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# Factors Affecting Smartphone Purchase among Indian Youth: A Descriptive Analysis

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#### **Abstract**

Background/Objectives: The objective of this study is to understand the technology and hardware factors affecting the purchase of smartphones among Indian youth. Methods/Statistical Analysis: Various studies have been done on factors affecting smartphone purchase decisions of the youth. However, very few studies, especially in Indian context, have focussed on technology and hardware factors. Primary data was collected by means of survey and around 306 responses were observed onto which regression and factor analysis have been carried out to generate a more precise analysis of behaviour of youth. Findings: The study showcases that the young student's choice of smartphone is affected by five factors namely as Technology factors, Hardware factors, Basic factors, Brand factors and Financial factors. Out of these, Technology has the most significant influence. OS version and Hardware featureshave a significant effect on young student's choice while purchasing a smartphone. This study will be helpful to smartphone manufacturers and cellular service providers not only to understand how and what inclines a youth towards the smartphone but also give an idea of what features might be needed to make better sale of smartphone in the younger generation. It will help them know the range of factors that behave as a trigger towards a smartphone purchase and to know what technological, hardware and software, branding and financial factors must be considered. This study will also be useful to telecom managers and smartphone manufacturers to understand smartphone requirements of the youth segment and accordingly align their product design, sales and marketing communications strategy. **Applications/Improvements:** The scope of this research is limited to youth aging between 18-25 years. This can be further enhanced to a broader age group thus increasing the scope for smartphone manufacturer.

Keywords: Descriptive Analysis, Hardware Factors, OS Version, Smartphone Purchase, Technology, Youth

#### 1. Introduction

Smartphones can be defined as computing devices which are a combination of wireless voice services, and software applications. As they are connected to internet they can run several internets based services such as emails, video-streaming, social media, geo location etc. and also provide great user experience<sup>1</sup>. Smartphones today have replaced various other smaller and important devices in our lives. It typically acts and assists an individual like a personal assistant, a smart navigator, schedule planner, personal entertainer and so on. It runs an advanced mobile operating system allowing third party applications to run on the same with a precise touchscreen user interface. As a result of the attractive looks and powerful

features, smartphones have become the prime choice for approximately 900 million cellphone users in India for staying connected with the outside world. With the advent of technology there has been a decrease in the cost of device and also the cost of data which has further led the consumer to trade in their traditional handsets to advanced smartphones with good number of features.

### 1.1 Smartphone Market in India

India has the highest rate of smartphone users globally. It has been found that consumers in India spend an average of 3 hours on their phone on daily basis, check their phones at least 77 times to 100 times a day. As per Nielsen India study<sup>2</sup>62% of consumers who are recent buyers chose to buy android phones. As of September

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2014, Android holds the maximum share in Indian OS market, which is more than 50% of the total market share. Nokia series 40 was its closest rival, whose share was less than 19% of the total market share. There has been a rapid transformation in Indian OS market. The market share of Symbian, the major operating system of Nokia smartphones have reduced to mere 5%.

A specific target audience of the young generation from 18 to 28 years has been considered for this study. Smartphone is an industry that has effectuated a gradual but steep growth in the mobile industry. With a huge population of 1.2 billion, India has a youth of around 150 million. This number is huge enough to decide the whole country's decision, and since the industry is high on competition, sustained growth and innovative features, it becomes necessary to differentiate one product from the other. According to the study conducted by, urban India has around 51 million smartphone users today. The study shows that there has been the highest rise of smartphone purchase amongst the youth in India. As per the article by IBN live, smartphone shopping in India grew by 100% as compared to last 2 years. This shows the advent use of smartphones at every moment in day to day work. The article also shows that the ability to shop on the go is 47.7 percent.

The rise in usage of smartphones by young consumers including students has made it essential for smartphone manufacturers to understand the specific features, applications, operating system etc., which this segment look for while making their purchase decision. Hence the objective of this study is to understand the factors affecting young student's choice of Smartphone handsets.

