

Smart Cellphones Market Segmentation Based on Expected Advantages of Cellophanes Customers

Abstract Negar Mesbahi Jahromi(Corresponding author)
Master of International Business Administration, Shahid Beheshti University,Tehran
Teacher of Hormozgan university, Bandar-e-abbas, Iran

Mehrdad Bahremand
Master of Business Administration, Deputy Manager, planning and Project Appraisal, Bank of Industry and Mine, Hormozgan, Iran,

Somayeh Akhavan Darabi
Department of economic, management and accounting, Payame Noor University, Iran.

Abstract

The aim of the present study was to segment different customers of smart cellphones based on their expected advantages and cluster them in related dimensions and identify import dimensions in their viewpoints. The period of investigation is 2015 and its locations are mobile phone stores and software and hardware repair shops in Bandar Abbas. So, 270 samples selected for analysis using questionnaire by two-phase sampling. Questionnaire contents validity studied, improved and finally confirmed by marketing and management professors in PHD degree, questionnaire reliability obtained using 0.879 Cronbach Alpha. Agent analysis method and clustering analysis methods used for market segmentation. In agent analysis implementation, 15 factors extracted between 78 variables. These factors cleared 77.5 percent of total variance, factors of selecting smart cellphones were video system, phone vital features, longevity and durability of the phone, phone operation system, price, security, auxiliary facilities, quality, software facilities, phone connectivity, memory, ease of use, the ability to capture and view photos and videos, after-sales service and processor. 3 parts of market identified by cluster analysis implementation on extracted factors each part has its own characteristics.

Key words: Segmentation of market- expected advantages of customers - smart cellphones

1- Introduction:

To 21th century, industries growth and human increasingly need work communication caused many changes in communicational technologies and increased using its important tools such as lines of communication and cellphone and also related softwares. Recently, cellphones technology have amazingly development and innovations. Presented statistics of last three months of 2013 A.D. by Gartner prestigious research institute show that recently using smart cellphones were ascending and it is expected this process to be continued. With smart cellphones appearance in the world, the concept of having a phone is changed and up throws our lifestyle. Also by Irancell and Hamrahe Aval appearance, promote the sale and use of these phones increased in I ran, changes in people lifestyle and their more technology leads to people consider cellphones as an essential goods. Smart cellphones phone world in Iran is an much as attractive that inspite of their high price difference with common phones can handles mobile phone market and lead buyers to new technologies with high price. Smart cellphones of mobile market which recently were only in rich people of the society, nowadays, have overtaken from normal phones as smart cellphones in different brands with different prices are presented which also middle class people of society have them. Nowadays, having money and going to the market is not enough to decide to buy a smart cellphone. This means that products variety and technology growth speed in new phones leads to increase choice dominion of buyers and decision making turns to a rather complex issue. Basic question for buyers is that, what characteristics should have my phone? The answer to this question that what are characteristics of a new smart cellphone, we can say that, what are expected advantages of users and customers of this type of phone and what they want from a smart phone. Therefore, according to increasing procedure of using smart cellphones, this study tries to identify this problem that what is variety of expected advantages of customers in using smart phones and based on their expected advantages what are segmentation factors of smart cellphones market.

Based on considered purposes of this research, research questions are:

- Expected advantages of customers from buying smart cellphones based on factor analysis techniques are categorized into how many categories?
- Customers of smart cellphones can be divided into how many clusters?

2- Theoretical and literature review

Market segmentation is one of the most important ways to develop successful marketing strategy (Kotler, 1997). Supply-chain strategies can be developed within a range of possibilities from treating consumers as being entirely homogeneous to treating them as individuals. The first of those strategies is known as mass marketing, where the seller mass-produces and mass-distributes one product and attempts to attract all kinds of buyers (Kotler, 1999). At the opposite end of the continuum, mass customization precludes personalization of some components of the marketing mix to each member of the market (Lampel and Mintzberg, 1996; Wedel and Kamakura, 2002). Neither of these polar-opposite strategies will typically be very successful, given the diversity of customers' demand in the case of mass marketing (Walley et al., 2000) and the costs involved in the customization strategy. In practice, segmentation schemes fall between these two extremes (Kotler, 1997). Segmenting the market implies distinguishing different segments, and selecting one or more of them on which to focus. The key requirement is to develop product and marketing mixes tailored to the needs of each target market. Market segmentation and targeting have been shown to improve the sellers' capacity to identify market opportunities, and to make clear adjustments to their product, prices, distribution channels and promotional mixes (Kotler, 1999; Wind, 1978).

