

# **MARKETING STUDY REGARDING INTERNET SERVICES USAGE ON SMARTPHONES**

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**Abstract:** The main objectives associated to this research study are: establishing the usage of Internet on the main devices (smartphones, ipad, laptops, desktop computer), making an average of the free and paid applications that the users installed on their smartphones and ranking the usage of some services on mobile devices within the last year. The present study is based on the primary data gathered from youngsters aged between 18- 24, owners of a smartphone. The gathered data was analyzed using the SPSS Informatics program, based mainly on descriptive statistics. This marketing study was made during December 2013, using the questionnaire to gather the data, which was filled in by a sample of 50 persons.

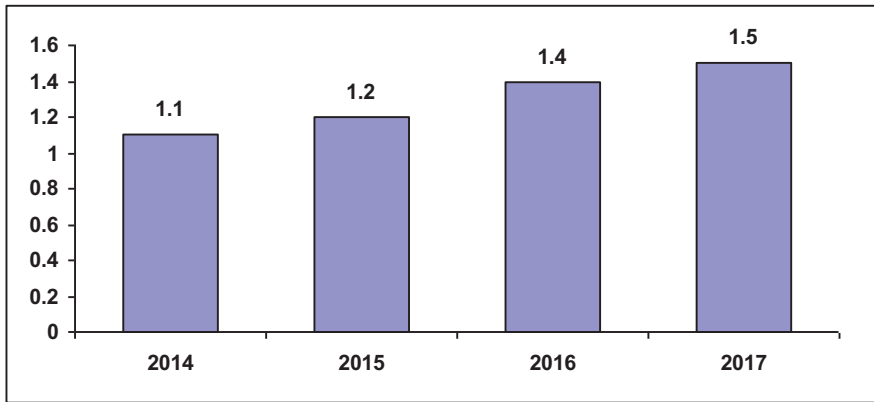
**JEL classification: M30, M31**

**Key words: consumer behavior, marketing study, mobile Internet services, mobile telecommunications services, quantitative study**

## **1. INTRODUCTION**

Today, the mobile phone became present in our lives, “it is a device that many consumers cannot seem to do without”. (Persaud A., Azhar I., 2012) According to a study made by Gfk Temax Romania, the sales of mobile telephones grew with 17% in 2013 compared to 2012, reaching the value of 99 million euro at the end of the year 2013. The sales of smartphones had the main importance, while the sales of mobile phones continued to decrease. (Mobile Communications Magazine, Aug.-Sept. 2013)

Another study issued by Yankee Group estimates that 1.5 billion people will use smartphones worldwide till the year 2017. (Figure no 1) However, the market share of Apple Company in terms of smartphones sales decreased to 13.6% in 2013, compared to a market share of 16.6% in 2012. Samsung maintained itself leader with a market share of 33.1%. (Mobile Communications Magazines, Aug.-Sept. 2013) Evonthough the sales of the Apple devices were decreasing, almost 55% of the Internet traffic using mobile devices was generated by Apple terminals, according to the NetMarketShare Company.



Source: *Supervision and previsions regarding connected devices, Yankee Group, July 2013*

**Figure no 1. Global sales of smartphones in 2017 (in billion)**

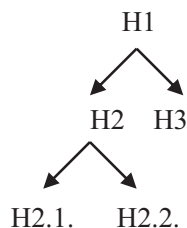
## 2. OBJECTIVES

The hypotheses of this research article are (Figure no 2):

Hypothesis no 1. Youngsters use Internet mainly on smartphones. This hypothesis comes as a result of a study made by International Data Corporation, which estimates that in 2017 the market share of smartphones will grow to 70.5% compared to 65.1% in 2013. According to this study, the market share of smartphones was followed by ipads (14.6%), laptops (11.6%) and desktop computers (8.6) in 2013. However, the global market of laptops and desktop computers will continue to diminish till 2017, with an estimated market share of 8% for laptops and 5% for desktop computers.

Hypothesis no 2. The youngsters installed an average of 26 applications on their smartphones. This hypothesis comes on the basis of a worldwide study made by Google and published in Mobile Communications Magazine of August- September 2013. According to this study, the first 10 countries with the highest number of installed applications on smartphones are: South Korea (40.1 apps), Switzerland (39.8 apps), Sweden (39.3 apps), Singapore (37.5 apps), Japan (36.4 apps), Australia (33.4 apps), Denmark (32.9 apps), USA (32.8 apps), Norway (32.5 apps) and France (32.2 apps).

Hypothesis no 3. Messenger Facebook was the most used application on smartphones by youngsters during last year. According to a worldwide study made by Yankee Group, the following services were used on mobile devices during the last year, presented in decreasing order of their usage: Messenger Facebook, WhatsApp, Skype, Google Talk, Viber, Messenger BlackBerry, iMessage Apple.



**Figure no 2. Hypotheses of the research study**

### 3. METHODOLOGY

The present study is based on the primary data gathered from youngsters aged between 18- 24 years old, owners of a smartphone. The gathered data was analyzed using the SPSS Informatics program, based mainly on descriptive statistics.

This marketing study was made during December 2013, using the questionnaire to gather the data, which was filled in by a sample of 50 persons.