# 1.2 Theoretical Background and Formulation of Objective

The factors affecting young student's choice of a smartphone are complex hence it is very difficult to assign a single reason or factor as it differs for different individuals<sup>3</sup>. Branding plays a very crucial role in a consumers' purchase pattern. Better the popularity of the brand better is the recognition it achieves. In<sup>4</sup>states that organizations have realized that Brand name is one of the most important assets for companies. Kim (2000) reiterates that brands are used by consumers as means of self-expression as they tend to identify themselves with the brands that they purchase. As per the findings of<sup>5</sup> brand name influences consumer's evaluation as well as their purchase decision.

As per the study by6, various channels are being used by owners of smartphones for comparison of products/ prices. They use channels such as advertisements, text messages, QR codes, and links to information videos, mobile coupons, and applications. According to<sup>7</sup> social influences with respect to an individual can cause other people to change their attitude, behaviour, or intentions. So users may be concerned that the smartphone they use should be liked by their friends or they would buy one just to fit in the peer group. As per<sup>8</sup> advertisements influence consumers as some advertisements for imply that consumers or using such products are in danger of being ridiculed or feel left out. Mohamed Ismail, Mohamed Riyath and Sulaima Lebbe Musthafa, found in their research that youth's choice of a brand in a smartphone is driven by factors like third party recommendations, price, stylish appearance, promotion and advertisement, features, quality aspects, brand image, celebrity endorsement and post-purchase services. Word of mouth publicity by aspirational groups<sup>9,10</sup> and other reference groups such as family11. Religious groups, professional and trade unions groups (Kotleret al. 2008 p 244).

A study conducted in Philippines by<sup>12</sup> on factors affecting choice of mobile phones concluded that new technology features were more important than the size. A study conducted by<sup>13</sup> on Nokia Lumia smartphone shows that Connectivity through 3g; Wi-Fi, etc. are also the features that are the necessary requirements that are expected by individuals.

A study was conducted by<sup>14</sup> on Finnish consumers and their intention to acquire mobile phones and the factors affecting change of mobile phones. As per this study, there were certain basic factors like brand, price, properties and interface which affect consumer choice of mobile phones. According to the study conducted by<sup>15</sup>, design of the phones (such as simplicity, attractiveness, salience, rigidity, colourfulness etc.,) are important factors affecting consumer choice of smartphones. According to<sup>16</sup> functionality is the most important factor affecting consumer choice whereas<sup>17</sup> stress that product attributes like features and aesthetics are most important while choosing a mobile phone.

In<sup>18</sup> presented their finding on the choice of a brand among youth on the basis of many independent variables such as quality, friends' and family recommendation, image of the brand, innovative features, promotion effectiveness, user-friendliness, after-sale services, celebrity endorsement, stylish appearance and price. In<sup>19</sup>

the research found that the youth purchase behavior may be affected by factors such as design of the smartphone, performance, types of connectivity it supports, price of the smartphone, social trends and so on. It was found in a study that was conducted by Market Analysis and Consumer Research Organization that in 79% of the cases youth purchase a smartphone basically due to the need which arises with the motivation that people around them have a smartphone which is the driving factor to purchase a smart phone. However it was found that price of the phone played an important role followed by quality aspects of mobile phones such as display, speed, network coverage, stylish appearance and battery life. A study conducted19 has suggested that brand image, price, technology factors, functional factors and perceived value affect smartphone purchase among senior citizens.In20 their study tried to analyse the use of smartphone bands for Cardio Pulmonary Resuscitation (CPR) and its effect on the quality of chest compression. Thus smartphone usage also has application in medicine field.

It was observed during literature review that most of studies discussed various parameters which the youth consider for purchase of smartphone. However very few of these studies have focused on the latest trends that the youth long for while purchasing a smartphone. The latest trends include hardware specifications such as dual SIM requirements, RAM and technology related specifications such as security, OS/version, etc. These are the two main factors that form the basis of our study.

Smartphones can be identified as advanced phones that offer advanced technologies with similar functionality to that of a personal computer. There has been an increase in demand of smartphone recently with the betterment of technology. Hence it is important to identify the basic requirements from the view of a customer. The two most important factors that influence purchase intention of a smartphone are hardware and technology. If consumer (specifically youth) hold over hardware related factors then the requirements may mainly be concentrated over factors such as speed of the processor, dual SIM slots, camera quality, memory card slot, etc. Looking onto the technological features, the intention to purchase a smartphone may mainly be focused on factors such as OS/ Version used by the smartphone, types of apps that could be supported, security features offered, smartphone's adaptability to changes and compatibility of a smartphone with other devices. Hence this study aims to examine the relationship of technological and hardware related factors that affect young student's choice of smartphone handsets. Apart from this, other factors have also been considered which affect the intention of young students to purchase a smartphone such as finance related factors, brand related factors, willingness of customers to buy a smartphone, referrals and situational factors. These factors are well studied with the help of the responses collected and hence best results are obtained.

