON ($305) in buying a refrigerator. This is followed by another 28% that are willing to go as high as 1400 RON ($355), of which 40.5% of them are in the >2500 RON (>$635) income per family member. Meanwhile, sixteen percent of the 264 respondents who are mostly in the 501-1700RON ($127-$431) income per family member bracket are more or less content with or can only afford a 900 RON ($228) refrigerator.

Table 6.
The correlation between variables: net income per family member and cost of refrigerator.

Net income per family member	**Additional cost to the basic 900 Ron refrigerator model**					**Total**
	< 100 RON	101-300 RON	301-500 RON	501-800 RON	> 801 RON	
< 500 RON	0	12	6	0	0	18
501 – 1000 RON	14	24	8	4	0	60
1001 – 1700 RON	18	28	18	6	0	70
1701 – 2500 RON	2	16	10	4	2	34
> 2500 RON	8	26	30	4	14	82
Total	**42**	**116**	**74**	**18**	**16**	**264**

Source: author's contribution

Stober E.O. 2016. The Psychology of Consumers and the Behaviour Analysis: A Case of Romanian Refrigerator Market. *Eastern European Business and Economics Journal* **2**(1): 75-94.

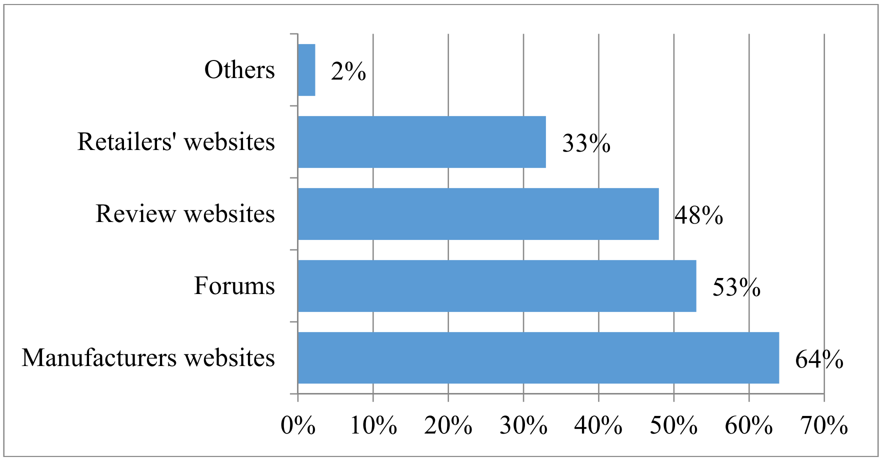
Research has shown that 74% of consumers rely largely on the Internet as an information source in the acquisition process, followed by their knowledge / experience (68%), while 64% of the respondents count on their family member and friends in buying process.

Information sources	Very much	Much	Somewhat	Little	Very little
Family Member/Friend	31%	33%	21%	9%	6%
Dealer from the store	6%	19%	47%	19%	9%
Internet	35%	39%	21%	4%	2%
Mass-media	3%	17%	27%	25%	28%
Personal knowledge / experience	38%	30%	18%	8%	5%

Table 7. Information sources utilized in the buying process
Source: author's contribution

Table 7 is also supported by Figure 4. Of the 264 respondents, 64% of them go directly to manufacturers' websites, 53% use forums, and 48% use review websites. Two respondents out of 264 respondents (0.76% of total respondents) do not use online sources of information (response included in "Other") during the acquisition process.

Fig. 4.
Online information sources used by consumers



Source: author's contribution

E-commerce seems to be the way forward in this internet age among young adult. Seventy nine-percent of the respondents from age 26 – 45 years rely to a large extent on internet sources in the process of purchasing their refrigerator. While 67% of age 18 – 25 years claimed to have made their decision based on online sources; only 56% of age 46 – 65 rely on the internet in the refrigerator acquisition process (see tab. 8).

