

Influence of Peer in Purchase Decision Making of Smart Phone: A Study Conducted in Coimbatore

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Abstract- This article discussing about recently launched Google Android platform, and its online application marketplace for Android smart phones. The project examines the paths to success for third-party developers building applications for Android smart phones by comparing them with application development for the Apple iPhone and factors that influencing mobile brand selection while purchasing new mobiles. Research on related topics shows this mobile ecosystem benefits third-party developers and those application vendors play a critical role in contributing to the success of Android. In the current scenario most of the youngsters having Android smart phones in their hands, the reason for this development in a short period is usage social media such as face book, twitter and all other applications. Android platforms are simplified the use of social medias and access of it. In this article we can know further about this Android platform and its influence of peer purchase decision making of smart phone.. And altogether 140 smart phones users came forward and participated at the survey. But, when the scoring was carried out only 85 subjects were alone completed all the items of the tool. Hence, for the present the sample constituted is 85. The sample included both male and female. Their qualification ranged from less than plus 2 to above Post graduation. Their age ranged from 20 years to 60 years of age. The Statistical Package for the Social Science (SPSS) for Microsoft Windows 20.0 was used to complete the analysis of the collected data. Descriptive statistics, including means, standard deviations were implemented in order to investigate the demographic data, and the Peer influence, one-way analysis of variance (ANOVA) were used to determine whether any significant relationships exist among respondents. In the end of the study implications and conclusions were provided.

Index Terms- Smart phone, Peer influence, online applications

I. INTRODUCTION

Based on the evolution of communications and computer industry, a vision of mobile convergence devices emerged in the 1990s that provided voice and data communications in a mobile computing-enabled device. These devices arose from the confluence of mobile phone and personal digital assistant (PDA) design paths. Today this category is normally referred to as the “smart phone” segment of the mobile phone market.(Joel and Michael, 2009, p. 8)

Over the past few years, the battle between heavyweights like Nokia (Symbian OS), Apple (iPhone OS), Microsoft (Windows Mobile), RIM (RIM OS for Blackberry), and Google (Android) for smart phone operating systems market share has been escalating. All the major OS vendors highlight the fact that applications and user interface have emerged as critical factors. These factors help developers in selecting the platform for application development and help end-users in smart phone device selection.

This article work focuses on the study of the Factors influencing the selection of Android smart phone. This project includes the study of the Android ecosystem and how it differs from other mobile ecosystems such as those surrounding the iPhone, Android Market, (online mobile application store for Android users) application developers, and which factors developers consider for selecting a platform for application development. To understand application development trends across Android and iPhone platforms compared the Android market with the iPhone App Store, the leading application store in current mobile market, and how different kinds of developers are working for the Android, the iPhone, or for both the platforms.

Apple launched an online application marketplace called the “iPhone App Store” before launching iPhone 3G. Currently, this store has more than 195,000 applications. To match or surpass the success of iPhone App Store, Apple rivals such as Google and Blackberry introduced their own application downloading stores called “Android Market” and “Blackberry App World” respectively. The Android Market is similar to the iPhone App Store or to any other application store; it boasts a catalog of applications, services and tools available for the user to purchase download and use.

The Android Market also has around 49,000 applications. Thus, the comparison between iPhone and Android application stores will help explain the new challenges faced by these two application stores, and also the demand for these stores in the near future. This study will help understand why third-party developers choose the Android over the iPhone, what determines their success and which factors overcome the selection of branded mobile phones.

The research plan occupies the central place in any empirical investigation. This chapter systematically presence the research plan proposed in the present investigation. It includes statement of the problems, objective of the study, hypotheses of the study, the instrumentation, the sample and the statistical technique use in the analysis of the data.

II. STATEMENT OF THE RESEARCH PROBLEM

Buying behavior occupies the prominent placed in market research. The available literature on buying behavior of the consumer seems to get influenced by a host of psychological, sociological, economical, cultural and personal factors. The general scenario of mobile industry projects a ever growing and highly competitive spirit in production and marketing of their products, mainly, the Mobile phones. Here it is worth to note that apart from other factors the human factor remains as a unique and important one in purchasing smart phones. This has necessitated focusing a study on the buying behavior of human beings. In, this line it was proposed to investigate the role of peer influence on the buying of smart phone of the consumer.

