Impact of Brand Image Customer's smartphone buying decision

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Abstract

The Study aims at exploring factors that concern the purchasing decision towards smartphones. The variables that are used in the study are brand image, product price and purchase decision of smartphones. The research involves two independent variables namely, brand image and product price and one dependent variable purchase decision. A customer's perception to the smartphone are generally influenced by the company's brand image and also on the fat that the price at which the smartphone is available in the market. The finding of the study concludes that customers purchase decision are influenced not only by the brand image of the product but also the price factor of the smartphones as well.

Keyword: Brand Image, smartphones, purchase decision

1. Introduction

The transmission of sound in the form of signal can be considered to have a long history. The history of the first device that could be considered wireless, mobile, and actually being capable of connecting to the standard telephonic network can be deemed as much more recent. Those device could barely be considered portable in comparison to the current era's compact hand-held devices.

The intersection of communication and digital computing developed for consumer devices can be considered to be on the evolutionary route to bring cross operability and this can leverage the inter services and functions amongst almost each and every possible industry.

The term 'smartphone' was coined as a marketing strategy to gain advantage in the market, referring to the new and upgraded class of mobile phones which provided an assimilated services of communication, computing and mobile associated sectors that included the voice communication, text messaging, private information management associated applications and wireless communication orientation.

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The Smartphones could be said to have revolutionized in 1993 with the coming of IBM's Simon handset, though few were made aware of its features and functions. The smartphones gained prominence with Apple's introduction of their Smartphone for mass consumer market. The smartphones have come a long way since then. The early smartphones were predominantly developed for the corporate users and was used as an organizational device due to the fact of its cost being significantly higher for the general consumer to afford for their personal use.

The Smartphones era can be briefly divided into three different time phases. The First phase was entirely dedicated and associated with the organizations. In this phase the smartphones were specifically targeting corporations and organizations by providing features and functions according to the corporates requirement and necessity. This era started with the coming of the very first smartphone, IBM's Simon in the year 1993. Blackberry followed up by providing the world with one of the most revolutionary phones in the first phase. The smartphone introduced now had features like Internet, E-Mail services, Web Browsing facilities and also supported cameras. This phase was entirely focused on smartphones targeting organizations and corporations.

The Smartphones second phase began with the launching of iPhone by Apple in the year 2007. This was a major breakthrough in the Mobile market. Apple introduced the world to its first smartphone in the year 2007. This was a move that rocked the world as this was the first time that a smartphone was built and developed for exclusive use for general consumers. This was a revolutionary move which changed the world's outlook on mobile. Google soon followed suit and
Unveiled its Android Operating System by the end of 2007 with the intent to approach and attract the consumer smartphone market segment. This phase saw the smartphones deeply being modified for consumer preference. This time phase witnessed the emphasis on introducing several features and functions that general customers required and also keeping the cost factor in their mind. Thus the innovation and development of smartphones offering consumers with various features at a lower cost attracted more and more customers. Smartphone features and functions like, Internet, E-Mail services, audio/video support, social web integration and chatting facilities were significantly being developed for the smartphones.

The Smartphones third and final phase focuses mainly on closing the gap between organization oriented and general customer oriented smartphones along with the constant improvements mane to the various features of the smartphones like the display quality, software technology and also focusing on the hardware aspects of the smartphones like smartphone operating systems stabilization, improving the user interface, introduction of more powerful batteries for smartphones for longer use and several other features associated to these smartphones.
This phase could be stated to have been started in 2008 with the process of up gradation bought about in the operating systems of the mobiles. Since then the world has witnessed several upgrades made by smartphone giants to their operating systems like Apple IOS, Google's Android, Blackberry OS, Microsoft's Windows and several others among these.

All the known Operating Systems (IOS, Android, Windows, etc.) and major Smartphone manufacturers (Apple, Samsung, Huawei, Nokia, One Plus etc.) are focusing on bringing about features and functions that would improve the worlds perception towards it. The Android OS has been a dominant player in this segment and it has provided a substantial opportunity to all smartphone manufacturers to bring about. The Android has provided the manufacturers to experiment and develop devices using their platform of open source Android technology to develop their devices.

Smartphone growth

The world has seen a substantial booming sale of smartphones. The companies ranging from multinational to locals. India hold the 2nd largest market in the smartphone consumer units among the world. India's Smartphone shipment saw a growth of 9% Year on year basis to reach a whopping 53 million units for the Q3, 2020 segment, according to the research study conducted by Counterpoint's Market Moniter services that is shown in figure 1. This has been the highest ever shipment to be recorded for the Indian Smartphone sector for any quarter. The Brand's push along with the pent-up desire of the customers due to the recent COVID lockdown may have slingshot the sales on online platforms which could be credited for such excruciating growth. The COVID fear too seems to have directed the customers to opt for an online platform rather than the offline ones.

