

Conceptual Paper on Factors Affecting the Attitude of Senior Citizens towards Purchase of Smartphones

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Abstract

Smartphones have gained huge popularity globally among the youth and its distinct advantages and improved features ensure that smartphones are here to stay in the market for a considerable amount of time. However there is still an opportunity lying for the smartphone industry to capitalize on the senior citizens segment. This research paper endeavors to understand the expectations of the senior citizens from phones and how these expectations influence their intention towards smartphone purchase. This paper proposes a conceptual framework mapping the various factors that affect senior citizens to the extent to which these factors influence people while making a purchase decision.

Keywords: Functional Value, Relative advantage, Subjective Norm, Technology Factors

1. Introduction

1.1 Smartphone Market

A smartphone can be defined as a portable mobile handset which is capable of doing multiple operations at the same time like a computer, typically characterised with a large screen and having an operating system capable of handling various general purpose applications.

The uptake of smartphone is at a booming phase and owing to its powerful features and attractive looks, it is steadily becoming the first choice for the 900 million mobile phone users in India to stay connected to the world. The fast evolution of technology awareness among the Indians has ensured hasty penetration of smartphones on a pan-India basis. The decreasing cost per device as well as higher penetration of social media has resulted in exponential growth of smartphone purchase all over the country.

Smartphone market in India is led by Samsung, followed by Apple, Micromax and Nokia. According to market reports, Indian smartphone shipments have increased three-fold to reach a staggering 13 million units in the third quarter of 2013 and has completely outnum-

bered the feature phone sales in India. According to the report by IDC, India's smartphone market saw a rise in smartphone shipments by a convincing 229% and comprehensively establishes the fact that smartphone has penetrated deeply into the minds of the Indians.

1.2 Senior Citizens in India

The senior living sector in India is at a crossroad. Recent stats reveal that nearly 100 million people in India belong to senior citizens sector (more than 60 years of age) constituting a huge segment that can be aimed for future investment and development. There clearly lies an untapped market in the form of senior citizens segment which is not often looked upon as a very profitable and potential sector by the investors and marketers. Marketers need to change the traditional viewpoint as with time and increasing penetration of literacy in this segment, Indian senior citizens are fast becoming a greatly potential market asking to be catered to. A notably distinct fact that differentiates India from the western countries is that unlike western countries where the senior citizen segment is at a mature phase, Indian senior citizen segment remains fairly untouched and uncovered and thus

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exposes a vast opportunity for investors to encash from the segment.

Market data shows a distinct difference in the uptake of smartphones for population less than 55 years of age and that for more than 55 years of age. That encourages us to broaden the scope of our paper in terms of the age of the target segment and thus for our research we consider 55 years of age as the lower bound for senior citizens

1.3 Smartphone Diffusion in the Senior Citizens Segment

As the smart phone shipments in India grew by a staggering 229% in India and the number of smart phone users climbing upto 67million, a segment still lies untapped- a huge potential awaits the segment of people aging more than 55 years of age, with adoption of smart phone in the elderly people segment still maintains a lowly 4.7%. While surveys reveal that 38.5% of people belonging to this bracket are actually eager to buy a smart phone, the general conception is regarding the technological competence to use a smart phone. The issue they face while handling a smart phone is with the touch screen, which is believed to be supposedly easy to use, turns out to be difficult to use for the elderly people. Moreover a myth remains prevalent in this segment that smart phones belong to younger people only, as they are the ones who are more exposed and attracted towards advancements in technology and are the people who belong to the “Tech savvy” bracket of mobile users. Hence, needless to say that even though there is a wish amongst the people belonging to this segment, this wish has not been fulfilled yet to the fullest and still offers an untapped market full of opportunities that the handset manufacturers can analyze and capitalize on. Thus this becomes the primary motive towards our research paper to understand the expectations of senior citizens from smartphones and to get more insights on the factors that influence senior citizens in building a favourable attitude towards smartphones.

2. Literature Review

Factors influencing customers mobile phone purchase decision.