III. OBJECTIVES OF THE STUDY

The objective of the present study is to find out the possible effectives of peer influence on purchase decision making processes. Specifically, the study seeks to search answers for the following statements:

1. To measure the influence of peer in purchasing of smart phones by respondents age.
2. To measure the influence of peer in purchasing of smart phones by educational qualification.
3. To measure the influence of peer in purchasing of smart phones by marital status.
4. To measure the influence of peer in purchasing of smart phones by occupation.

3.2 HYPOTHESES OF THE STUDY

In order to find answers for the research statements formulated the following hypotheses have generated in the present investigation.

Hypothesis:1Peer influence has significant difference among respondents age.

Hypothesis:2 Peer influence has significant difference among respondents educational qualification.

Hypothesis: 3 Peer influence has significant difference among respondents occupation.

Hypothesis: 4 Peer influence has significant difference among respondents Marital Status

3.3 RESEARCH DESIGN

A research design is the planned sequence of the entire process involved in conducting a research study. It is the plan, structure and strategy of investigation conceived so as to obtain answers to questions and control variance. The research has adopted descriptive design in this study since research describes the opinion of respondents about purchase decision.

3.4 INSTRUMENTATION

It consists of three parts each part is designed to measure the different parameters of peer influence and decision making process of smart phone purchasing;

The questionnaire is one way of summarizing the influence of the peer in the purchase decision making process. First part of the questionnaire consists of the demographic variables like age, gender, marital status, educational qualification, occupation and monthly income.

The second part of the questionnaire consist twenty statements which will capture the respondents purchasing situations. The responses are measured on a four point scale.

The third part of the questionnaire is designed to capture the respondent's opinion on what influenced the respondents to make that purchase decision.

This part has three sets of questions;

The first set is to know the respondent's choice on the decision making factors and the respondents are asked to rank the five important decision making factors based on their experience.

The second set is designed to understand the respondents influence on purchase of the mobile phones, here they are asked to respond for nineteen questions in a four point scale which had influenced the respondents on the time of purchase.

Third set is designed to capture the dominant peer influence on the respondent's decision making on the ten important factors in the mobile phone industry.

3.5 SCORING PROCEDURE

Every statement in the questionnaire has to converted in to quantitative data for convince of the researcher. Fist part of the questionnaire is consisted of all demographic variables of the study so the researchers adopted the nominal scale for the question other than two and eight. Question number two and eight captures the real value of the variable. For other questions the following values are given:

Question No	Classification	Values
3. Gender	Male	1
	Female	2
4. Marital Status	Single	1
	Married	2
6. Educational Qualification	Schooling	1
	UG	2
	PG	3
	Diploma	4
7. Occupation	Self-Employed	1
	Employee	2
	Business	3

	Professional	4
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The second part of the questionnaire consists of twenty statements based on their agreement for the statements. It is measured in the following way for 1- highly agree, 2 – agree, 3- disagree, 4- strongly disagree.

The third part of the questionnaire consists of three sets. The first set is ranking of the factors, by the choice of the respondent the lower value is given higher value, as the value goes up the ranking comes down (1- high preference to 5- least preference). The second set consists of nineteen question of influence based on the respondents choice and they are measured like very high influence -1, high influence – 2, less influence – 3, no influence – 4. The third set consists of ten statements which is measured Friends – 1, Relatives- 2, Co-worker – 3, Neighbors – 4, Community groups – 5.

3.6 ADMINISTRATIVE PROCEDURE

The respondent’s are met at the different shops in the city. Researcher explained the purpose of the study to the respondents, after getting their willingness to participate in the survey the questionnaires are administered to them. The researcher explained the answering pattern for each question in the questionnaire. And the respondents are told that there is no right or wrong answer to the questions. If any point of time the respondents is not interested they are allowed to submit the unfilled questionnaire. Those questionnaires are not including for the study.