Studies on market segmentation are:

Some researchers (Jansen 2007), (Sohn and Kim 2008), (Okazaki 2006) have used combination between two or more dimensions such as demographic and behavioral, or psychographic and behavioral, etc. It is interesting to explore what type of dimensions that commonly used by market researchers in mobile domain.

In a study (Mazzoni et al., 2007), the causes of customer purchase mobile phone through multivariate segmentation model, three general categories lifestyle consumer attitudes, motivation were studied.

Another study (Uronen, 2008), the market for mobile phone based on various criteria such as the characteristics of psychological, behavioral, geographic and benefits were expected to purchase mobile phone, but in this study to determine the relative lack of comprehensive feature mobile phone and advanced statistical methods appropriate to the subject of study were not used.
In a study that Amandyp (2012) did on products FMCG, especially health care products, concluded that gender and education of consumers in the purchase of products for personal care is effective.

Fedly (2014) conducted a study on segmentation of the market for mobile services. They, according to an analysis conducted on 129 users by measuring software smartphones, that it is possible mobile market, based on the views of network usage (eg voice, SMS, data) and services (eg applications) divided.

Amandeep (2012) reveals in his study that earlier demographic factors were considered as best basis of segmentation but they are no longer effective for segmentation in FMCG sector. An investigation of 500 consumers' purchase routine and their demographic attributes are found non-associated in this study. This study shows that purchasing of FMCG products specially personal care products is indifferent of age and educational level.

In a study that was done in the wireless communications industry, customers were segmented just in terms of expected value customer (Hwang et al., 2004), In the other study, buyers only were segmented based on factors such as ecological characteristics and their related assets (Ranganathan et al., 2006), the basic pattern (Hannu, 2008) and cultural factors (Srikes et al., 2009).

3- Methodology:

The present study is among applied researches due to its application in marketing, market segmentation and users behavior, because it studies an applied knowledge for companies, organizations and marketers in the field of identifying different parts of cellphone market and necessities of each part of market and presenting an effective marketing mixture and its data collecting method is descriptive-survey. Because population of this research include owners and buyers of smart cellphone in Bandar Abbas sample size 242 people using Cronbach formula (statistic sample volume and from unlimited population) in order to increase research validity of research results and better generalization of obtained results to the mentioned population, 300 questionnaires distributed and completed by customers and finally 270 questionnaires used. Sampling method in this research is

two-stage sampling. As first because research data collect from stores which sell smart cellphones with different brands and cellphone repair shops and mainly these stores are focused in a few passages in Bandar Abbas, in first stage, sampling implemented randomly from these stores and repair shops, and then sampling implemented as accessible sampling in selected stores from clients. Closed questionnaire is used to collect needed data to segmentation of smart cellphones market and research hypotheses test. These questionnaires completed indirect method and by self-report by sample members. In designing this questionnaire, existed literature in this field (domestic and foreign papers) and semi-open interview from 50 people among smart cellphones buyers in Bandar Abbas market and also professional information obtained from two reliable websites Digikala and GSM used to identify expected advantages of smart cellphones customers from buying smart cellphones. In this research in order to estimate questionnaire validity content or external validity method is used, SPSS software version 20 and Cronbach Alpha method used to determine reliability of questionnaire of this this research. Results show that Cronbach Alpha for research questionnaire in final sample generally is equal to 0.879 and shows that used questionnaire has required reliability and validity and suitable result constant overtime.

4- Research data analysis:

In this research, descriptive statistics used to describe data and cluster analysis and agent analysis used for market segmentation. Demographic data of this research are in Table 1. Among 270 people who answered this question and their data is accessible, 168 people (62.2 percent) were female, most of respondents were between 20to 30 years old. About material status of respondents, 144 people (53.3 percent) were married and 126 people (46.7 percent) were single. Education status of respondents were 48 people (17.8 percent) were under diploma, 91 people (33.7 percent) were diploma and degree, 72 people (26.7 percent) bachelor's degree, 59 people (21.9 percent) master's degree or higher.