#### 2. Theoretical Framework

This section highlights the five factors considered for this study named as Technology factors, Hardware factors, Basic factors, Brand factors and financial factors. Figure 1 highlights the conceptual framework which is formed based on literature review. It showcases that Technology factors, Hardware factors, Basic factors, Brand factors and financial factors affect the purchase intention of youth to purchase a smartphone.

#### 2.1 Technology Factors

Keeping these features in mind the different dependent variables considered here are OS/Version, level of security requirement, applications supported in a smartphone, changes that can be adopted easily by a smartphone on various updates by different applications and compatibility of a smartphone with other devices.

#### 2.2 Hardware Factors

Price plays an important role followed by various hardware and quality aspects of a smartphones. These are namely network coverage, display, sound, camera, speed, battery user-friendliness and Stylish appearance. Hence the main factors that we considered in this paper are namely speed of the processor, connectivity of the phone, and quality of the camera, battery life, single/Dual SIM card slot, size of RAM, and memory card slot.

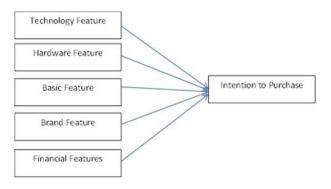
#### 2.3 Basic Factors

This study considers some basic factors that any normal customer expects in a smartphone. The inclusion of factors such as phone size, screen resolution, feasibility in carrying and good user interface are reason enough to consider that any specific brand of smartphone is good enough to catch the eye of the younger generation. The main features that drive to the purchase decision for a mobile phone are Bluetooth, internet connection,

color, video, speaker and weight, FM, design, available accessories, media player, store, touch screen, size<sup>20</sup>. People believe that the size of the smartphone is directly related to screen resolution and inversely related to the feasibility i.e., bigger the smartphone, stronger is its resolution and more difficulty it has in terms of carrying. The high-density smartphones today has allowed the handset to display the websites in its standard format in the very similar manner as it appears on the desktop. The user interface must be lively, dynamic and creative. The best interface is that there is no interface. The user must be easily able to adapt to the phone and use it according to his changing requirements.

#### 2.4 Branding Factors

Brand name is the first thing that appeals the youth when it comes to buying a new smartphone. The brand's presence, its importance, and a place in the consumer's perception assure that it has grabbed a certain position in the market and carved an image for its own. The advertising done by such brands is critical in assessing the specific brand and how the consumer will perceive it and base their sales on it. The survey done in this paper suggests that a lot of people believe brand name plays an important role in their purchase as it is an assurance of guaranteed quality. Companies rely on consumer's satisfaction as another part of advertisement. Once a consumer is happy with the specific brand of smartphone, he/she will go ahead and spread the word of how good the smartphone is. This in marketing terms is called as mouth-to-mouth publicity.



**Figure 1.** Theoretical framework.

#### 2.5 Financial Factors

For the Indian youth, one of the basic consideration is money, may it be his own or otherwise. We Indians need a phone that is economical yet durable and above that has all the necessary features and portrays as a style icon. So, basically one needs a good smartphone with maximum discounts. In the survey, many people agreed that they do buy electronic items over the internet, smartphone being one of them. But India is country where most people would check an item and be convinced only when examined by them. Hence a larger portion of the society buys phones if there is an offer in a retail store, and if there's an EMI option available, it's a cherry on top! Many companies such as Apple and Nokia have successful high sales raises when offered discounts and EMI payments. In various festive seasons and other times of celebrations, companies also prefer giving in free accessories that increases sales, and customer loyalty and retention in the longer run.

# 3. Research Methodology

Primary data was collected from 306 respondents by means of survey with questionnaire as the research instrument. A 5 point Likert scale with values ranging from strongly agree to strongly disagree was used for measuring the responses. The data collected was analyzed with the help of SPSS tool. Factor analysis was used to identify the factors that affect the young student's choice of smartphone handset. Regression analysis was further done on the factors obtained in order to validate the significance of these factors on the customer's willingness to buy the smartphone. Total number of attributes considered was 24 and after factor analysis they were clubbed under 5 factors namely: Technology factors, Hardware factors, Basic factors, Brand factors and financial factors.