3.7 SAMPLING OF THE STUDY

Sampling is the most important portion of the research. Based on the objectives of the study the consumer who buys the smart phone constitutes the sample frame. Due to the convenience of the investigator the smart phone users who visit the shops between 6.00 p.m. to 9.00 p.m. were alone identified as sample for the study. Hence, the investigator approached different shops and it was selected and at the stipulated time specified the investigator went to the shops and those smart phones users who come for the shops during this time were approached individually and requested to help in a survey. And those who came forward willingly were distributed with the tool and the data has been collected with them. This process was carried out for three consecutive days. And altogether 140 smart phones users came forward and participated at the survey. But, when the scoring was carried out only 85 subjects were alone completed all the items of the tool. Hence, for the present the sample constituted is 85. The sample included both male and female. Their qualification ranged from less than plus 2 to above Post graduation. Their age ranged from 20 years to 60 years of age.

3.8 DATA ANALYSIS

The Statistical Package for the Social Science (SPSS) for Microsoft Windows 20.0 was used to complete the analysis of the collected data. Descriptive statistics , including means, standard deviations were implemented in order to investigate the demographic data, and the Peer influence, one-way analysis of variance (ANOVA) were used to determine whether any

significant relationships exist among respondents. In addition, the .05 level of statistical significance was set at all statistical tests in the present study.

IV. ANALYSIS AND INTERPRETATION

4.1 To Analyse the Influence of Peer in Purchasing of Smart Phones by Respondents Age.

Hypothesis: 1 There will be significant difference among the various Age Groups on their scores on Peer Influence.

In order to test the Hypothesis 1, the data related to the Four Age Groups of the Subjects were subjected to Mean and Standard Deviation test, Mean Plot and F-test. And if the F-ratio attains statistical significance, then, Post-Hoc Test was conducted to identify the most significant group. The results of the analyses are presented below in Table 4.1.1, Plot No. 4.1.1, 4.1.2 and 4.1.3 respectively.

Table 4.1.1 Showing the Descriptive Statistics of Age and Peer Influence

Age level	Peer Influence				
	Mean	Standard Deviation	Standard Error	Minimum	Maximum
20-30 yrs	54.5087	8.32812	1.73653	32.10	65.20
30-40 yrs	56.5575	4.51010	0.71311	48.10	66.15
40-50 yrs	58.7025	6.79207	1.51875	37.10	67.15
50-60 yrs	42.1250	17.0059	12.0250	30.10	54.15

From the above table and chart it is easy to know that the mean score of 20-30 yrs age group is 54.5, the mean score of 30-40 yrs age group is 56.56, the mean score of 40-50 yrs age group is 58.70 and the mean score of 50-60 yrs age group level is 42.12. The maximum score got for 40-50 yrs age group level and this shows that the most peer group influence for purchase decision making is 40-50 yrs group level. The minimum Score got for 50-60 yrs age group level and this shows that the least peer group influence for purchase decision making is 50-60 yrs age group level.

Table 4.1.2 Analysis of Variance of Age and Peer Influence

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	592.280	3	197.427	4.589	.005

Within Groups	3484.880	81	43.023		
Total	4077.159	84			

From the above table tells us that the significance level of Peer influence is 0.005 ($P = .005$), which is below 0.05 .We reject null hypothesis and, therefore, there is statistically significant difference between Peer influence and age level of the respondent, Therefore clearly we can say that there is influence of peer group on the purchase of smart phones respect to age level. By this study the understanding is that all the age group refers to their peer before making the decision of purchasing of smart phone.

Table 4.1.3 Post Hoc Test Multiple Comparisons

(I) age	(J) age	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Turkey HSD	20-30	-2.04880	1.71644	.633	-6.5513	2.4537
	40-50	-4.19380	2.00543	.165	-9.4544	1.0668
	50-60	12.38370	4.83551	.058	-.3007	25.0681
	30-40	2.04880	1.71644	.633	-2.4537	6.5513
	40-50	-2.14500	1.79631	.632	-6.8570	2.5670
	50-60	14.43250*	4.75260	.017	1.9656	26.8994
	40-50	4.19380	2.00543	.165	-1.0668	9.4544

Table 4.2.1 Educational Qualification and Peer Influence

Educational Qualification	Peer Influence				
	Mean	Standard Deviation	Standard Error	Minimum	Maximum
Less than +2	49.4667	13.0115	7.51223	36.15	62.15
UG	54.8500	7.75375	1.61677	30.10	62.15
PG	56.7118	4.04083	0.65551	48.10	66.15
Diploma	57.5857	8.89840	1.94179	32.10	67.15

From the above table and the mean score of Schooling is 49.47, the mean score of Under Graduate category is 54.85, the mean score of Post graduate category is 56.71 and the mean score of Diploma category is 57.58. The maximum score got for Diploma Category and this shows that the most peer group influence for purchase decision making is Diploma category, the minimum Score got for Schooling category and this shows that the least peer group influence for purchase decision making is schooling category.