Table 1: **Describe the demographic research**

Frequency	Abundance	Variable components	Variable type
62.2	168	Male	**sex**
37.8	102	Female	
17	46	Less than 20 years	**age**
37.4	101	Between 20 to 30 years	
31.5	85	Between 31 to 40 years	
10.4	28	Between 41 to 50 years	
3.7	10	Between 51 to 60 years	
53.3	144	Married	**Marital status**
46.7	126	Single	
17.8	48	Lower than a diploma	**Education**
33.7	91	Diploma and Degree	
26.7	72	License	
21.9	59	Master's degree or higher	

5- Agent analysis and its results:

Before agent analysis implementation, first agent analysis authority should studied for data, which accounted by Bartlett and KMO statistics, by registering all variables in the studying model, KMO obtained equal to 0.775 which authorized agent analysis. Therefore, results of agent analysis from data showed that questionnaire is suitable for agent analysis. This means that cleared variance is higher than 50 percent, which indicated that selected tool is a relatively suitable tool in order to determine needs and desires (purchasing interests research) of smart cellphones customers. Basic components method using orthogonal rotation of variance was used for agent analysis. According to existed results, 15 agents were deducted which are shown in Table 3. The Bartlett test and KMO are shown in table 2.

Table 2: Bartlett test valuesand KMO

0/775	**The test statistic KMO**
802/796	**The test statistic Bartlett**
0/000	**Significant level**

Table 3: factors of smart cellphones selection obtained from agent analysis results and Cronbach Alpha factors

Factors of Cronbach Alpha	Basic factors of smart cellphones selection and index of each factor	
0.86	➢ Smart cellphones monitor size ➢ Smart cellphones monitor resolution ➢ A bright screen with subtle colors and good viewing angles ➢ High sensitivity of touch monitor of smart cellphones	First of factor (smart cell phones, video system)
0.81	➢ Light weight of smart cellphones ➢ Smart cellphones being slim ➢ Color variety of smart cellphones ➢ Smart cellphones ergonomic ➢ Small dimensions of Smart cellphones to catch in one hand ➢ Smart cellphones design and visual appeal ➢ Smart cellphones uniqueness ➢ Attractive advertisements about smart cellphones in various media ➢ Renowned manufacturer smart cellphones ➢ Interchangeable frames smart cellphones	Second factor (vital characteristics of smart cellphones)
0.75	➢ Smart cellphones impact resistance ➢ Longevity of smart cellphones batteries ➢ Smart cellphones being waterproof ➢ Lack of heating of smart cellphones in graphical games ➢ Smart cellphones durability ➢ Not crash smart cellphones ➢ Charging battery speed of smart cellphones	Third factor (longevity and durability of Smart cellphones)
0.73	➢ Update feature of smart cellphones's operating system ➢ Type of smart cellphones operating system	Fourth factor Smart cellphones operating system
0.71	➢ Smart cellphones price ➢ Lack of a large drop in the price of second-hand smart cellphones cases	Fifth factor (Smart cellphones price)
0.78	➢ Information security in the use of smart cellphones ➢ Enable password for different menus in smart cellphones ➢ Security and encryption functionality in the smart cellphones by placing a finger	Sixth factor (Smart cellphones security)

