

## Analysis of the Romanian's attitude towards purchasing a mobile phone- between hedonic and utilitarian

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**Abstract.** Attitude is the basis of consumer behaviour. To better understand this aspect of the behaviour all relevant attributes of a product or service must be studied. Therefore, the main purpose is to better understand the individual and make him your customer. Thus, the behaviour combines logical, cognitive, utilitarian aspects, as well as aspects related to emotions, feelings, affectivity (the hedonic component) and the attitude takes these two hypotheses to which it is added the intentional side. This concerns the intention of an individual after he has formed an idea, an opinion regarding a service or a product. **Objectives:** This paper deals with only two aspects of the attitude, namely the utilitarian/cognitive side and the hedonic/affective side. To obtain concrete results in what concerns the attitude of the consumers between hedonic and utilitarian we have conducted a quantitative research through which we analyzed the attitude of the inhabitants of Iasi towards buying a mobile phone, using a sample of 200 people living in Iasi. **Prior Work:** We, as researchers, have conducted previous researches using either the same topic (hedonic vs. utilitarian motivation), or the same product/industry (mobile phone/telephony). **Approach:** The problem that we submit to research is determining the proportion of hedonic and utilitarian that is involved in the purchase of a mobile phone in a temporal horizon of 6 months. Mobile phones are becoming more and more necessary, this being the reason why a growing number of persons have such an item. But the great rate to which they are renewed shows that the concept of pleasure interferes more and more in buying and having them. Thus, the purchase of a mobile phone must respond to both rational and emotional demands. **Results:** Starting from the main objective, we want to determine the proportion of the cognitive components as well as affective ones of the attitude of the mobile phone buyers from the inhabitants of Iasi- the biggest city from the North-East of Romania. **Implications:** As a direction for further researches we think that it could be attempted to find out the consumption or the daily use of the mobile phone or what applications are mostly used on a mobile phone (in this situation, there should be taken into consideration a new aspect, namely the occupation, which will be an important factor to influence consumption). Once this aspect is discovered, it could be attempted to find out if the mainly utilitarian attitude derives from this factor. As it is used a lot, the mobile phone may lose some of the features that meet people's affective needs. **Value** Starting from the constitutive components of the attitude, we have studied the utilitarian/cognitive dimensions.

**Keywords:** consumer's attitude; utilitarian/cognitive motivation; hedonic/affective motivation

**JEL Classification:** M30, M31, M37

### 1 Introduction

Attitude is the basis of consumer behaviour. To better understand this aspect of the behaviour all relevant attributes of a product or service must be studied. Therefore, the main purpose is to better understand the individual and make him your

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customer. Thus, the behaviour combines logical, cognitive, utilitarian aspects, as well as aspects related to emotions, feelings, affectivity (the hedonic component) and the attitude takes these two hypotheses to which it is added the intentional side. This concerns the intention of an individual after he has formed an idea, an opinion regarding a service or a product.

This paper deals with only two aspects of the attitude, namely the utilitarian/cognitive side and the hedonic/affective side. To obtain concrete results in what concerns the attitude of the consumers between hedonic and utilitarian we have conducted a quantitative research through which we analysed the attitude of the inhabitants of Iasi towards buying a mobile phone, using a sample of 200 people living in Iasi.

The problem that we submit to research is determining the proportion of hedonic and utilitarian that is involved in the purchase of a mobile phone in a temporal horizon of 6 months. Mobile phones are becoming more and more necessary, this being the reason why a growing number of persons have such an item. But the great rate to which they are renewed shows that the concept of pleasure interferes more and more in buying and having them. Thus, the purchase of a mobile phone must respond to both rational and emotional demands. The main objective that we purposed was to determine the proportion of the cognitive components as well as affective ones of the attitude of the mobile phone buyers from the inhabitants of Iasi- the biggest city from the North-East of Romania.

## **2. Research Methodology**

To collect the necessary data for the research we used, as method, the quantitative research. As sample we purposed a number of 200 valid questionnaires (we chose the value of 200 people in order to make the sample more representative for the population of Iasi)

As sampling method we chose sampling rate, the used variables being the gender of the person and the age group to which the person belongs. As distance between the age groups we chose 5 years and at the gender of the person we applied the nationally valid percentages, those being: 48,7% men and 51,3% women. Consequently, my sample has five age groups, each of them having 40 questioned persons, of which 19 men and 21 women (values have been rounded up)

After defining the sample we applied a street report using a questionnaire. We previously made a pretesting of it, to make sure of the correctitude of the formulation of the questions and of their efficiency. We made the pretesting on a small sample of 30 people. After the pretesting has been performed no big changes took place in the composition of the questionnaire, but small changes did occur in phrasing, in what concerns a more accurate understanding of the requirement.