30-40	2.14500	1.79631	.632	-2.5670	6.8570
50-60	16.57750*	4.86444	.006	3.8172	29.337
50-60	-12.38370	4.83551	.058	-25.0681	.3007
30-40	-14.43250*	4.75260	.017	-26.8994	-1.9656
40-50	-4.86444	4.86444	.006	-29.3378	-3.8172

*. The mean difference is significant at the 0.05 level.

The above table indicates that significant differences existed among Peer influence dimension and age level of the respondents. According to the results of the Turkey's W multiple comparison analysis, significant differences existed among the groups of 40-50 yrs and 50-60 yrs with respect to the age level. This shows that there is great influence of peer group on the purchase of smart phones with respect to 40-50 yrs age group level and there is least influence of peer group on the purchase of smart phones with respect to 50-60 yrs age group level.

2. To analyse the influence of peer in purchasing of smart phones by respondents Educational Qualification.

Hypothesis: 1 There will be significant difference among the various Educational Qualification on their scores on Peer Influence.

In order to test the Hypothesis 1, the data related to the Four Educational Qualification of the Subjects were subjected to Mean and Standard Deviation test, Mean Plot and F-test. And if the F-ratio attains statistical significance, then, Post-Hoc Test was conducted to identify the most significant group. The results of the analyses are presented below in Table 4.2.1, Plot No. 4.2.1, and 4.2.2 respectively.

Table 4.2.2 Analysis of Variance Educational Qualification and Peer Influence

	Sum Squares	of Df	Mean Square	F	Sig.
Between Groups	228.125	3	76.042	1.600	.196
Within Groups	3849.035	81	47.519		

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	228.125	3	76.042	1.600	.196
Within Groups	3849.035	81	47.519		
Total	4077.159	84			

From the above table the significance level of Peer influence is 0.196 ($P = .196$), which is above 0.05. The accept null hypothesis and therefore, there is no statistically significant difference between Peer influence and Educational Qualification of the respondent, Therefore clearly we can say that there is no

Table 4.3.1 Descriptive Table of Occupation and Peer Influence

Occupation	Peer Influence				
	Mean	Standard Deviation	Standard Error	Minimum	Maximum
Self-Employed	54.0143	9.59408	3.62622	36.15	67.15
Employee	56.3102	6.85534	1.03348	30.10	67.15
Business	56.0586	7.10732	1.31980	32.10	65.20
Professional	56.5700	2.60399	1.16454	55.15	62.15

From the above table and the mean score of self-employed is 54.01, the mean score of Employee category is 56.31, the mean score of Business category is 56.05 and the mean score of Professional category is 56.57. The maximum score got for Professional Category and this shows that the most peer group influence for purchase decision making is Professional category, the minimum Score got for self-employed category and this shows that the least peer group influence for purchase decision making is self-employed category.

Table 4.3.2 Analysis of Variance between Occupation and Peer Influence

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	62.554	3	20.851	.421	.739
Within Groups	4014.605	81	49.563		
Total	4077.159	84			

From the above table the significance level of Peer influence is 0.739 ($P = .739$), which is above 0.05. The accept null hypothesis and therefore, there is no statistically significant difference between Peer influence and Occupation of the respondent, Therefore it clearly says that there is no influence of peer group on the purchase of smart phone respect to Occupation.

4.4. To analyse the influence of peer in purchasing of smart phones by respondents Marital Status.

Hypothesis: 4 There will be significant difference among the Marital Status on their scores on Peer Influence.

influence of peer group on the purchase of smart phones respect to Educational Level.

