

PERCEIVED RISK & PRICE IN E-SOURCES: ANALYSING PURCHASE DECISIONS IN BUYING MOBILE PHONES

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Abstract

The behaviour of a consumer in buying a mobile phone or a smart phone has a significant difference among individuals. There is a rapid growth among the smart phone industries in India. In turn, the number of Smartphone buyers using online shopping websites has a stupendous growth. This study focuses and investigates on the factors which influence the purchase decisions of consumers in buying mobile phones online using shopping websites. A research model is derived from the articles supporting the study. Perceived Price (PP), Shopping Experience (SE), Perceived Value (PV), Social Media Marketing (SMM) and Perceived Risk (PR) are the independent Variables and Purchase Decisions (PD) is the dependent variable taken into consideration for the study. Moreover, empirical type research is adopted for the study. The sampling method used in the study is convenience sampling where 230 questionnaires were distributed online. 202 respondents were recorded out of which 8 responses are either incomplete or invalid. Therefore the sample size is 194. The study shows that the perceived price and perceived risk has a significant influence on the purchase decision.

Key Words: Purchase Decision, Online Shopping, Shopping Experience, Perceived Value, Perceived Risk, Social Media Marketing, Perceived Price.

1. INTRODUCTION

There is various purpose of mobile phones such as contacting family members, colleagues and friends, business works and for to have access to contact someone at time of emergency. According to an article by S. O'Dea on Mar 14, 2022, in the year 2020 there was around 1.38 billion of smart phones were sold worldwide. In current period smart phone has been an innovation in technology which gave a new way to communicate. This study here is focused on attempting to identify and discuss the gap that exists in the factors which the target customers intend to buy mobile phones in shopping website. Purchase decision can be termed as the process which guides a buyer starting from finding the need, generating options till selecting a particular product as well as brand.

There are two types of purchase decision namely, minor purchase decision and major purchase decision. Minor purchase decision is where small items like soap, tooth paste etc. are bought while major purchase decision are like buying an expensive car, house etc. There have been numerous studies conducted to determine the factors that affect the choice of mobile phones for purchase through online shopping. From various review on literature conducted with respect to purchase decision on buying mobile phones through shopping website it is found that there were 5 factors highlighted namely Perceived Price (PE), Shopping Experience (SE), Social Media Marketing (SMM), Perceived Risk (PR) and Perceived Value (PV). Quantitative research process is what has been adopted in this study with a convenience sampling has been involved for sample selection.

2. LITERATURE REVIEW

Literature review has been made with respect to the various influencing factors of purchase decision such as Perceived Price (PE), Shopping Experience (SE), Social Media Marketing (SMM), Perceived Risk (PR) and Perceived Value (PV). There have been various insights that have been identified on this issue with respect to purchase decision through several studies.

“Influence of price level and perceived price dispersion on consumer information search behaviour: Moderating effect of durables and consumables” were explained by Li W et.al (2021). According to this article, with respect to purchase through e-commerce platform there is a direct impact of perceived price on consumer information search behaviour^[1]. According to Anwaret.al (2020) on “The effect of perceived quality, brand image and price perception on purchase decision” it is clear that price perception has a major influence over consumer purchase decisions along with brand image and perceived quality^[2].

Zivile Bauboniene et.al (2015) has discussed about the various factors that influence purchase decision especially with respect to online shopping in the paper “E-Commerce factors influencing consumer’s online shopping decision”. In this study it has been clearly stated that all characteristics of a consumer has greater influence towards purchase decision in online shopping and also has quoted that their previous shopping experience has an influence^[3]. In the study conducted by Majid Esmaeilpour at.al (2019) on the title “Effect of customer experience on consumer purchase intention” it was clearly observed that along with shopping experience there are 4 more experience dimensions such as behavioral, cognitive, affective and social experience. And all these 5 experience dimensions, especially shopping experience has major effect on consumes purchase intention as well as decision^[4].

“Impact of social media on consumer buying behavior” was explained by Sony Varghese et.al (2021). According to this study though the buying process of a consumer is complex in nature to understand, social media has given power to the consumer to determine their own pattern of selecting a product to purchase through online shopping^[5]. A study done by Sinoka Ansari et.al (2019) on the title “Impact of brand awareness and social media content marketing on consumer purchase decision” has stated that social media marketing has a strong positive relationship with consumer’s purchase decision but the factor of brand awareness has a weak relationship with purchase decision of consumer^[6].