Table no 1 provides the profile of the respondents:

**Table no 1. The profile of the respondents**

Characteristics	Descriptor	Distribution (percentage)
Age	18 years old	0.0
	19 years old	10.0
	20 years old	34.0
	21 years old	40.0
	22 years old	8.0
	23 years old	6.0
	24 years old	2.0
Gender	Male	30.0
	Female	70.0
Occupation	Student	100.0
Smartphone usage	Owner	100.0
Internet usage on smartphone	Daily	86.0
	Weekly	10.0
	Monthly	4.0
	I've tried once or twice	0.0
	I have Internet, but I don't use it	0.0
Monthly Internet traffic	< 500 megabytes	46.0
	500 megabytes	10.0
	> 500 megabytes	44.0
Mobile telecommunications operator subscription	Orange	20.0
	Vodafone	8.0
	Cosmote	72.0
	RCS-RDS	0.0

*Source: Own analysis using SPSS Informatics Program*

### 4. ANALYSES

Hypothesis no 1. Youngsters use Internet mainly on smartphones. All the questioned youngsters use Internet on their smartphones (100%), followed by laptops (72%), desktop computers (60%) and ipad (24%). (Table no 1)

**Table no 2. Internet usage on devices**

I use Internet service on smartphone					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	50	100.0	100.0	100.0
I use Internet on ipad					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	12	24.0	24.0	24.0
	No	38	76.0	76.0	100.0
	Total	50	100.0	100.0	
I use Internet on laptop					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	36	72.0	72.0	72.0
	No	14	28.0	28.0	100.0
	Total	50	100.0	100.0	
I use Internet on desktop computer					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	30	60.0	60.0	60.0
	No	20	40.0	40.0	100.0
	Total	50	100.0	100.0	

Hypothesis no 2. The youngsters installed an average of 26 applications on their smartphones. According to a worldwide study made by Google, this average of 26 applications installed on smartphones included: free applications (20.6 apps) and paid applications (5.6 apps). Thus, the hypothesis no 2 can be divided in H2.1. for free applications on smartphones and H2.2. for paid applications on smartphones.

According to the Table no 3, the average number of free applications installed by youngsters on their smartphones is 13.74 (H2.1), while the average number of paid applications installed by youngsters on their smartphones is 0.68 (H2.2). Thus, the average number of all paid and free applications installed becomes 14.42.

**Table no 3.**

Statistics			
		How many free applications have you installed on your smartphone?	How many paid applications have you installed on your smartphone?
N	Valid	50	50
	Missing	0	0
	Mean	13.74	.68

Hypothesis no 3. Messenger Facebook was the most used application on smartphones by youngsters during last year. Thus, youngsters used the following applications on their smartphones during last year: Messenger Facebook (82%),

WhatsApp (58%), Skype (34%), Viber (26%), iMessage Apple (12%), Google Talk (10%), Messenger BlackBerry (4%). (Table no 4)

**Table no. 4**

I used Messenger Facebook on mobile phone during last year					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	41	82.0	82.0	82.0
	No	9	18.0	18.0	100.0
	Total	50	100.0	100.0	
I used WhatsApp on mobile phone during last year					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	29	58.0	58.0	58.0
	No	21	42.0	42.0	100.0
	Total	50	100.0	100.0	
I used Skype on mobile phone during last year					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	17	34.0	34.0	34.0
	No	33	66.0	66.0	100.0
	Total	50	100.0	100.0	
I used Google Talk on mobile phone during last year					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	5	10.0	10.0	10.0
	No	45	90.0	90.0	100.0
	Total	50	100.0	100.0	
I used Viber on mobile phone during last year					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	13	26.0	26.0	26.0
	No	37	74.0	74.0	100.0
	Total	50	100.0	100.0	
I used Messenger Blackberry on mobile phone during last year					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	2	4.0	4.0	4.0
	No	48	96.0	96.0	100.0
	Total	50	100.0	100.0	
I used iMessage Apple on mobile phone during last year					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	6	12.0	12.0	12.0
	No	44	88.0	88.0	100.0
	Total	50	100.0	100.0	

#### **4.1 Critical**

Hypothesis no 1 is totally validated. All of the interviewed youngsters use Internet on their smartphones.

Hypothesis no 2 is partially validated. Romanian youngsters installed an average of 14.42 applications on their smartphones (13.74 free applications and 0.68 paid applications).

The hypothesis no 3 is totally validated. Messenger Facebook was the most used application on smartphones by youngsters during last year (82% of the respondents used this application).

#### **5. CONCLUSIONS**

Eventhough the results are close to the findings from other external studies, caution must be taken due to the relatively small sample used for this research. We encourage replicating the research in other context in order to validate the reported results. Also, a study on the main usage of the Internet on the smartphones is recommended.

#### **REFERENCES**

1. Kotler P. Marketing Management, 11<sup>th</sup> edition, Prentice Hall, New Jersey, 2003
2. Meghisan G. M. Strategies on the Mobile Telecommunications from Romania, Shaker Verlag, Aachen, 2012
3. Persaud Ajax, Innovative Mobile Marketing via Smartphones. Are Consumers Ready?, Marketing Intelligence & Planning, Vol 30, Issue 4, 2012
4. \*\*\* Mobile Communications Magazine, year XV, issue 121, August-September 2013
5. \*\*\* Mobile Communications Magazine, year XV, issue 122, October-November 2013