0.84	➢ Having a strong handles with great facilities and applications ➢ Smart cellphones voice command system ➢ Radio playback ➢ Smart cellphones SIM card number ➢ TV channel playback ➢ Smart cellphones accessories ➢ The ability to connect the smart cellphones to a TV	Seventh factor (auxiliary facilities)
0.76	➢ Smart cellphones front speaker quality ➢ High quality body smart cellphones ➢ High quality lens of smart cellphones ➢ Original parts of Smart cellphones ➢ High quality handsfree of smart cellphones ➢ Smart cellphones good reception	Eighth factor (Smart cellphones quality)
0.72	➢ Ability to type and read e-book ➢ Ability to use special software such as: LINE,Tango,.. ➢ Ability to open files with different formats: PDF, Word,... ➢ Ability to install and cancel applications of Smart cellphones ➢ Compatibility with existing software ➢ Ability to install advanced games in smart cellphones ➢ Ability to use several programs simultaneously in Smart cellphones ➢ Good software and hardware backup of smart cellphones	Ninth factor (software feature Smart cellphones)
0/86	➢ Having USB and data cable of smart cellphones ➢ Having GPS in smart cellphones ➢ Connectivity to internet, email and settings	Tenth factor (communication features of Smart cellphones)
0.77	➢ Ability to add memory card in smart cellphones ➢ Back up memory stick with large amounts of memory in phones ➢ High RAM memory in smart cellphones	Eleventh factor (smart cellphones memory)
0.72	➢ Having Persian language ➢ Having light for night ➢ Having Persian Calender ➢ Complete external menu of smart cellphones ➢ Having Persian manual in smart cellphones	Twelfth factor (ease of use of smart cellphones)
0.87	➢ Having a camera flash ➢ High-speed video recording ➢ Ability to view video ➢ Ability to capture photos in night ➢ Ability to automatic focus of photo ➢ Equipped with second camera ➢ Having front and back camera with good lens ➢ Automatic setting when shooting in smart cellphones	Thirteenth factor (ability to capture and view photos and video)
0.71	➢ Ability to repair and after-sales service of smart cellphones ➢ Longevity, durability and guaranty of smart cellphones	Fourteenth factor (after-sales service

		of smart cellphones)
0.74	➢ Equipped with powerful processor ➢ Having multi-core processors	Fifteenth factor (processors of smart cellphones)

Identified factors enter to K-Mean analysis algorithm as input variable in order to identify different parts of market. This done using SPSS 17 software, that finally 3 parts identified for market. Clusters distribution presented in Table 4. Results of market cluster analysis of smart cellphones are presented in Table 5.

Table 4: Distributed in clusters mobile smartphone market

Combined percentage of people in each cluster	The number of people in each cluster	Clusters (sectors)
0/385	104	**Cluster (sector 1)**
0/325	88	**Cluster (sector 2)**
0/288	78	**Cluster (sector 3**
100 percent	270	**Total**

Table 5: Cluster analysis

The third factor loadings	The second factor loadings	The first factor loadings	Factors
0/319	0/171	0/411	The first factor (Video system Smartphone)
0/361	0/041	0/450	The second factor (Vitals phones)
-0/541	0/222	0/557	The third factor (Longevity and durability smartphone)
0/532	-0/114	0/136	Fourth factor (OS smartphone)
0/331	0/179	-0/385	Fifth factor (Price smartphone mobile)
0/728	0/541	0/157	Sixth factor (Security smartphone mobile)
0/309	0/712	0/112	Seventh factor (auxiliary facilities smartphone)
-0/011	-0/261	0/020	Eighth factor (Smartphones quality)
0/840	0/454	0/072	Ninth factor (software feature Smartphones)
0/321	0/361	-0/785	Tenth factor (communication features of Smartphones)
0/842	-0/311	0/542	Eleventh factor (smartphones memory)

-0/013	0/244-	0/561	Twelfth factor (ease of use of smartphones)
0/232	0/152	-0/262	Thirteenth factor (ability to capture and view photos and video)
0/362	0/311	-0/165	Fourteenth factor (after-sales service of smart cellphones)
-0/421	0/433	-0/321	Fifteenth factor (processors of smart cellphones)

6- **Descriptive data of smart cellphones market sections in this research**

Demographic features and their relatively frequency in each market of smart cellphones studied in Tables 6,7,8,9.

