Customer Behavior Over Choice of Smartphones in Social Networks

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Summary

With the advent of social media and the availability of the Internet, the demand for the smartphones has reached its peak. The smartphone manufacturing companies use unique marketing strategies for selling of smartphones. Many marketing companies are working human behavior and personality in order to increase the selling of smartphones. These companies cannot change the personalities or predict the behavior of the customers. However, the analysis on the buying behavior of customers is possible.

This study aimed at investigating the influence of individual's personality on smartphone buying behavior. In order to achieve the objective a descriptive and explorative study was conducted in Pakistan. Data collected from both male and female participants. About 500 responses are received from the participants out of whom 450 responses are considered acceptable for further analysis. By using statistical variables, it is found that the personality plays a vital role in consumer buying decision-making. As individual personalities are consistent, so marketers cannot change customer's personality; but they can understand customer personality and its influence over buying behaviors. The study provides a detailed discussion on the buy behavior in order to increase the business.

Key words:
Personality, Customer Behavior, Pakistan, Smartphone, Marketing

1. Introduction

The smartphones getting cheap as the time passes. It is due to the availability of the Internet, which also increasing. Nowadays, almost every body wishes to uses the smartphone in order to use the services such as Facebook, WhatsApp, Skype, reading online journals. Pakistan telecom industry is considered to be one of the fastest growing industries in world. Currently Pakistan is one from the fastest growing countries in the telecommunications market so Pakistan's potential can never be doubted in this market. In the past only upper and middle class people were able to buy and use the smartphones phones but now as the time passed and the technology kept on moving towards advancement almost every citizen can buy and use mobile phones. Currently

industry have 119% growth rate during 2000 to 2007 whereas mobile phone penetration rate was 55% at the end of 2007. Mobile sector is contributing 2% directly and 5% indirectly to GDP. Currently the number of mobile phone users had reached 131 million and in Asia it is ranked as 5th largest country in mobile phone users. The use of mobile phones has good impact towards socio economic conditions of the country. (Pakistan Telecommunications Authority – PTA, 2007-08) [7].

By definition, personality assessment is very complex. The Personality assessment of individuals simplifies the complexity. Putting label on the something helps us in recognizing it quickly, so putting label is not bad thing. It is shorthand and shorthand is useful. This rule is not useful for people, because people are not easy to understand. People are too interesting and too complicated to be summed up in a simple assessment. Generally it is argued that personality assessment is neither valid nor reliable. This argument is black and white version; it provides illusion of understanding of people at cost of truth. What we find that most people are constant in their personality, because personality characteristics are dynamic and organized. A Person's decisions and behaviors are influenced by his or her personality [4].

2. Literature on Personality

2.1 Personality

The word personality is originally taken from a Latin word persona. The word persona means the mask. Personality is a set of dynamic and organized characteristics that person possesses. This set of unique characteristics influences the cognitions, motivations and behaviors of that individual [5]).

The academicians and researchers have tried to understand personality from different angles and at different levels. Since many decades researchers have faced problems in understanding the individual's personalities. After many researches and observations researchers and academicians

have reached a conclusion that, there are big five personality traits. These five big personality traits are given below [12]:

Extraversion Personality
This personality is characterized by the attributes like as Excitability, amiability, sociability, loquaciousness, boldness and high amounts of emotional expressiveness.
Agreeableness Personality
This type of personality has attributes like as trust, selflessness, kindness, affection, and altruism.
Conscientiousness Personality
 This type of personality has attributes the high levels of thoughtfulness, self-discipline, act dutifully, and aim for achievement; planned rather than spontaneous behavior.
Neuroticism Personality
The attributes of this personality are able to tendency to experience unpleasant emotions easily, such as anger, anxiety, depression, sadness or vulnerability.
Openness Personality
The attributes of this personality are as imagination and insight, adventure, unusual ideas, curiosity, and variety of experience[4,6,7,8].

2.2 Customer Behavior

The major focus of consumer behavior is to study that how consumer comes up with a certain decision while purchased products or availing any service. Research in consumer behavior is one of the top priorities of marketers across the globe. Although there are lots of studies investigating consumer behavior regarding their purchase decisions but there is still lot more to be investigated [9].