Figure 1: Smartphone Shipment Market Share in India (%)
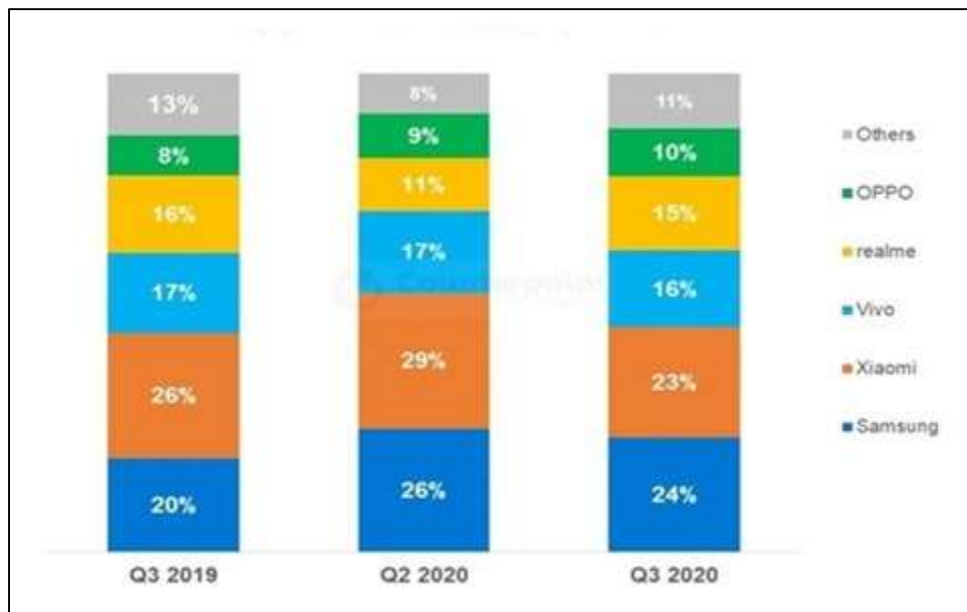
Source: Counterpoint Research Market Monitor, Q3 2020
Note: Xiaomi's share include POCO brand

2. **Literature Review**

Brand Image

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Han (2017) in his paper titled, "Effects of Brand Image on Purchase Intention and Brand Loyalty: Focused on Mediating Role of the Brand Trust" has conducted a study to understand the effect of Brand Image of Home Meal Replacement (HMR) on their customers purchase intention and their brand loyalty for the product. A total of 300 sample were collected for the study from 2 specific cities of Korea, Seoul and Kyonggi. The study concluded that emotional image seemed to have an effect on purchase of HMR whereas social Image had no such effect.

Athar (2020), aimed at studying the effect of Brand Image, the cost of stay and promotion involved with the Cadaka Hotel, Java. A primary research was conducted with the sample size of 94 respondents who had stayed in the hotel and the data was collected through questionnaires, interviews and other documentations. The study concluded that Brand Image, stay charges and promotional efforts of the hotel seemed to have a positive impact on customer's decision to stay there.

Since its formation, brand image becomes a pivotal part of the corporation largely due to its humongous implication on a firm's strategy associated to their planning and performance. Various factors have diligently contributed to the creation of brand image, which also includes practicality, the symbolic representation as well as their acceptability as a product/ services (Hsieh and Li, 2008). Brand Image can be stated as a customer's perception about a brand which has been promoted by the conglomerate inter-action propounded between the affective, cognitive as well as the evaluative thought process from within a customer's mind (Lee et al., 2019). Seo and Park (2018) state that brand image is a physical manifestation of the product/ service in the customer's mind and it has the aptitude to become a crucial marketing element. Once the Brand Image has taken root in the customer's mind there are expectations from the product/ services. This is followed by the fact whether the product deliver's as per the expectation or not. If the product is able to meet the expectation of the customers, trust for the brand is built (Takaya, 2019).

As per Kim et al. (2019) brand trust is a very essential factor that specifies an individual's behavior and attitude associated along with a business relationship.

Hermanda et al. (2019) in their study states that purchase intention is a form of an activity in which the customer propounds the idea of purchasing a product/ service that is available. The collaborative set of consumer's behavior, their attitude as well as their initiated perception, are closely associated to customer's purchase decision that they have. Purchase Intention is a multi-step process that refers to the personal customer experience that is needed to innovate and incorporate the product knowledge associated to any specific product/ services (Tariq et al. 2013).