Table 6: Gender distribution in the first, second and third part

Frequency			
Sector 3	Sector 2	Sector 1	Sex
32	32	38	Male
46	56	66	Female

Table 7: Distribution of marital status in the first, second and third part

Frequency			
Sector 3	Sector 2	Sector 1	Marital Status
26	43	57	Single
52	45	47	Married

Table 8: Distribution of education in the first part and the second and third

Frequency			
Sector 3	Sector 2	Sector 1	Education
21	16	11	Lower than a diploma
18	35	38	Diploma and Degree
20	20	32	License
19	17	23	Master's degree or higher

Table 9: Distribution of age at first and second and third part

Frequency			
Sector 3	Sector 2	Sector 1	Age
7	23	16	Less than 20 years
25	30	46	20-30 years
27	22	36	31-40 years
14	8	6	41-50 years
5	5	0	51-60 years

7- Results of smart cellphones market segmentation

Research using last Tables, 3 obtained clusters are analyzed. Using obtained data from each cluster we can found that in each cluster which advantages are more expected by smart cellphones users and which factors are important for customers, and what are demographic features of each cluster.

7-1- First Cluster Analysis

The first cluster is the biggest part of smart cellphones and includes 104 people of customers (users) of smart cellphones which is 38.5 percent of sample volume. 38 people of these 104 people were male and 66 people were female. About 57 respondents were single and 47 respondents were married, that single people were more than married people. 11 people of smart cellphones customers were under diploma, 38 people had diploma and degree, 32 people bachelor's degree and 23 people had master's degree and higher that diploma and degree people were most in this cluster. 16 people were under 20 years old, 46 people 20 to 30 years old, 63 people 31 to 40 years old, 6 people 41 to 50 years old, that most of respondents were between 20 to 30 years old (44.2 percent). This part of market give most important to the first factors (smart cellphones video system) second factor (vital features) twelfth (ease of use smart cellphones) third (longevity and durability of smart cellphones) eleventh (smart cellphones memory) and fifth factor (price) thirteenth factor (ability to capture and view photo and video by smart cellphones) fourteenth factor (after-sales service), fifteenth factor (smart cellphones processors) have not significant effect on this part. From above descriptions it can be concluded that customers wanted to have phone which has durability and ease of use and good vital features and video system, price is not important for customers of this part of market and because vital features are important for customers they maybe buy expensive phones because they have their expected vital features. Customers of this part of market choose phones that are light, narrow and have various colors and they can attract attention while its using, fame of manufacturer company of these phones is important for customers of this part of market and they prefer to choose brands which have Persian menu and manual in order to use them easily, against first and second parts customers, processor of smart cellphones is important for the customers of this part. In Mortezavi et.al (2011) research about smart cellphones market segmentation based on expected advantages, smart cellphones markets classified into three parts, in comparison of results of first cluster of this research and result of first cluster of Mortezavi et.al (2011) research it is concluded that price is not important for customers of first cluster of this research and smart cellphones vital features are very important for them, and choose expensive phones because they have their expected vital features and look for phones which attract others attention, while in Mortezavi et.al (2011) price factor is an important factor for smart cellphones customers of this part of market and they prefer to choose relatively cheap phones for their communication and they do not want to attract others attention when they are using it and vital features are not important for them.

7-2- Second Cluster Analysis:

Second cluster includes 88 people of smart cellphones customers which are 32.5 percent of sample volume. Among these 88 respondents, 32 people were male and 56 people were female and 43 people were single and 45 people were married, that married people are more than single people , 16 people of respondents were under diploma,35 people were diploma and degree 20 people were bachelor's degree, 17 people were master's degree and higher. 23 people of respondents were under 20 years old, 30 people were between 20 to 30 years old, 22 people were between 31 to 40 years old, 8 people between 41 to 50 years old and 5 people were 60 to 51 years old that age average 20 to 30 years old included most population.

Seventh factors (auxiliary facilities of smart cellphones) sixth factors (smart cellphones security, ninth (software features), fifteenth (smart cellphones processor), tenth (communication features), fourteenth (after-sales service) are important for customers of this cluster. In spite of importance of mentioned cases, eighth factor (smart cellphones quality), eleventh (smart cellphones memory), twelfth (ease of use), fourth (operating system) are not important for them. Fifth factor (smart cellphones price) has medium importance. From above descriptions it can be concluded that auxiliary facilities, software features, and good communication equipment are expected advantages of the customers of smart cellphones in this cluster they buy phones which have repair ability, and after-sales services and longevity and guaranty are important for them. Smart cellphones price, long battery life, manufacturer company, repair ability and after-sales service, battery charging speed, and voice quality while speaking, coverage and quality and speed of connectivity are not important for customers in this part. In comparison of second cluster results of this research to second cluster results of Mortazavi et.al (2011) it is concluded that price have medium important for second cluster customers of this research unlike Mortazavi et.al research, voice quality during conversation is important for them and they want smart cellphones which have

proper and good communication feature, they buy phones with repair ability and after-sales services, and longevity and guaranty of smart cellphones are important for them.