### **Working hypotheses**

The working hypotheses have been generated by the results of a research done by the authors of this paper in 2009, through which the testing of Fishbein's Model of Rational Behaviour was used for the particular case of buying mobile phones. Thus, in this research we start from the assumptions that:

1. There is a correlation between the intention of buying a new mobile phone in the next 6 months and its perceived utility.
2. The advantages expected from a mobile phone are mostly utilitarian/ cognitive.
3. The intention of buying a mobile phone is dominated by affective/hedonic elements in the case of women, respectively cognitive/ utilitarian elements in the case of men.

### 3. Data analysis and corresponding interpretations

We will analyse in what follows the data that resulted from the research. I mention that the analysis used the program SPSS 13.0.

As we mentioned above, there were 200 valid questionnaires, only the subjects that already have a mobile phone being taken into consideration.

It may be noticed the fact that the biggest proportion of the respondents does not intend to buy a new mobile phone in the next 6 months, respectively 60.5%, the rest of 39.5% saying that it is possible that they buy one.

In the next table the variation of the intention of buying a new mobile phone according to gender and age group of the respondents may be noticed:

**Table 1. The variation of the intention of buying a new mobile phone according to gender and age group of the respondents**

Age group			Intends or not to buy a phone		Total
			probably NO	probably YES	
18 - 23 years	gender	female	14	7	21
		male	11	8	19
	<b>Total</b>		<b>25</b>	<b>15</b>	<b>40</b>
24 – 29 years	gender	female	11	10	21
		male	11	8	19
	<b>Total</b>		<b>22</b>	<b>18</b>	<b>40</b>
30 - 35 years	gender	female	11	10	21
		male	9	10	19
	<b>Total</b>		<b>20</b>	<b>20</b>	<b>40</b>
36 - 41 years	gender	female	12	9	21
		male	13	6	19
	<b>Total</b>		<b>25</b>	<b>15</b>	<b>40</b>
42 - 47 years	gender	female	15	6	21
		male	14	5	19
	<b>Total</b>		<b>29</b>	<b>11</b>	<b>40</b>
<b>Total</b>	gender	female	63	42	105
		male	58	37	95

	<b>Total</b>	<b>121</b>	<b>79</b>	<b>200</b>
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We notice the fact that from the questioned persons, from the ones with the age between 30 and 35, women and men, 50 % of them said that they intend to purchase a new mobile phone in the next 6 months and the rest of 50% said that they do not intend to purchase one. 72.5% of the people from the group range of 42-47 years old state that they most likely won't buy a new phone. Respondents with the age between 18 and 23 and 36 and 41 years old have the same refusal percentage of 62.5%. The total percentages show that 60.5% will not purchase a new phone in the next 6 months, the rest of 39.5% saying that they probably will. In what concerns the gender of the persons, it seems that there are no noticeable differences on the age groups when it comes to the intention of purchase.

In what concerns the utility of the mobile phones things are pretty clear: the average of the values is of 6.21 on a scale of 1 to 7. The dominant value was 6 and values under 3 weren't given. In other words, the mobile phone is considered a useful thing. Until now we made analyses that help me verify the first hypothesis and in what follows we test this hypothesis according to which there is a connection between the intention of buying a new mobile phone in the next 6 months and the attitude of the respondents towards its utility. After applying a bivariate correlation test the sig value =0,000 is obviously smaller than the reference value of 0.05, so it results that there is a correlation between the intention of buying a new mobile phone and the attitude towards its utility. The Pearson Coefficient that has a value of 0.289 shows a direct connection, the value being very close to the interval that shows an average between the two variables. However, it is considered that a connection with a weak strength does exist between the variables.