2.3 Research on Customer Behavior towards Smartphones

RODRIGO et al. (2013) found that personality traits i.e. extroversion, conscientiousness, and intellect have a noticeable influence over customer satisfaction as for as mobile phone usage is concerned—positively for the extroversion and negatively for conscientiousness, and intellect whereas extroversion positively influences mobile phone usage extroversion and conscientiousness positively influence the users' perceived usability of mobile services. Interestingly, usability has the strongest positive impact on satisfaction, whereas mobile phone usage has a negative impact on satisfaction [11,12].
Another study in Pakistan on the same subject concluded that most of young people were into "Trends" means youth wants to buy new mobile models as per the current market trends more than other attributes. Irrespective of it the relationship of personality factors openness and Moral with the "Trendy" is attention-grabbing. Study further says that that people with complex personalities are difficult

targets for marketers' rather simple personalities. (Sidiqui 2011). Another study by Wilburn Lane Chris Manne examined the relationship between mobile phone buying behavior and big five personality, study found that extravert people are more likely to own a smart phone [14].

2.4 Social media and mobile phones

Understanding the mobile phone consumer's behavior is important in this digital era for success of any mobile phone brand. Mobile phones have become most common communicators in this century and its growth is expected in coming days. Today is era of social media and most social media networks are carried out with the support of mobile sets. Therefore understanding the role of mobile phones in social networks communication is important as important is developing strategies for social media communication. In every single minute more than 4 billion posts are added on the major social networks and approximately 2.62 billion are using social networks. Most of the posts are related to businesses and brands. Victory loves preparation; most marketers keep this phrase in mind when it comes to marketing of personal branding. Social media marketers should avoid from following marketing mistakes while targeting millennial consumers for brands. First having no strategy, many brands fail because of not having good social media plan for personal branding. Secondly not having defined brand voice. Thirdly incomplete social networks profile and finally not knowing exactly audiences is a really a big mistake. Social media marketers should take advantage of networks tools means using platform specific tools to present contents, simply getting social media into strategy makes difference between social media marketers[13,1,2,4].
Leveraging social networks boosts mobile sales but it is not an easy to do. Social media is great opportunity to promote personal brands and it is free but many business firms and marketers do not consider it a worth effort. In today's digital era more than seventy percentages of peoples use social networks to get guidance in purchasing decisions. Sixty percentages of these people engage with brands through social networks before making any final purchase decision. Majority of consumers who have good experience will recommended it. Consumers who are engaging in social networks at least thirty percentages spend more. Fifty parentages of retailers are rating social media as effective marketing tool for consumer mobile phones [6,8].
Social networks play significant role in consumer journey for buying mobile brands. Social networks drive awareness about mobile brands and influences consideration among the consumers. Purchasing decision and developing loyalty is also influenced by social networks. These goals through social networks can be achieved for mobile brands through developing cohesive

social media strategy. The first step towards a comprehensive social networks strategy is educating the employees who are directly dealing with employees. Firms can enhance the mystery of physical presence by adding some screens. Social media develops gape between online and offline world. It is effective when it is adopted properly in attracting mass customers of mobile brands.

3. Objective of the Study

Since every individual has a unique set of personality traits and so the self-image; and these traits and self-image influences the buying patterns of that consumer. This is two ways process, in some cases individuals want to match their brand choices with personality and sometime consumer take this as to can his or her self-image by selecting certain brand or product.

Mobile set has become a status symbol across the globe and especially in Pakistan. So it gives individual an opportunity to modify their self-image. There is it is very important for mobile industry in Pakistan to look into this area and make their promotion strategies according.

Based on the literature and conceptual framework study tends to explore the following areas.

1. To know personality and reasons for using smartphone
2. To identify personality factor influencing the purchase of particular mobile brand.
3. To explore the formation of mobile personality.

4. Research Methodology

Study is descriptive and exploratory in nature. Data collected from the both male and female in Lahore city using questionnaire, research tool used is likert scale. Cluster sampling method was used to get data. Primary data was collected from 500 respondents out of which 450 responses were considered to be fit for further analysis. Factor loading and Crown Basch Alpha technique were used to make sure that item statement in questioners are relevant and reliable.

5. Results and Discussions

Data collected with respect to personality tested by using factor analysis. Tables obtained as result of factor analysis include, variance, component matrix and communalities are presented in Table 1 2.