Third cluster analysis : Third cluster is the smallest part of smart cellphones, market included 78 people of customers (users) of smart cellphones which formed about 28 percent of sample volume. Among these 78 people, 32 people were male and 46 people were female. About 52 people of respondents were married and 26 respondents were single that married people were more than single people. In education status 21 people of customers were under diploma, 18 people were diploma and degree, 20 people were bachelor's degree and 19 people master's degree and higher. In age status 7 people were under 20 years old, 25 people between 20 to 30 years old, 27 people were between 31 to 40 years old, 14 people between 41to 50 years old and 5 people were between 51 to 60 years old that highest age range belongs to 40-31 years old.

This part of market pay more attention to eleventh factor (smart cellphones memory), sixth (security), ninth (software features), fourth (operating system), fourteenth factor (after-sales services), tenth (vital features), first (smart cellphones video system), second (vital features), and fifth (price) are also important for customers of this part of market but are in next priorities. Third factor (longevity and durability of smart cellphones), eighth (quality), twelfth (ease of use), fifteenth (smart cellphones processors) do not play significant role in influence on customer behavior.

By comparison between third cluster results of this research and third cluster results of Mortazavi et.al (2011) concluded that software features of smart cellphones is important for customers of third cluster of this research unlike Mortazavi et.al research. They choose Mortazavi et.al which are able to play PDF, Word,… files, and also can freely install and cancel application in them, and are compatible with existed softwares, and ability to install advanced games and using several programs simultaneously and have software and hardware back up. Standards such as ease of use, having Persian language, night light, Persian calender, Persian manual in Mortazavi et.al in this research and Mortazavi et.al research are among standards which are not important for third part customers. In Asadi and SEYED Salehi (2014) about identifying and prioritizing purchasing standards of cellphone in buyers of Tehran viewpoints, 51 variables identified for cellphone buyers. After implementing agent factor, 51 variables located in 13 following dimensions which cleared 0.74 of total variance: phone video system communication features of smart cellphones, processors, ease of use, two SIM cards, vital features, prices, operating system, software features, longevity and durability of smart cellphones, after-sales, services, memory capacity, phones audio system.

Comparison of the present research foundings to Salehi and Asadi foundings show that phone videos systems, communication features, ease of use, vital features phone price, after-sales service, processor, operating system software features, longevity and durability of phone factors are common in these two researches.

Also, in Mortazavi et.al (2011) research about smart cellphones market segmentation based on expected advantages, 71 components identified for smart cellphones of smart cellphones selection were in the form of 15 factors that factors in total account for 63% of customers behaviors in the field of smart cellphones selection. They have not set a specific name in their research for identified factors. Almost all obtained dimensions of Mortazavi et.al (2011) research are similar to obtained dimensions of this research.

References

- Sohn, So Young, and Yoonseong Kim. "Searching customer patterns of mobile service using clustering and quantitative association rule." Expert Systems with Applications 34, 2008: 1070-1077.
- Jansen, S.M.H. "Customer Segmentation and Customer Profiling for a Mobile Telecommunications Company Based on Usage Behavior." Master Thesis, Maastricht, 2007.
- Okazaki, Shintaro. "What do we know about mobile Internet adopters? A cluster analysis." Information & Management 43, 2006: 127-141.
- Kotler P (1997). Marketing Management: Analysis, Planning, Implementation, and Control. Prentice-Hall. Englewood Cliffs.NJ.
- Kotler P (1999). Marketing Management: The Millennium. Prentice-Hall. Englewood Cliffs. NJ.