The attitude of the respondents towards the advantages that a mobile phone must have in order to be bought (on the hedonic side as well as on the utilitarian side) is named through 8 analysis fields, their answers being presented as average in the next table:

**Table 2. The average values of the attitude on the 8 analysis fields**

<b>The component of the attitude</b>	<b>The advantage expected from the phone</b>	<b>Average</b>	<b>Rang</b>
<b>UTILITARIAN</b>	Efficient	5.98	1
	Nice design	5.68	3
	High tech	5.78	2
	More functions that the current phone	4.83	5
<b>HEDONIC</b>	Catchy	4.99	4
	To create emotion	3.83	8
	To create pleasure	4.06	7
	Good for the personal image	4.69	6

It must be said that the analysis has been made on a semantic differentiation scale in all 8 cases, taking values on a scale from 1 to 7.

From the interpretation one may say that a mobile phone, in order for it to be bought, must be in the following order: efficient, with an advanced technology, with a nice design, catchy, to have more functions than the current phone, to be good for the personal image and to create pleasure and emotion.

The average for the utilitarian component has a value of 5.57 and on the hedonic one has a value of 4.39, with a great noticeable difference, namely 1.18.

As I expected, a phone must, first of all, be efficient and high tech to be bought, and then it should have a nice design and be catchy. Given the fact that technology moves extremely fast in this area, it's no novelty that the majority wants, mainly, these aspects from a mobile phone.

In what concerns the performance of a phone, statistics have shown me that 72.5% of the respondents consider that this quality is the most important when buying a new mobile phone.

Question number 4 asks the respondents to give grades from 1 to 7 for three fields that influence them, by having a state-of-the-art mobile phone. Two of them are hedonic- they feel important and happy, and the last one is utilitarian- they feel up-to-date with technology. In the table below, the average values of the attitude for the three analysed fields are presented:

**Table 3. The average values of the attitude for the 3 analysed fields**

Heading level	Makes you feel important	Makes you feel happy	Makes you feel up-to-date with technology
Mean	4.48	3.92	4.89
N	200	200	200

Once more, we notice the fact that people, first of all, feel up-to-date with technology when having a state-of-the-art phone. However, at a quite small difference of 0.41 between the averages, respondents feel important when having such a phone. On the last place we find the feeling of happiness with an average of 3.92.

We have grouped the 12 variables of determination of the attitude in accordance with the two components of interest (for my research) - utilitarian or cognitive and hedonic or affective, according to the following:

**Table 4. Constitutive components of the attitude**

Utilitarian/cognitive dimension	Hedonic/affective dimension
Useful	You feel important
Up-to-date with technology	You feel happy

Efficient	Catchy
Nice Design	Creates emotion
New Technology	Creates pleasure
Multiple Functions	Good for the personal image

The average values of those two dimensions of the attitude are presented according to the table:

**Table 5. The average values of the attitude for the two analysed components**

Dimension of the attitude	Average
Utilitarian/cognitive dimension	5.56
Hedonic/affective dimension	4.33

As one could notice from the table, the average value of the utilitarian dimension of the attitude has the highest value. The difference between the two averages is relatively high, having a value of 1.23. It also has to be mentioned the fact that in the analyses it was used a value scale from 1 to 7 (valid for every field that was analysed).

If we were to draw a conclusion up to now is that people from Iasi have an attitude directed more towards the utilitarian in what concerns the purchase of mobile phones. Probably because the mobile phone represents nowadays a ‚must have’ and is no longer a novelty, a scarcity, like it was 10 years ago. Its utility was proven by the analysis of the third question from the questionnaire, where the average had a value of 6.21 on a scale of 1 to 7. Nowadays, even from an early age, we have a mobile phone and we do not separate from it even when we get older.

In the next analysis I tried to see if there is a connection between the gender of the respondents and the agreement and disagreement with the statement: „Do you think that the fact that you have a phone will improve your personal image?” It is obvious that it has to do with the personal image. The results show the following:

- 37% disagree (with both nuances – totally, partially) with the statement, 29% of the respondents are indifferent to the statement and 34% agree (with all the nuances). It may be stated that there is a certain balance if it were to make a scale of disagree- indifferent- agree, the differences between the values being quite small. However, a bivariate Chi-square test has shown that there are important differences between the gender of the person and the agreement or disagreement with the statement. The Pearson Chi – Square coefficient with 4 degrees of liberty has the value of 15.674 and the sig has a value of 0.03, obviously smaller than the reference value of 0.05.
- It seems that men disagree more with the statement (W 26.7% and M 48.4%), whereas women agree more with it (W 42.9% and M 24.3%). It results that women think that they improve their personal image by having a mobile phone, whereas men do not entirely share this opinion.

In the next phase of the analysis I verify the third hypothesis that states that the women's attitude is mostly affective/ hedonic and in what concerns men it is utilitarian/ cognitive.