# 4. Hypotheses Formulation

- The young student's choice of smartphone is affected by five factors namely as Technology factors, Hardware factors, Basic factors, Brand factors and Financial factors.
- OS version has a significant effect on young student's choice while purchasing a smartphone.
- Hardware features have a significant effect on young student's choice while purchasing a smartphone.

# 5. Results and Analysis

Since the objective of the study was to understand the

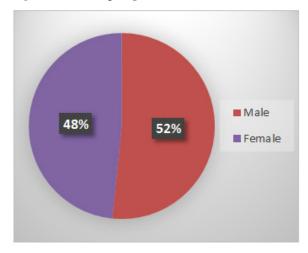
factors affecting young student's choice while purchasing a smartphone, we have chosen a specific target audience of the young generation from 18 to 28 years.



Figure 2. Age group wise classification..



Figure 3. Price group wise classification.



**Figure 4.** Smartphone buyers in India.

NOTE: The total data is out of 306 samples collected across India.

The Figures 2, 3,4 stated above describe the demographic profile of the sample. As per Figure 2, the target audience was in the range of age 18 to 28 years. Figure 3 shows that maximum people carried a phone in the price range of Rs 10000-20000 and some of them even above Rs 20000. Figure 4 shows the gender wise classification of mobile phone usage 48% of the sample

were male users whereas 52% were female users.

The bar graphs suggest the predominance of smartphones in specific age groups and affordable pricings for the same. Certain numbers have been observed to give importance to technical factors, whereas in ladies it has been observed that the look and feel of the smartphone carries a more prioritized position as compared to the technical aspects of the phone. The younger generation, mostly in the age group of 20-23 years are observed to give preference to features such as security, better compatibility with other devices, better camera and larger phone storage, whereas the sample above the age of 24 years are inclined towards features, the likes of good brand name, effective advertising, easy to carry and use. Final observations include that people mostly buy phones via friends and family recommendations, i.e., word of mouth publicity. Quite a few risk takers buy smartphones based on celebrity brand endorsing and hoarding and are quite happy with the devices. The booming e-commerce business has also affected the sales of smartphones via internet on reasons of better discounts, COD option and reliability as good as a retailer.

# 6. Data Analysis

### 6.1 Scale Reliability: Cron bach Alpha

In<sup>21</sup> referred to reliability as an extent of providing consistent results by a measuring instrument under similar conditions. According to<sup>22</sup> reliability can be defined as the degree to which a test consistently measures an attribute.In<sup>23</sup> defined that a Cron bach's Alpha of 0.7 as an acceptable reliability coefficient for undergoing scale. To test reliability we have used Cron bach Alpha. The below mentioned table shows the reliability statistics using Cron bach Alpha. The Cron bach alpha showcases high level of reliability (more than 0.7) for all 5 constructs.

# 6.2 Hypotheses Testing using Factor Analysis: Hypothesis 1

Exploratory factor analysis was used for the study. Principal Component Analysis method was used with Varimax rotation. Table 1 explains the total variance for the factors considered. According to the factor analysis, five factors were estimated and around 64% of the overall variance was explained by these five factors. (Refer Table 1).

Table 2 showcases the rotated component matrix which explains grouping of the factors which are highly

Table 1. Total variance explained

Component	Initial Eigenvalues			<b>Extraction Sums of Squared Loadings</b>			
	Total % of Variance Cumulative %		Total	% of Variance	Cumulative %		
1	10.044	41.848	41.848	10.044	41.848	41.848	
2	1.959	8.164	50.012	1.959	8.164	50.012	
3	1.251	5.213	55.225	1.251	5.213	55.225	
4	1.087	4.528	59.754	1.087	4.528	59.754	
5	.977	4.073	63.826	.977	4.073	63.826	