Table 1: KMO and Bartlett's test for personality

KMO measure of sampling adequacy	.635
Bartlett's test –chi square	164.761
Sig.	.000

Table 2: Communalities for Personality

	Initial	Extraction
The usage of mobile reflects my personality.	1.000	.543
I will be more appreciated in my group, when I use mobile.	1.000	.632
Mobile reflects my self-image.	1.000	.676
Principal component analysis		

Table 3: Component Matrix for Personality

	1
The usage of mobile reflects my personality.	
I will be more appreciated in my group, when I use mobile.	.747
Mobile reflects my elf-image	.771
Principal component analysis	.782

Table 4: Total variance explained for personality

Dimensions	Total	% variance	Cumulative %
1.	.654	21.8	21.8
2.	.590	19.10	40.9
3.	1.81	60.1	100.0

6. Findings

This research has investigated three dimensions regarding mobile personality formation. These are usage of mobile reflects my personality; I will be more appreciated in my group; when I use mobile and Mobile reflects my self-image. Cumulative variance is 60%. It means that usage of mobile reflects their personality, they perceived to be more appropriate when using certain mobile brand and mobile brand reflects their self-image.

7. Conclusion

Personalities of individuals are unique and consistent, whereas trait is a durable behavior in a situation. Trait can be honest, moody, impulsive and friendly. Personality is governed by unconscious force that the individuals cannot control. As smartphone is something more than just a communication device, people associate their personalities with mobile brands. Therefore, it is very important for mobile manufacturing companies to understand different personality types, their choices and how people associate mobile brands with their self-concept. Companies must formally, objective and empirically assess the personalities of their potential customers and make link with brands. This study is useful for the marketing companies in order to improve the company sell.

8. Limitations and Future Research

This study was conducted in Pakistani context; it can be done in a multicultural environment. Other personal factors can be considered for similar kind of research like motives of individuals, perceptions, self-esteem and attitudes. The research is conducted on the data collected from Pakistan. Due to the economic conditions of Pakistan, the same research on a different country may reflect different results.

References

[1] Green L. and Freed D.E., "The Substitutability of Reinforces", Journal of the Experimental Analysis of Behavior, 60, 141–58 (1993).

[2] Graziano, W. G., N. H. Eisenberg, "Agreeableness: A dimension of personality", Handbook of Personality Psychology, Academic Press, San Diego, 795–824. (1997)

[3] Hursh S.R., "Economic Concepts for the Analysis of Behavior", Journal of the Experimental Analysis of Behavior, 54, 219–38 (1980).

[4] Koponen, A., "Personality characteristics of purchasers", Journal of Advertising Research, 1; (1960).

[5] Foxall, G. R., Goldsmith, R. E., and Brown, S., "Consumer Psychology for Marketing" 2nd Ed. International Thompson Business Press, London,(1998).

[6] Loehlin, J.C., McCrae, R.R., Costa, P.T., Jr., & John, O. P. , "Heritability of common and measure-specific components of the Big Five personality factors", Journal of Research in Personality, 32, 431-453 (1998).

[7] LePine, J. A., L. Van Dyne, "Voice and cooperative behavior as contrasting forms of contextual performance: Evidence of differential relationships with big five personality characteristics and cognitive ability", Journal of Applied Psychology 86, 2, 326–336, 2001.

[8] Pakistan Telecommunications Authority, "Telecom Quarterly Review", Pakistan Telecommunications Authority, Islamabad. Retrieved July 7, 2007, from http://www.pta.gov.pk/annual-reports/annrep06.pdf.

[9] A.M. Greenberg, W.G. Kennedy, and N.D., "Predicting Personality Using Novel Mobile Phone-Based Metrics", Springer-Verlag Berlin Heidelberg 48–55, 2013.

[10] Sidiqui Kamran, "Personality Influences on Mobile Phone Usage", interdisciplinary journal of contemporary research in business 3, 3, (2011).

[11] Swickeert, R. J., J. B. Hunter, J. L. Harris, and J. A. Herring. "Relationship between Internet use, personality, and social support Computers" Human Behavior, 18 4, 437- 451, (2002).

[12] Sawng, y.-w., kim, s.-h., lee, j., and young, s.. "Mobile service usage behavior in Korea: An empirical study on consumer acceptance of innovative technologies". Tech. Econ. Devel. Econ. 17, 1, 151–173. 2011.

[13] https://www.socialmediatoday.com/news/how-to-leverage-social-media-to-boost-in-store-sales-infographic/523391/

[14] Wilburn Lane* Chris Manner. "The Impact of Personality Traits on Smartphone Ownership and Use" International Journal of Business and Social Science, 2, 17, 2012.

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