In the next analysis we found out if there are important differences or not between the average values of the attitude of the 9 fields of analysis of the hedonic dimension as well as of the utilitarian one.

The corresponding interpretation is the following:

- There is no significant difference between the average values of both women's and men's attitude towards the performance of a phone, its utility, its multiple functions which could make it be bought, the fact that it is catchy and good for the personal image.
- However, it seems that women place more importance on the appealing design of the mobile phone (W 6.03 and M 5.28); also to women it must offer more emotion (W 4.35 and M 3.24) and pleasure than to men (W 4.66 and M 3.39).
- However, compared to women, men prefer to have more functions on their new mobile phone than on the current one (W 5.63 and M 5.95).

If we were to draw a general conclusion based on this analysis, it would seem that men adopt a more cognitive attitude and women a more affective one.

In addition, we assessed the 8 advantages that the mobile phone would offer in order to make the respondents buy it and then the importance of the desired advantages. These convictions are extremely important in order to determine the attitude of mobile phone consumers between hedonic and utilitarian. Once more, this analysis verifies our hypothesis according to which attitude towards the advantages that a mobile phone must have in order to be bought is mainly utilitarian. The results are given as average values for the entire sample, presented in the table below:

**Table 6. The convictions concerning advantages that a mobile phone should offer**

Advantage expected from the phone	Advantage assessment	Advantage importance
Efficient	5.98	5.87
Nice design	5.68	5.69
High tech	5.78	5.71
Multiple functions compared to the current mobile phone	4.83	5.15
Catchy	4.99	4.87
To create emotion	3.83	4.31
To create pleasure	4.06	4.54
Good for personal image	4.69	4.20

As it can be noticed from the table above, following the advantage assessment and their importance, it seems that there is a slight balance between them. It is

highlighted the attitude of the respondents to the utilitarian/cognitive constituent of the attitude. In other words, they first follow the physical, practical, useful, specific features of the mobile phones before deciding to purchase it and then the hedonic/affective ones.

The following table focuses both on the advantages' average values and on their importance on the two constituents of the attitude - cognitive/utilitarian and affective/hedonic:

**Table 7. Average values of the advantages and their importance on the two constituents of the attitude**

Dimension of the attitude	Advantages' value average	Importance's average value
Cognitive/utilitarian dimension	5.56	5.61
Affective/hedonic dimension	4.33	4.48

It can be easily noticed that the average values of the importance of the advantages that a mobile phone may offer in order to be bought are greater than the proper advantages ( $5.61 > 5.56$ ,  $4.48 > 4.33$  respectively). It can be identified again the obvious difference between the importance of the physical features and traits that make the mobile phone useful and the ones that meet the affective needs of the consumers.

Using the One-Way ANOVA test, we checked to see if there were significant differences between the average values of the advantage to make respondents happy, brought by a state-of-the-art mobile phone, on age groups, the results being the following:

- There are significant differences in the average value of the advantage to make the respondents happy, based on age groups, proven by the sig value in the ANOVA table, namely 0.003, which is clearly lower than the reference value of 0.05.
- After the application of a Post Hoc test, the results are:
  - There are significant differences in the average values of the advantage of a state-of-the-art mobile phone to make happy the consumers aged between 18 and 23 years and aged between 30 and 35 years, between 36 and 41 years respectively.
  - There is no significant difference in the average value of the above-mentioned advantage for the age group 24-29 years and the other age groups.
  - There are significant differences in the average value of the advantage brought by the mobile phone for the age group 30-35 years and 18-23 years.
  - There are significant differences for the average value of the advantage in question for the age group 36-41 years and 42-47 years.



By using the One-Way ANOVA test again, we tested to see if there were differences between the average grades given to the 3 advantages expected from a state-of-the-art mobile phone ('I feel important, happy, up-to-date') and respondents' gender:

- There is no significant difference between the average grades given to the advantage "I feel important" and the respondent's gender. This is proven by the sig value, which is 0.380, a lot higher than the reference value of 0.05. Thus we can draw the conclusion that respondents feel important if they have a state-of-the-art mobile phone, regardless of their gender.
- There are significant differences between the average grades given to the advantage "I feel happy" and the person's gender. The sig value is of 0.003, a lot lower than 0.05. Since there are significant differences between given average grades (W 4.21 and M 3.59), it turns out that women are happier than men if they have a state-of-the-art phone.
- There are no significant differences between average grades given to the expected advantage "I am up-to-date" by both genders. This is shown by the sig value of 0.497, which is higher than the reference one of 0.05. This means that both women and men feel up-to-date if they have a state-of-the-art mobile phone.