Table 2. Rotated component matrix

			Componer	nt	
	1	2	3	4	5
OS_Version	0.679	0.293	0.063	-0.167	-0.003
Security	0.566	0.301	0.291	0.073	-0.023
Apps_supported	0.713	0.21	0.229	0.123	0.05
adaptable_to_changes	0.748	0.205	-0.018	0.201	0.182
compatible	0.723	0.233	0.062	0.143	0.142
Processor_speed	0.572	0.581	0.12	0.103	0.081
Connectivity	0.641	0.442	0.119	0.192	0.15
Camera_of_good_quality	0.334	0.664	0.078	0.199	0.166
Battery_Life	0.484	0.554	0.037	0.367	0.057
Dual_SIM	0.012	0.137	0.205	0.775	0.2
RAM	0.418	0.591	0.175	0.197	0.02
Memory_card_slot	0.189	0.549	0.37	0.314	-0.082
Brand_Name	0.2	0.634	0.055	-0.098	0.478
Advertisement	0.05	0.097	0.251	0.034	0.805
word_of_mouth	0.147	0.112	0.085	0.297	0.718
screen_size	0.268	0.669	0.133	0.11	0.23
Screen_Resolution	0.433	0.729	0.103	0.081	0.061
easy_to_carry	0.416	0.454	0.038	0.48	0.107
User_interface	0.458	0.467	0.109	0.268	0.116
Discounts_on_e_commerce	0.368	-0.058	0.618	0.397	0.186
offers_in_retail_outlets	0.281	0.145	0.667	0.013	0.325
Price	0.281	0.321	0.283	0.519	0.04
EMI	-0.049	0.142	0.742	0.166	0.166
free_accessories	0.108	0.573	0.574	0.098	-0.122

Table 3. Summary of factor analysis table

Technology_OS (41.848)	Hardware (8.164)	Financial (5.213)	Basic (4.528)	Brand (4.073)
OS_Version (0.679)	Processor_speed (0.581)	Discounts_on_e_commerce (0.618)	Dual_SIM (0.775)	Advertisement (0.805)
Security (0.566)	Camera_of_good_quality (0.664)	offers_in_retail_outlets (0.667)	easy_to_carry (0.48)	word_of_mouth (0.718)
Apps_supported (0.713)	Battery_Life (0.554)	EMI (0.742)	Price (0.519)	Brand_Name (0.634)
adaptable_to_changes (0.748)	RAM (0.591)	free_accessories (0.574)		
compatible (0.723)	Memory_card_slot (0.549)			
Connectivity (0.641)	screen_size (0.669)			
	Screen_Resolution (0.729)			
	User_interface (0.467)			

correlated. Thus we can see that the correlated factors are grouped under 5 groups which have been name as Technology factors, Hardware factors, Basic factors, Brand factors and Financial factors.

Table 3 showcases the variables grouped under each factor namely technology factors, Hardware factors, Basic factors, Brand factors and Financial factors. Based on the output of the factor analysis (Refer Table3), technology factor came out as the most important factor affecting young student's choice while purchasing a smartphone followed by Hardware, Financial, Basic and then Brand oriented factors. All these five factors together explain 64% of the variation and the factor scores for all the 24 attributes are more than 0.5 which explain that they are highly significant (Refer Table2). Thus the H1 which states that the young student's choice of smartphone is affected by five factors namely as Technology factors, Hardware factors, Basic factors, Brand factors and Financial factors stands accepted.

### 6.3 Output of Regression Analysis for **Testing Hypotheses 2**

This main contribution or originality of this study was to focus on the latest trends that the youth long for while purchasing a smartphone. The latest trends include hardware specifications such as dual SIM requirements, RAM and technology related specifications such as security, OS/version, etc. Thus significance of technology and hardware on choice of smartphones are the two main factors that form a new contribution for this study.

Hence for testing the Hypotheses 2 and 3 we adopted regression analysis.

The dependent variable considered was "willingness to purchase with Technology OS features" while the predators considered are "connectivity", "OS Version", "Security"," Apps supported", "compatibility", "adaptable\_to\_changes"

Table 4. Model summary for Annova table

Model summary <sup>b</sup>								
Mod-	R	R	Adjusted	Std. Error of	Durbin-			
el		Square	R Square	the Estimate	Watson			
1	.521ª	.271	.253	.55624	2.070			

a. Predictors: (Constant), Connectivity, OS\_Version, Security, Apps\_supported, compatible, adaptable\_to\_changes.