2.1 Price

Price according to many researchers is the most important determinant in terms of influencing customers

towards a smartphone purchase. According to theory of economics, price inversely affects the demand of a product. Erickson & Johansson¹ opined that price as a critical factor of consideration in terms of purchase of a product with limited budget on offer. According to Dodds² there is an acceptable price range associated with purchase intention for customers. When the actual price of the product exceeds the acceptable price range for the customers, the willingness to purchase the product reduces significantly. Peter³ further illustrated on the impact of price by opining that when the price of the product lies lower than the accepted price range for the customers, customers show a lack of confidence or trust towards the product.

According to Smith and Carsky⁴, price always plays a pivotal role in influencing customers before making a purchase decision. According to Aaker⁵, level of price positively influence customer behavioural intention as price indicates product quality and embedded value that the product offers. According to Kenning, Evanschitzky, Voegl and Ahlert⁶, over 90 percent of retailers regularly keep a tab on the prices offered by their competitors. Pricing thus plays an influential role in establishing a psychological construct related to the retailer success.

As opined by numerous researchers, it has been proved that price lays a significant role in formation of a favorable attitude towards products. However it is to be seen whether senior citizens as well consider price as a powerful determinant for smartphone purchase.

2.2 Brand Image

In the current competitive scenario, Brand name and Brand image play a very crucial role in order to attract customers and influence them into buying action. According to Srinivasan and Till⁷, Brand name is useful in corresponding and signifying quality to the customers and suggests precise knowledge structure associated with the brand. Researchers have concluded that Brand name & brand image acts as a deciding factor for adding value to the product Monroe and Grewal². Brand image helps in giving a unique identity to the product and helps launching of a product in the market⁸. Haigh⁹ on the other hand has given three definitions for three aspects of brand: “Trademark” can be defined as a logo with certain visual appeal or elements; “Brand” can be defined as a trademark with associated intellectual properties and finally “Branded Business” covers the whole organization. According to Aaker¹⁰, a brand can help creating a sustain-

able competitive advantage to a firm. Thus the resultant can be said as a firm can gain a sustainable competitive advantage if the customers perceive the firm and its products in a favorable manner¹¹. Companies now have understood the importance of “brand” and regard “brand image” as an invaluable asset linking to products or services¹². According to Khasawneh and Hasoune¹³, brand name influences how consumers evaluate products and resultantly, affects the buying decision.

2.3 Functional Values and Basic Factors

Functional values can be defined as a few dimensions which act as one-dimensional factors for the users. The influence of functional values or basic factors on the overall satisfaction is linear in nature, the factors which are core essential to a user to build a favourable attitude towards the product. According to Seth et al.¹⁴ Functional values are subjective in nature and vary with the reasons to purchase the product and how the user intends to consume the product which can be further attributed to the needs of the user. Gimpel¹⁵ opined that functional value can be assessed by economic utility it delivers to the user as compared to the costs incurred. Karjaluoto¹⁶, in his study “Factors affecting consumer choice of mobile phones: Two studies from Finland” found a strong positive relationship between reliability of the phone and intention to smartphone adoption ($r=0.712$). Further Sands and Tseng¹⁷ assessed that durability and lack of disturbances or malfunction in the operation of the phone impacts reliability of the phone and hence are essential to add value to the product.

2.4 Technology Factors

In the current scenario, where the world has witnessed a massive leap as well as a huge increase in acceptance of new technology, technological factors do play a significant role in terms of making a buy-or-not-to-buy decision for a smartphone. In case of GenX (people lesser than 40 years of age), the expectation from a technological viewpoint is considerably higher than that of GenY. Better technological features encourage and attract tech-savvy customers in respect to its influence on forming a favourable purchase intention for the smartphone. In-Stat/ MDR, 2002 and Liu¹⁸ have judged that technological features like a higher resolution built-in camera, higher memory, better OS version, etc. do have an exponential impact on attracting customers to purchase newer models of smartphones.

According to Oulasvirta et al.¹⁹ phones now come up with advanced technological advancements like wireless connectivity, internet browser or a HD display and these features have been found to have significant influence on the customer’s perspective about the smartphone. Chang and Chen²⁰ gave a further insight about technological factors by saying that operating systems have their own personalities and thus have differential impact on customers according to the type and needs of the customer.