Table 8.
The correlation between the variable: "How much do you rely on the Internet in the refrigerator acquisition process "and "Age group"

	Age Group			Total
	18 – 25 years	26 – 45 years	46 – 65 years	
Very much	14	68	10	92
Much	18	74	10	102
Somewhat	12	32	12	56
Little	4	4	2	10
Very little	0	2	2	4
Total	48	180	36	264

As presented in (table 9), 73% of women (130 women out of 178) stated that they rely or very much rely on family members and friends as a source of information in the acquisition process of refrigerators, while only 44.2% of men rely on family and friends opinion as source of information.

Table 9.
The relationship between the variable: "How much do you rely on family member and friends in the refrigerators acquisition process" and "gender of the respondent".

	Gender of the respondents		Total
	Female	Male	
Very much	62	20	82
Much	68	18	86
Somewhat	30	26	56
Little	12	12	24
Very little	6	10	16
Total	178	86	264

Source: author's contribution

After analysing the correlation between the variables "How you bought last refrigerating appliance" and "Age group", we found that more than 50% of people involved in each age group acquired refrigerators in specialized stores. As a matter of fact, 63% of the age group 18 – 25 years bought theirs in specialized stores. Twenty percent of respondents in the age group 26-45 years purchased refrigerators by online order, while 22.2% of the age group 46-65 years led those that patronized hypermarket in purchasing refrigerator (see table 10).

Table 10. Comparing age groups and their source of acquisition

	Age Group			Total
	18 – 25 year	26 – 45 year	46 – 65 year	
Others	2	10	4	16
Specialist stores	30	94	18	142
Hypermarket	6	28	8	42
Order online	6	36	2	44
From the Owner	4	12	4	20
Total	48	180	36	264

Source: author's contribution

Conclusion

The Romanian refrigerator market is a mature market with consumers constantly evolving and becoming increasingly more informed. The decision of buying a new refrigerator has to do first with understanding the customers' needs, having in mind the current family size, and eating habits – if they eat more at home, whether home cooking or take-out or delivery.

Making a refrigeration appliance attractive and more competitive could involve a good package accommodating optimum features. To approach the Romanian consumer and convince him or her that the refrigerator offered is just the right product for him or her, emphasis must be placed on the characteristics that are essential in the decision-making process, such as total family income, the ease of acquiring such product, income level of the social demographic targeted group, available credit, price and promotions (most important factor mentioned by 94% of the respondents) and energy consumption (mentioned by 89% of the respondents). Since a large number of the respondents consider themselves 'satisfied' and 'very satisfied' with the basic characteristics of the refrigerators (consumption, noise, cooler/freezer capacity) an increased focus must go towards the special functions like 'Fast cooling', 'Quick frost', and 'Automatic defrost'.

To reach the consumer, it is highly advised to be present in the specialized stores where most of the consumers (63%) choose to acquire their refrigerator and increase the promotions and offer specialized training to the dealers in the shops. The number of consumers that order their refrigerators online (17%) is becoming significant and is expected to increase; therefore online promotions are also an important tool to reach the consumers, just as online forums and review sites that are considered trustworthy sources of information.

Since refrigerators are long-term usage products, and consumers choose to replace them only when they stop working or their needs are no longer covered, therefore it is highly recommended to start a buy-back campaign to stimulate sales. Going forward, understanding consumer preference will help organizations to determine what feature to include in their product and which demographic group to target.

References

Ali, I., Rehman, K. U., Yilmaz, A. K., Nazir, S., & Ali, J. F. (2010). Effects of corporate social responsibility on consumer retention in cellular industry of Pakistan. *African Journal of Business Management,* **4(4)**, 475-485.

Azhar, A., Sallehuddin, M. N. & Che, A. C., (2014). Factors Influencing Consumers' Purchase Decision of Private Label Brand Products. *International Journal of Economic Practices and Theories,* **4 (2)**, Special issue on Marketing and Business Development, 101-110.