Product Price

Launtu (2021) has tried to explore the cognitive relationship between Price, product quality and the online buying decision of customers. The research aims at studying the effects that the above factors have on the customers purchase decision on a generic individual level as well as at cognitive level. The customer's preference are ever-changing in nature. One second they prefer a specific feature in any product and the next second their preference changes. The research focuses on specific factors as to observe and understand the reasons for the above factors. The study concludes

that these factors have a price of the product as well as the quality of the product can play a pivotal role in a customer's decision making process.

Purchase decision

Rachmawati et al. (2019) in their paper have tried to study the various factors that influence a customer's intention to buy any product. The study focuses on various factors that influence any customers buying decision. The factors studied in the research are price, location of the property and the company's image. The study concludes that price, location of the property, promotion and the company's image can have significant influence on the customers purchase intention. It also concluded that location was the most important factor that influenced a customers buying decision for the residential property in Selangor, Malaysia. Location factor was closely followed by price, company's image and promotion of the property played the least influential factor for the customers purchase intention.

Kotler and Armstrong (2010) defined purchase decision making process as the stage where the customers actually makes the final purchase of the product. As for the purpose of measuring this purchase decision, Kotler and Armstrong (2010) explains that any purchase decision process basically consists in five primary stages, namely, need generation, information search, evaluation of available alternatives, purchase decision and finally the post purchase behavior.

3. **Research Framework**

The research framework of the study is comprised of Brand Image as the attribute to study the effect of the variable in context to purchase decision. See figure 2 to better understand the research framework.

The framework of the study highlights the effect of independent variable to that of the dependent variable both from partial as well as simultaneous effect correspondingly.

Figure 2: Conceptual Framework

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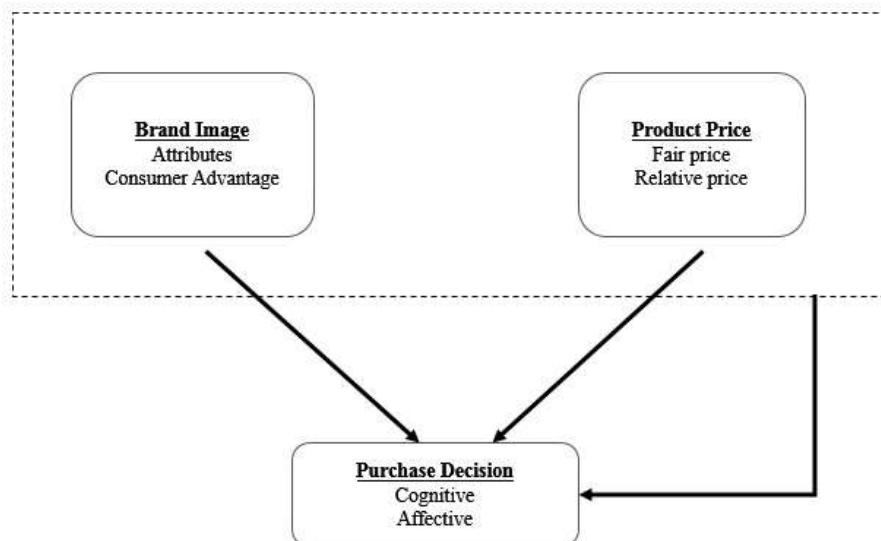
3.1 Research Methodology

Research Design

The study uses a descriptive quantitative method. Zikmund (2010) defines descriptive quantitative research as an elementary transformative data that explains basic characteristics like variability and distribution. The sampling method used for this study is purposive in nature. The research has been conducted with the fact that three prime variables have been utilized. The Purchase Decision (Z) has been used as the dependent variable in the study and Brand Image (A1) and Product price (A2) have been considered as an independent variable.

Data Collection

The data has been gathered through the extensive use of questionnaire and personal interaction with the respondents. The data sample comprises of 100 respondents. The sample are is restricted to Aligarh and New Delhi city.

Data Analysis

For the research SPSS 20 has been used for the data analysis and also for further use, the multi linear regression was used.

4. **Result and Interpretations**

    4.1 Characteristical traits of the respondents

The data sample collected from 200 respondents were further classified into different groups for the study. They are as follows.

Gender

The respondents were classified into Male and Female. The Male respondents comprised of 60% of the data whereas the female represented 40 % of the data.

Age

In this classification the age factor was classified in three basic groups. First group having respondents of the age group of 20 years or lower. Second group comprised of respondents between the age group of 21 and 25 and the final group comprised of respondents having age of more than 25.

The 0 – 20 years age group comprised of 34% of the sample respondents.
The 20 – 25 year age group comprised of 45% of the sample respondents.
The Final group of respondents having age of 25+ represented 21% of the sample.