2.5 Relative Advantage

Relative advantage can be defined as the attributes or features which act as delighters for a product, attributes which make the product stand out with respect to other similar products at similar prices. Relative advantage according to Kotler, Philip, Armstrong, and Gary²¹ helps in meeting the expected level of satisfaction that a user expects from the product to deliver while owning or consuming the product. Tidd²² assessed that relative advantage can be defined as the extent to which the innovation or the unique differential factors inculcated in the product is perceived as better and useful as compared to other similar products. As Rogers²³ pointed out, the extent to which features of relative advantage will be perceived useful and better depends on the psychological and physiological characteristics of the user and also on the nature of the innovation. As depicted by Ho & Wu²⁴ a product of higher relative advantage is perceived as a better product by the users and thus has got a higher diffusion speed in the market and a higher acceptance among the customers.

Keeping in mind we are considering the factors which influence senior citizens to purchase smartphones, relative advantage that can be offered can be the various health apps to monitor their daily health conditions like blood pressure level, blood sugar level, etc.; pill reminder apps, special touch screen designed to ease the usage experience for senior citizens and so on. Now it is to be seen whether these features do play a differential role in influencing the senior citizens while considering a purchase intention.

2.6 Subjective Norm

Ajzen²⁵ initially defined subjective norm as the compelling pressure that different social groups have on the customer towards a purchase decision. According to Fishbein & Ajzen²⁵, customer purchase intention is intricately based on the concept or model known as TRA

which takes into account the influence of subjective norm as one of the major contributors towards purchase intention. According to Seth et al.²⁶ influence of referrals is completely subjective in nature and varies from person to person. According to Gimpel¹⁵ a customer may intend to purchase a product just on the basis of the perceived social value or image it can convey irrespective of the value that the customer will derive from it. Gimpel¹⁵ also assessed that owning and using of smartphones to the customers is a way of conveying to the society that they are the leaders of upcoming technology and aware of the latest trends in technological advancements. Tuominen⁴⁰ further clarified the influence of subjective norm by pointing out that many customers buy smartphones just to enhance their social image. You et al.²⁷ in his study, “Factors affecting adoption and post-adoption of Smart Phone” pointed out that there is a significant relationship between the decision to purchase smartphones and the social image it conveys.

Subjective norm accounts for the extent to which referrals or inputs from interaction with the society, be it friends, family, colleagues, relatives, political parties and so on influence customers while making purchase behaviour²⁸. Littlefield⁴¹ added to the list of influences given by Kalafatis²⁸ by inferring that apart from friends or family, consumers also get influenced by the inputs from agents, newspapers, internet and other such sources.

2.7 Attitude

The simplistic definition of attitude can be the way we look at things. It establishes the feelings we have towards a particular object or a person. Hawkins, Best and Coney²⁹ in their study “Consumer Behavior: Building Market Strategy” defined attitude as an organization of various psychological processes which include motivational, emotional and cognitive processes relating to a particular aspect in the environment that gives a favorable or unfavorable attachment towards that aspect of the environment. Pride and Ferrell²⁹ further pointed out that attitude refers to the knowledge we possess and the positive or negative feelings we have about an object or an activity. According to Petty, Unnava, and Strathman³⁰; Solomon³¹, Attitude also describes the extent to which we like or dislike a particular object, person or any other aspect of the environment.

2.8 Purchase Intention

Purchase intention can be defined as the desire or willingness shown towards the purchase of a particular product. According to Warshaw & Davis³², Purchase intention may not necessarily lead to actual purchase action because purchase behaviour is affected and influenced greatly by the ability of the customer to perform the behaviour. In other words, as depicted rightly by Blackwell, Miniard & Engel³³, purchase intention represents the intention or willingness that the customer has in his mind about purchasing a product and may or may not lead to the actual purchase behaviour. Bagozzi et al.³⁴ defined Purchase intention as the personal tendencies towards a favourable purchasing action relating to a product. Intentions are different from attitude in the sense that attitude is the evaluation of how much a customer liked the various features of the product while intention denotes the customer’s motivation in the sense of his or her willingness to exert considerable effort to fulfil the actual purchasing behaviour³⁵. Therefore while attitude can be seen as just the feelings or attachment that the customer has towards a particular product, purchase intention goes beyond attitude through willingness to satisfy the urge to purchase the product towards which the customer has a favourable attitude. Fishbein and Ajzen²⁵ emphasize the fact that attitude influences in purchasing behaviour through behavioural intentions.