Bennett, J., & Blamey, R., eds. (2001). *The Choice Modelling Approach to Environmental Valuation*. Cheltenham: Edward Elgar Publishing

Bordalo, P., Gennaioli, N., & Shleifer, A. (2013). Salience and Consumer Choice. *Journal of Political Economy,* **121(5)**, 803- 843

Cătoiu, I., & Teodorescu, N. (2004). *Consumer Behavior*, 2nd Edition, Bucharest: Uranus Publishing House

Edgeworth, F. Y. (1881). *Mathematical Psychics: An Essay on the Application of Mathematics to the Moral Sciences.* London: Kegan Paul.

Euromonitor International. (2015, March). *Refrigeration Appliances in Romania*. Retrieved August 31, 2015, from http://www.euromonitor.com/refrigeration-appliances-in-romania/report

GfK (2012). *PANELMARKET ROMANIA- Topline Cooling.* Bucharest: GfK Romania.

GfK (2015). *PANELMARKET ROMANIA- Topline Cooling.* Bucharest: GfK Romania.

Hicks, J. R., & Allen, R. G. D. (1934). A reconsideration of the theory of value. *Economica*, **14**, 52-76 and 196-219.

Investopedia. (2015). *Income Effect - Video*. Retrieved June 2, 2015, from http://www.investopedia.com/video/play/income-effect/

Ioanăş, E., & Stoica, I. (2014). Social Media and its Impact on Consumers Behavior. *International Journal of Economic Practices and Theories,* **4 (2)**, Special issue on Marketing and Business Development, 168-178.

Kahneman , D., & Tversky, A. (1984). Choices, Values and Frames. *American Psychologist,* **39(4)**, 341-350.

Kahneman, D. (2011). *Thinking Fast and Slow.* New York: Farrar, Straus & Giroux.

Leontief, W. W., (1933). The Use of Indifference Curves in the Analysis of Foreign Trade. *The Quarterly Journal of Economics*, **47(3)**, pp. 493-503.

Martian, N. (2015). *Romanian economy to benefit from increasing internal consumption, says EY*. Retrieved September 1, 2015, from http://business-review.eu/featured/romanian-economy-to-benefit-from-increasing-internal-consumption-says-ey-82681

Morey, E. (2014). *Budget Constraints.* University of Colorado Boulder, Department of Economic. Retrieved May 16, 2015, from http://www.colorado.edu/economics/morey/2010/Lectures/2010_Lecture-BudgetConstraints.pdf

Naidoo, R. & Wiktor, L. A., (2005). Economic benefits of biodiversity exceed costs of conservation at an African rainforest reserve. *Proceedings of the National Academy of Sciences of the United States of America (PNAS),* **102(46)**, pp. 16712-16716, Doi: 10.1073/pnas.0508036102

Novemsky, N., Dhar, R., Schwarz, N., & Somonson, I. (2007). *Preference Fluency in Choice*, Journal of Marketing Research, **Vol. XLIV (August)**, 347–356

Pindyck, R. S., Rubinfeld, D. L., & Koh, W. T. (2009). Consumer Behavior, 63-106. In Pindyck, R. S., Rubinfeld, D. L., & Koh, W.T., *Microeconomics: An Asian Perspective*. Singapore: Pearson Education, Inc.

Răduţ, C. (2015, June 18). *Arctic – second-largest refrigerator plant in Europe.The Romanian company produced 25 million refrigerators in 45 years of activity.* Retrieved August 31, 2015, from www.nineoclock.ro/arctic-%E2%80%93-second-largest-

Stober E.O. 2016. The Psychology of Consumers and the Behaviour Analysis: A Case of Romanian Refrigerator Market. *Eastern European Business and Economics Journal* **2**(1): 75-94.

refrigerator-plant-in-europe-%E2%80%A2the-romanian-company-produced-25-million-refrigerators-in-45-years-of-activity/

Tanner, J. F., & Raymond, M. A. (2015). Chapter 3: Consumer Behavior: How People Make Buying Decisions. In *Principles of Marketing and Business Communication, v. 1.0.2.* Flat World Education, Inc.