Educational Background

The respondents were classified into three groups. First group represented respondents having formal education up to Secondary School (12th) constituting 40%. Second group comprised of respondents having formal education till graduation which comprised of 51% of the data sample and the finally group comprising of respondents having formal education of post-graduation or higher which constituted 9% of the data.

4.2 Diagnostic Test

Validity Test results

In reference to the table 1, as all the above variables in question has value greater than the Karl Pearson's base value of 0.360 it can be concluded that all these variables are valid. Thus, signifying the fact that it can be used as a tool for data gathering.

Table 1: Result of Validity test

Variables	Karl Pearson's Correlation	R Table	Remark
Brand Image	>0.360	>0.360	Valid
Product Price	>0.360	>0.360	Valid
Purchase decision	>0.360	>0.360	Valid

Source: Author's own calculation (SPSS 20)

Reliability test results

In reference to the table 2, as all the above variables in question has value greater than the Cronbach Alpha's base value of 0.6 it can be concluded that all these variables are reliable. Thus, signifying the fact that it can be used as a tool for data gathering.

Table 2: Result of reliability test

Variables	Result of Cronbach Alpha	Remark
Brand Image	0.826	Reliable
Product Price	0.883	Reliable
Purchase decision	0.796	Reliable

Source: Author's own calculation (SPSS 20)

4.3 Multiple Regression Analysis

To explore the impact that an independent variables can have on the dependent variable, we have used the multiple regression analysis test. The test results obtained were as shown in table 3.

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Table 3: Multiple Regression results

Model	Coefficients (Unstandardized)		Coefficients (Standardized)	T	Sig
	B	Standard Error	Beta		
Constant	0.933	0.453		2.060	0.042
Brand Image	0.655	0.130	.429	5.036	0.000
Product price	0.680	0.158	.365	4.293	0.000

Source: Author's own calculation (SPSS 20)
Note: the Dependent variable here is Purchase Decision.

According to the above table, the multiple linear regression could be defined as stated below.

$Z = \alpha + \beta_1 A_1 + \beta_2 A_2$

$Z = 0.933 + 0.655 A_1 + 0.680 A_2$

Where, Z is purchase decision, A_1 is brand image and A_2 is product price.

As per the multiple linear regression equation derived above it can be briefed as:

- The derived value of the constant i.e. 0.933 signifies that consumers are willing to buy a smartphone even during the fluctuation of the values in brand image or the products price. Thus, the value remains 0.933.

- The Brand Image (A_1) along with value of the variable of the regression coefficient of 0.655 signifies that with every increase in 1 unit of brand image will the value of the dependent variable i.e. it is likely that the possibility of the purchase decision is to increase by 0.655 units, on the condition that the value of the other independent variable are fixed.

- The Product Price (A_2) along with value of the variable of the regression coefficient of 0.680 signifies that with every increase in 1 unit of Product Price will the value of the dependent variable i.e. Purchase decision is likely to increase by 0.680 unit point, depending on the condition that the value of the other independent variable remains fixed.

Thus, we can conclude that the equation is impacted greatly by the independent variable which influence the purchase decision with almost the same figure even if the brand image value is lower compared to the product price value.

Table 4: R-square results

Model	R Square Value	R Value	R Square (Adjusted)	Standard Error (Estimate)	Change Stats		
					F Change	R Change	Df1
1	0.474	0.688	0.463	0.363	43.678	0.474	2

Source: Author's own calculation (SPSS 20)
Note: Dependent variable here is Purchase Decision.
     Prediction factors: Constant, Brand Image and Product price.

In reference to table 4, it can be stated that these independent variables i.e. brand image (A_1) and the product price (A_2) influence on the dependent variable i.e. Purchase Decision (Z) is approximately 47.4% or 0.474 to be specific.

This value denotes that the independent variable can specify the impact upon the dependent variable by 47.4%. Similarly, the other variables not used in this study can explain the remaining 52.6%.

5. Conclusion

This study's final result concludes the following facts:

- The customers desire to purchase a smartphone remains high even if no specific action is taken from the management in context to their products brand image or their product's price.
- The customers purchasing decision is influenced by the independent variables i.e. brand image and product price by almost a similar figure. Thus, specifying the fact that they both have a similar level of influence on the customers buying behavior.

6. Suggestions, limitations and direction for future work

- The study's end results have brought forward some recommendation for the associated smartphone manufacturing enterprises as well as fellow researchers.

- The need for more data in regard to the customer's preference, desires and expectations are needed.

- The study was limited to two independent variables and one dependent variables. Future study could incorporate more variables and even varied variables in nature.

- The study focused on smartphone as a whole. The probability of brand specific research could be adopted for detailed study and findings.

- The study's sample data and area were restricted to Aligarh and New Delhi city. Therefore, sample data could be increased and area could be expanded.

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