3. Theories and Models

Thus far, we have identified the various parameters or factors which influence customers while making a mobile phone purchase decision. However in order to design a conceptual framework to test the significance and importance of each of these factors, it is essential to study some of the most widely used behavioural intention models.

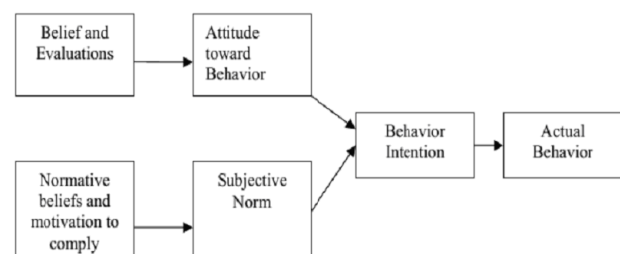


Figure 1. Theory of reasoned action.

Source: Ajzen (1980)

3.1 The Theory of Reasoned Action

Theory of Reasoned Action (TRA) highlights the fact that an individual's actual behaviour is driven by his/her behaviour intentions which is in turn driven by the individual's attitude towards a particular product and the impact of subjective norm regarding to the performance of the actual behaviour²⁵.

The Theory of Reasoned Action considers that an individual undergoes the final purchase behaviour through rational evaluation of alternatives and assess the expected performance beliefs in the process of attitude formation. As already stated, Fishbein and Ajzen²⁵ depicted attitude as a set of negative or positive attachment or feelings that an individual has towards a particular aspect of the environment about performing an actual behaviour. The attitude formation process takes into consideration evaluation of the beliefs through an expectancy-value model

3.2 The Theory of Planned Behavior

While Theory of Reasoned Action is supposed to predict an individual's behaviour in a voluntary scenario, the Theory of Planned Behaviour acts as an extension of the Theory of Reasoned Action to take into account the mandatory situation. Ajzen³⁶ added a new construct of perceived behavioural control in his Theory of Planned Behaviour model and defined it as the ease or difficulty perceived by an individual to perform the actual behaviour. Taylor and Todd³⁷, further opined that perceived behavioural control is the perception of various internal and external constraints that an individual has acting on the final behaviour.

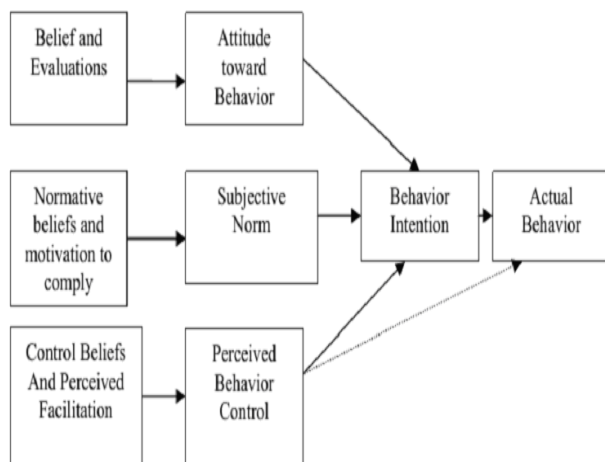


Figure 2. Theory of planned behavior.

Source: Ajzen (1985)

The Theory of Planned Behaviour resembles TRA in the way that both take into account individuals take their decisions rationally and evaluates the alternatives in hand to come to a final behavioural decision. Assessment of perceived behavioural control is also done using an expectancy-value model similar to the attitude formation process. Various researchers like Harrison³⁸; Mathieson³⁹; Taylor and Todd³⁷ have used TPB as the base model to evaluate the acceptance of various technologies at an individual level and willingness to perform the purchase behaviour for those technologies.