For Table4, the value of adjusted R-square signifies that the dependent variable (willingness to purchase) is affected by 25% by the independent technology factors like OS version, Security, Apps supported, Compatibility.

Table 5 reveals that the overall model was also significant and tested by Anova. The Anova table is showcasing the significance of the variables. The Anova table is showing the relationship between the dependent and the independent variables significant as compared to alpha value of 0.01. This signifies 99 per cent confidence in the ability of the model to explain the dependent variable; hence we can conclude that the regression equation as computed is statistically significant.

Table 5. ANOVA test

	ANOVA <sup>a</sup>									
M	odel	Sum of	df	Mean	F	Sig.				
		Squares		Square						
1	Regression	26.978	6	4.496	14.532	$.000^{b}$				
	Residual	72.400	234	.309						
	Total	99.378	240							

a. Dependent Variable: willingness\_to\_purchase\_with\_ Technology\_OS\_features.

**Table 6.** Coefficient table for technology factor

_										
	Coefficients <sup>a</sup>									
	Model	Unstar	ndard-	Standard-	t	Sig.				
		ized C	Coeffi-	ized Coef-						
		cients B Std.		ficients						
				Beta						
			Error							
	(Constant)	2.959	.204		14.493	.000				
	OS_Version	.248	.043	.396	5.743	.000				
	Security	027	.044	043	622	.534				
1	Apps_sup- ported	.016	.050	.025	.326	.745				
	adaptable_ to_changes	.019	.055	.028	.346	.730				
	compatible	.058	.051	.088	1.138	.256				
	Connectivity	.081	.062	.110	1.302	.194				
	a. Dependent V	ariable:	Willing	ness_to_purc	hase_wit	th_				
	Technology OS features.									

b. Dependent Variable: Willingness\_to\_purchase\_with\_ Technology\_OS\_features.

b. Predictors: (Constant), Connectivity, OS\_Version, Security, Apps\_supported, compatible, adaptable\_to\_ changes.

Table 6 showcases the coefficient table and the p values of all the independent variable under technology factors. Out of the five sub factors, four sub factors like Security, Apps\_supported, compatible, adaptable\_to\_changes are not significant as shown by the p value. However the sub factor OS version is positively significant as the p value is 0.000 which is below .01 hence we can say that there is 99 per cent confidence in the value of the estimated coefficient.

Hence the H2 which states that OS version has a significant effect on young student's choice while purchasing a smartphone stands accepted.

# 6.4 Output of Regression Analysis for Testing Hypotheses 3

Dependent Variable: Willingness\_to\_purchase\_with\_ hardware\_features

**Table 7.** Comparison of R square and adjusted R square for hardware features

Model Summary <sup>b</sup>							
Model	odel R R Adjusted Std. Error of Durbin						
		Square	R Square	the Estimate	Watson		
1 .500 <sup>a</sup> .250 .228 .65691 1.935							
a. Predi	ctors: (	(Constan	ıt), User_in	terface, Memo	ory_		
card_sl	ot, scre	en_size,	Camera_o	f_good_qualit	y, RAM,		
Battery_Life, Screen_Resolution.							
b. Dependent Variable: willingness_to_purchase_with_							
hardwa	re_feat	ures.					

Table 7 shows that the R Square value is 0.25. This indicates that 25 per cent of the variation in smartphone choice is accounted for through the combined linear effects of the seven predictor or variables viz b. Predictors: (Constant), User interface, Memory card slot, screen size, Good quality Camera, RAM, Battery life, Screen resolution.

Table 8. ANOVA test

	ANOVAª								
M	odel	Sum of	df	Mean	F	Sig.			
		Squares		Square					
1	Regression	33.553	7	4.793	11.108	$.000^{b}$			
	Residual	100.547	233	.432					
	Total	134.100	240						

a. Dependent Variable: Willingness\_to\_purchase\_with\_hardware\_features.

Table 8 showcases that that the overall model was also significant and tested by Anova. The Anova table is showcasing the significance of the variables. The Annova table is showing the relationship between the Dependent and the independent variables significant as compared to alpha value of 0.01. This signifies 99 per cent confidence in the ability of the model to explain the dependent variable; hence we can conclude that the regression equation as computed is statistically significant.