- Lampel J, Mintzberg H (1996). Customizing, customization. Sloan Management Review. 38(1) :21-30.
- Wedel M., Kamakura W A (2002). Introduction to the Special Issue on Market Segmentation. J.classification.19: 179-182.
- Walley K E., Custance P R, Parsons S T (2000). UK consumer attitudes concerning environmental issues impacting the agrifood industry.j. Bus. Strateg. Environ. 9: 355-66.
- Wind Y (1978). Issues and advances in segmentation research. J. Mark. Res. 15: 317-37.
- Uronen M (2008). Market segmentation approaches in the mobile service business, Thesis submitted for examination for the degree of Master of Science in Helsinki university of technology, Faculty of Electronics, Communications and Automation.
- Mazzoni C, Castaldi L, Addeo F (2007). Consumer behavior in the Italian mobile telecommunication market, Telecommunications Policy journal, Vol .31, No.10-11, pp. 632-47.
- Amandyp. Smith, (2012), "Product Differentiation and Market Segmentation as Alternative Marketing Strategies ", Journal of Marketing, Vol. 21, No. 1, pp: 3-8.
- Fedly C, (2014). Switching behavior of mobile users: do users' relational investments and
- demographics matter? European Journal of Information Systems, Vol. 15, No. 3, pp. 269-276.
- Gholizade, N. To determine the criteria of marketing segmentation for detergents and cleaning products market (Golrang shampoo), Thesis MSc in Business Management, Faculty of Humanities, Tarbiat Modarres University.
- Hannu V (2008). Contextual Patterns in Mobile Service Usage. Personal and Ubiquitous Computing. Forthcoming.
- Hwang H, Taesoo, J Euiho S (2004). An LTV model and customer segmentation based on customer value: a case study on the wireless telecommunication industry. Expert Systems with Applications, Vol. 26, No. 2, pp. 181-186.
- Mortazavi, S., Asman dare., Y, Najafi shahroodi, M., Alavi, M., The market for mobile phones based on the expected benefits customers, the Journal of Business Management, Vol. 3, No. 8, pages 115-132.
- Ranganathan C, Seo DongBack, Babad Yair (2006). Switching behavior of mobile users: do users' relational investments and demographics matter? European Journal of Information Systems, Vol. 15, No. 3, pp. 269-276.
- Srikes M, Louvieris P, Collins C (2009). the impact of culture on mobile phone purchasing: a comparison between Thai and British customers, 17th European Conference on Information Systems.
- Smith W (1956). Product Differentiation and Market Segmentation as an Alternative Marketing Strategy. Journal of Marketing, Vol. 21, pp. 3-8.
- Safari, SH., Design and explaining the benefits of market segmentation based on consumer research, Thesis Master of commercial management, University Shahid Beheshti, Tehran.
- Seyed Salehi, M., Asadi, A., Identify priorities for the most important aspects of buying criteria for mobile phones from the perspective of buyers in Tehran, the first National Conference on Marketing: Opportunities and Challenges, Ferdosi University of Mashhad.
- World Telecommunication Development Report (2002). "Reinventing Telecoms" & Trends in Telecommunication Reform 2002 "Effective Regulation" (ITU 15. 3. http://www.itu.int/newsroom/wtdc2002/backgrounder.htm)
- Karjaluoto H, Karvonen J, Kesti M, Koivumaki T, Manninen M, Pakola J, Ristola A, Salo J (2005). Factors Affecting Consumer Choice of Mobile Phones: Two Studies from Finland, Journal of Euromarketing, Vol. 14, No. 3, pp. 59-82.

The IISTE is a pioneer in the Open-Access hosting service and academic event management. The aim of the firm is Accelerating Global Knowledge Sharing.

More information about the firm can be found on the homepage:
http://www.iiste.org

CALL FOR JOURNAL PAPERS

There are more than 30 peer-reviewed academic journals hosted under the hosting platform.

Prospective authors of journals can find the submission instruction on the following page: http://www.iiste.org/journals/ All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Paper version of the journals is also available upon request of readers and authors.

MORE RESOURCES

Book publication information: http://www.iiste.org/book/

Academic conference: http://www.iiste.org/conference/upcoming-conferences-call-for-paper/

IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digtial Library , NewJour, Google Scholar