To draw a general conclusion, by applying the One-Way ANOVA test on the four variables mentioned above, it seems that we maintain the same idea: the respondents' tendency is to have a primary utilitarian attitude. Between women and men, it seems that women are more affective, sentimental.

Below, we are going to provide an interpretation on the application of bivariate correlation in order to see if there are any correlations between respondents' gender and the grades awarded to the 3 advantages expected from a state-of-the-art mobile phone. The correlation shows us the extent to which variables' changes are associated to changes of another variable. Therefore:

- Between the person's gender and the grade awarded for the advantage "I feel important" there is no correlation. The sig value proves it, where 0.380 is greatly higher than the reference value of 0.05. Pearson's coefficient, whose value is -0.062 shows us that there is a reverse connection between the two variables, which is very weak, almost unnoticeable.
- Between the person's gender and the grades awarded for the advantage "I feel happy" there is a correlation given by the sig value of 0.003, which is lower than 0.05. Pearson's coefficient with a value of -0.207 shows us that there is a power weak between the connection of the two variables (the 0.2 value enters the value range showing a weak power of [0,1; 0,3]) and, at the same time, reverse - given by the sign minus (-).
- For the same variable – the person's gender and the grades awarded for the advantage "I am up-to-date" there is no correlation, the sig value being of 0.497. Pearson's coefficient has the value 0.048 and indicates a very weak connection, hard to notice and thus the sign of the coefficient value is plus (+).

As a conclusion drawn from the performed analysis, the attitude of mobile phone consumers in the city of Iasi is mainly utilitarian or cognitive. They first aim at

performance, nice design, high tech and multiple functions, and then at affectivity elements, such as: catchy, to create pleasure and emotion, improve their image.

#### **4. Conclusion**

Out of the questioned people, it seems that only 39.5% intend to purchase a mobile phone in the following 6 months, the other 60% stating they will probably not. The same intention on age groups indicated that people aged between 18 and 23 years and between 36 and 41 years respectively declined in the same percentage of 62.5% the purchase of a new mobile phone, and people aged between 20 and 25 years stated in the same percentage of 50% that they will probably buy one or not.

The first hypothesis according to which there is a correlation between the intention to purchase a new mobile phone in the following 6 months and the attitude towards its utility has been verified and proved to be true. It must be said that on a scale of 1 to 7, the average value of the phone utility was 6.21.

In order to observe the attitude on the two constituents subject to my analysis, I calculated the average value of the two values, which indicated that the utilitarian aspect is more important than the hedonic one, as there is more than 1 point difference between the two (average calculated on a scale of 1 to 7).

If we haven't formed an opinion by now about the trend of consumers' attitude, we now have a first main idea: the utilitarian/cognitive aspect prevails over the hedonic/affective one.

First of all, people feel up-to-date because they have a state-of-the-art mobile phone and then they feel important and happy. This is probably due to the fact that for the time being the mobile phone is no longer out of the ordinary, but rather a basic, main need.

Results also show that women think that by owning a phone, their personal image is improved, whereas men agree less with this statement.

Following the verification of the hypothesis according to which women's attitude is mainly affective/hedonic and men's is utilitarian/cognitive, it has proven to be true. Women feel happier than men if they have a state-of-the-art mobile phone. Compared to men, to a large extent women also consider that a mobile phone must offer them pleasure and emotion.

The average value of the importance of utility advantages also had a greater value than the hedonic/affective ones. The difference between these two average values is 1.13.

It seems that there is no correlation between respondents' gender and the grades given for the advantages that a mobile phone must have in order to be bought, namely "I feel important" and "I feel up-to-date". However, there is a correlation between the person's gender and the grades given for the advantage "I feel happy", the connection being weak and reversed.

As a suggestion to follow on the study we've started, it could be attempted to find out the consumption or the daily use of the mobile phone or what applications are mostly used on a mobile phone (in this situation, there should be taken into

consideration a new aspect, namely the occupation, which will be an important factor to influence consumption). Once this aspect is discovered, it could be attempted to find out if the mainly utilitarian attitude derives from this factor. As it is used a lot, the mobile phone may lose some of the features that meet people's affective needs.

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