4.3 To measure the influence of peer in purchasing of smart phones by respondents Occupation.

Hypothesis: 3 There will be significant difference among the various Occupation on their scores on Peer Influence. In order to test the Hypothesis 1, the data related to the Four Occupation of the Subjects were subjected to Mean and Standard Deviation test, Mean Plot and F-test. And if the F-ratio attains statistical significance, then, Post-Hoc Test was conducted to identify the most significant group. The results of the analyses are presented below in Table 4.3.1, Plot No. 4.3.1, and 4.3.2 respectively.

In order to test the Hypothesis 1, the data related to Marital Status of the Subjects were subjected to Mean and Standard Deviation test, Mean Plot and F-test. And if the F-ratio attains statistical significance, then, Post-Hoc Test was conducted to identify the most significant group. The results of the analyses are presented below in Table 4.6.1, Plot No. 4.6.1, and 4.6.2 respectively.

Table 4.4.1 Descriptive Table of Occupation and Mean Influence

Marital Status	Peer Influence				
	Mean	Standard Deviation	Standard Error	Minimum	Maximum
Single	54.4652	8.31631	1.73407	32.10	65.20
Married	56.8000	6.35580	0.80719	30.10	67.15
Total	56.1682	6.96689	0.75567	30.10	67.15

From the above table that the mean score of Single is 54.47, the mean score of Married category is 56.80, The maximum score got for Married Category and this shows that the most peer group influence for purchase decision making is Married category, The minimum Score got for single category and this shows that the least peer group influence for purchase decision making is single category.

Table 4.4.2 Analysis of Variance between Occupation and Peer Influence

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	91.452	1	91.452	1.904	.171

Within Groups	3985.707	83	48.021		
Total	4077.159	84			

The significance level of Peer influence is 0.171 ($P = .171$), which is above 0.05. The Null hypothesis is accepted therefore, there is no statistically significant difference between Peer influence and Marital status of the respondent, Therefore the analysis clearly says that there is no influence of peer group on the purchase of smart phone respect to marital Status.

- Study of analysis of variance between educational qualification and peer influence tells us that significance level of Peer influence is 0.196 ($P = .196$), which is above 0.05. The accept null hypothesis and, therefore, there is no statistically significant difference between Peer influence and Educational Qualification of the respondent, therefore clearly it says that there is no influence of peer group on the purchase of smart phones respect to Educational Level.
- Study of analysis of variance between occupation and peer influence tells us that significance level of Peer influence is 0.739 ($P = .739$), which is above 0.05. The accept null hypothesis and, therefore, there is no statistically significant difference between Peer influence and Occupation of the respondent, Therefore it clearly says that there is no influence of peer group on the purchase of smart phones respect to Occupation.
- The significance level of Peer influence is 0.171 ($P = .171$), which is above 0.05. The Null hypothesis is accepted therefore, there is no statistically significant difference between Peer influence and Marital status of the respondent, Therefore the analysis clearly says that there is no influence of peer group on the purchase of smart phones respect to marital Status.

V. SUGGESTIONS

- ❖ The mobile phone manufacturers should adopt different types of marketing techniques to promote & sell their smart phone in the market.
- ❖ They should concentrate, apart from other methods, more on the word of mouth approach to promote their products.
- ❖ Since, the opinion of others do have certain systematic effect on the buying behavior of the people it would be advisable to generate effective opinions on their products through advertisement and sales promotions.

5.2 RECOMMENDATIONS

In this research the researcher is taken only the people living in Coimbatore as sample for the study. The further research can be done by the sample outside Coimbatore by that it would be possible to understand the general phenomenon of the purchase of smart phone. There is no competitive study conducted between two cities, the future studies should focus on groups comparing studies on buying behaviors.

The variables such as, Family Size, income level of the purchasers can be added in the future studies.

5.3 CONCLUSION

The findings of the study lead to the following conclusions. Peer influence seems to have an effect on the buying behavior of the smart phone purchasers. More specifically purchasers belong to the age group of 40-50 years significantly get influenced by their peers. Further, cutting across their educational qualifications, marital status and occupational status, the smart phone purchasers remain homogeneous with regard to their levels of peer influence. The present study adds a new dimension of peer influence on the marketing research.

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