Conceptual Framework:

As we have now seen some of the behaviour models most prevalent in the industry in order to understand customers behavioural intention to purchase a particular product, we can now approach to design our own conceptual framework consisting of the various factors enlisted above linking to customers' attitude towards a smart phone and finally their intention to purchase the phone. Our conceptual model is defined in Figure 3:

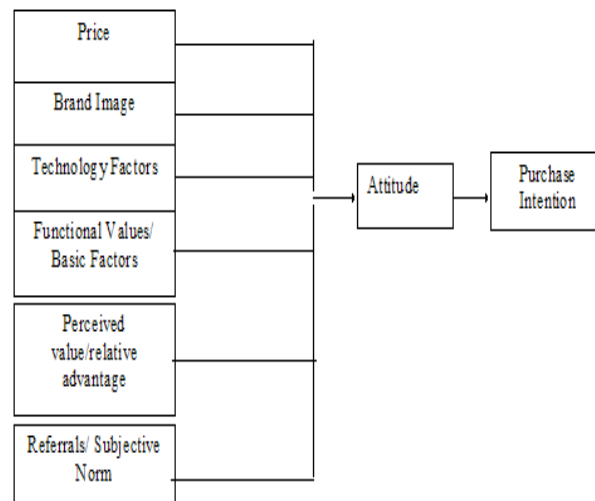


Figure 3. Proposed framework.

4. Hypothesis Development

This paper deals with six independent variables and their relationship and impact they have on overall attitude of customers while purchasing smart phones. Moreover this paper also deals with the relationship of attitude that customer has regarding a particular smart phone and overall intention to purchase that product. Thus the hypotheses can be enlisted as follows:

- H1: There is a significant relationship between price of a smartphone and attitude regarding the smartphone
- H2: There is a significant relationship between Brand Image and attitude regarding the smartphone
- H3: There is a significant relationship between Technology Factors and attitude regarding the smartphone
- H4: There is a significant relationship between Functional values/ Basic Factors and attitude regarding the smartphone
- H5: There is a significant relationship between Perceived Value/relative advantage and attitude regarding the smartphone
- H6: There is a significant relationship between Subjective Norm and attitude regarding the smartphone
- H7: There is a significant relationship between attitude regarding the smartphone and Intention to buy the smartphone

5. Managerial Implications

As said earlier, very few researches have been made to get more insights on the senior citizens segment regarding their expectations from smart phones. There remains a mammoth unanticipated market space providing huge opportunity for the smartphone manufacturers to unleash their marketing skills and use these insights and develop products to cater to their needs and expectations. Thus this paper offers a new market development strategy for the manufacturers to try to cater to an untouched segment. This paper also gives opportunity for manufacturers to use Blue Ocean Strategy to come up with a completely new and uncommon handset that can suffice to the needs of the senior citizens. This research paper is also dedicated to the market followers in the smartphone industry who are trying to battle the clutter by indulging only in price wars thereby neglecting the fact that nowadays customers are highly brand conscious and will not show purchase intentions if something new is not offered to them. It is an ideal opportunity for these players to try and dominate in the segments in which players like Samsung, Micromax or Nokia have left untouched. This research paper can act as a bypass strategy for these players to develop their market base in the senior citizen segment and then slowly and steadily increase their market strength by challenging the market leaders. As the senior citizens in India are getting more and more tech-savvy, this segment is no longer a niche one and hence vast opportunity awaits the handset

manufacturers if they are able to strike the right chord in the minds of the target audience and cater to the expectations of the senior citizen.

6. Scope for Future Research

Thus far, we have identified a few factors which influence customers while initiating a smartphone purchase decision. However it is to be seen whether similar factors influence senior citizens as well or not. Here in this paper, we have constructed a conceptual framework linking the various factors such as Price, Brand image, Technology factors, etc. with attitude of customers towards the smartphone and finally their intention to purchase the handset. The conceptual framework along with the proposed hypotheses needs validation through primary research and extensive statistical rigor. Validation of the conceptual framework is important in terms of obtaining proper insights into the senior citizens segment and constructing a comprehensive and tested model to come up with a proper knowledge about expectations of senior citizens from smart phone. Thus a lot of work is yet to be done for the proposed conceptual framework to be validated and approved which includes coming up with proper questions to fit into the various buckets used in the framework and going through extensive statistical tests to draw the final conclusion into the framework.

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