Thus based on the Model summary and Anova table we can conclude that the Hypotheses 3 which stated that Hardware features have a significant effect on young student's choice while purchasing a smartphone.

However it should be noted that all the seven variables under the Hardware factor do not show positive relationship. Five variables out of seven show a positive relationship with Choice of handsets.

Table 9. Regression table for hardware factor

		C	oefficie	nts <sup>a</sup>		
Model		Unstan- dardized		Standard- ized Coef-	Т	Sig.
		Coefficients		ficients		
		В	Std.	Beta	-	
			Error			
	(Constant)	2.839	.250		11.367	.000
	Camera_of_ good_quality	200	.068	245	-2.943	.004
	Battery_Life	.215	.074	.253	2.896	.004
	RAM	.179	.061	.243	2.924	.004
1	Memory_ card_slot	.176	.054	.241	3.247	.001
	screen_size	171	.058	225	-2.967	.003
	Screen_Resolution	.081	.077	.099	1.062	.290
	User_inter- face	.069	.061	.085	1.129	.260

a. Dependent Variable: willingness\_to\_purchase\_with\_hardware\_features.

Table 9showcases the coefficient table and the p values of all the independent variable under hardware factor. Out of the seven variables considered under hardware factor, five variables are showing positive significance. The p value of these six factors reaffirm the same viz, Good quality Camera (P value =0.004), Battery life (P value =0.004), RAM (P value =0.004), Memory card slot (P value = 0.001), screen size, (P value=0.003), are positively

b. Predictors: (Constant), User\_interface, Memory\_card\_slot, screen\_size, Camera\_of\_good\_quality, RAM, Battery\_Life, Screen\_Resolution.

significant as the p value 0.05 hence we can say that there is 95 per cent confidence in the value of the estimated coefficient. However the two variables Screen resolution (P=0.290) and user interface (P value=0.260) do not show a positive relationship with choice of smartphone handsets.

# 7. Managerial Implications

From a theoretical perspective, this study has explored the various factors that affect youth choice of smartphones. Literature review has suggested that the latest trends that the youth long for while purchasing a smartphone are hardware specifications such as dual SIM requirements, RAM and technology related specifications such as security, OS/version, etc. These two factors form the main hypotheses for this study. The statistical analysis has proven that hardware factors and technology factors are significant factors affecting the smartphone purchase decision of the youth. Another key contribution of the study is the development of a conceptual framework on the factors that affect the choice of young students while purchasing smartphones.

This study provides practical implication to all the players involved in the smartphone industry such as smartphone manufacturers, application developers also network providers etc. For smartphone manufacturers the research suggests that OS version is a very important factor that affects choice of smartphones. They must also ensure that battery life, RAM, memory card slot, user interface are provided for in the hardware part of the smartphone. Thirdly they must ensure that features such as good quality camera, screen size, screen resolution, dual SIM, easy to carry are provided for in the smartphones.

For application providers the research suggests that they should ensure that the applications that they provide are secure, support various apps, are adaptable to changes and also compatible to the handsets.

For the network providers they must ensure that connectivity must be ensured and processing speed should be good.

For the branding managers the research suggests that brand name is also an important factor affecting choice of smartphones and that managers can ensure wider reach through advertisements and word of mouth appeal.

## 8. Conclusion

The objective of the research was to understand the factors that affect young college student's choice of purchasing smartphones. A total number of 306 responses were received for the survey designed, from young college students in the age group of 18-25 years. Based on literature five factors were identified which affect the choice of smartphones for young college students namely technology factors, hardware factors, financial factors, basic factors and branding factors. The main contribution of this study was examining the significance of technology and hardware factors on choice of young college student while purchasing a smartphone. Very few studies have been conducted on these two factors hence they formed the basis of the hypotheses. This research has practical and managerial implication for various stakeholders in the smartphone industry like the smartphone manufacturers, application developers, network providers etc.

However, this study has certain limitations. First of all the sample size being small, generalizations regarding the population cannot be made. However, the sample size was adequate to provide inputs related to the factors affecting the choice of smartphones for the young college students and also their usage patterns. Secondly the study was conducted in the city of Pune so the geography can be a limitation. But as the purpose of the study was to understand factors affecting young students choice of smartphones the geographical boundaries may not affect their choice to a large extent but a more diverse data would have made the study more diverse and robust.

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