“Consumers decision-making process on social commerce platforms: online trust, perceived risk and purchase intentions” was explained by George Lazaroiu et.al (2020).The study clearly stated that their empirical evidence supports the concept that there is a positive effect of perceived risk on intention to purchase through online websites. According to Aishah Arshad et.al (2015) on the study titled “The impact of perceived risk on online buying behavior” it was clear from their analysis and findings that there is a positive relationship between perceived risk and consumer buying decision in online shopping website [8].

Chunmei Gan et.al (2017) has discussed about the effects of perceived benefits in the study titled “The influence of perceived value on purchase intention in social commerce context”. This study clearly gives an idea on how perceived value has its effect user behaviour in various dimensions with respect to purchase intention in the process of online shopping. “The impact of consumer perceived value on repeat purchase intention based on online reviews: by the method of text mining” by Ning Zhang et.al (2021) has examined all dimensions of perceived value with respect to online shopping and it clearly resulted in a positive impact towards consumers intention to purchase as well as repurchase through online shopping websites.

CONSTRUCTS	DEFINITION	REFERENCE
Perceived Price	It is defined as the consumer tendency to assess the quality of product that is to be purchased using its price.	The effect of perceived quality, brand image and price perception on purchase decision by Misbahul Anwar et.al (2020)
Shopping Experience	It is defined as the points at which the customer gets connected with the brand, product / service and when there is better connection, there is greater chance of purchase to happen.	Effect of customer experiences on consumer purchase intention by Majid Esmaeilpour et.al (2019)
Social Media Market	It is defined as the process of communicating to customers online where the business interacts with their customers. It is used to promote brand, create awareness on the product / services as well as retain existing customers.	Impact of social media on consumer buying behavior by Sony Varghese et.al (2021)
Perceived Risk	It is defined as the nature and amount of risk recognized by the consumers in regards to their purchases.	The impact of perceived risk on online purchase behaviour by Charlene Gerber et.al (2014)
Perceived Value	It is defined as the factor that acts as a major antecedent of repetitive purchase intention.	The impact of consumer perceived value on repeat purchase intention based on online reviews: by the method

		of text mining by Ning Zhang et.al (2021)
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3. PROPOSED RESEARCH MODEL:

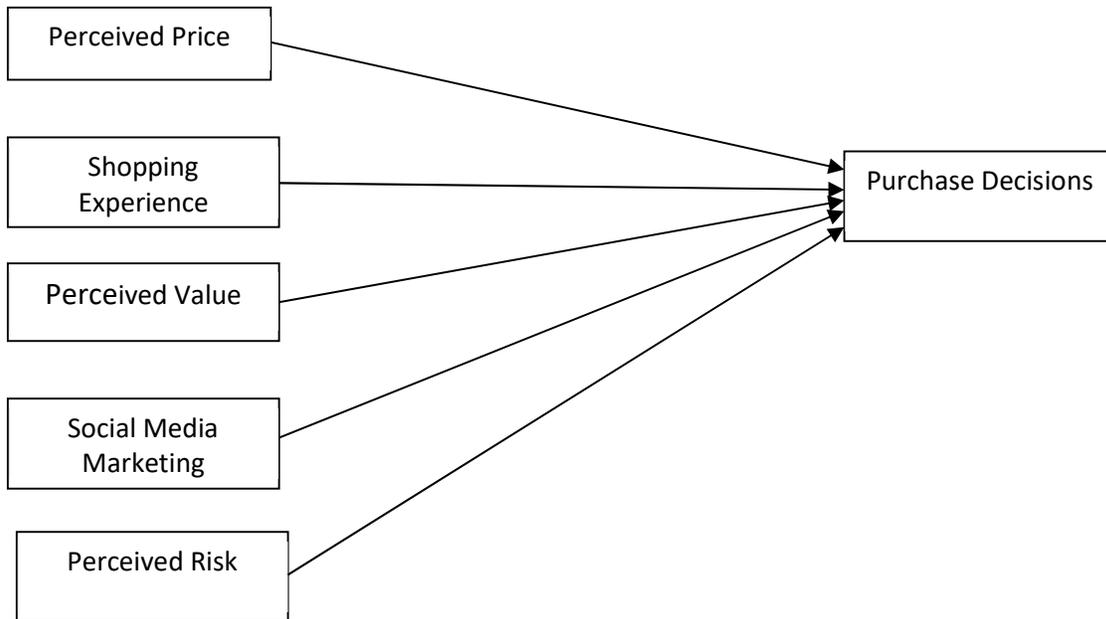


Figure 1: Researcher Model

4. RESEARCH OBJECTIVE:

1. To find out the determinants of Purchase Decisions.
2. To find the relationship between the independent variables and Dependent variables.
3. To investigate the difference between demographic factors and perception on factors influencing purchase decision.

5. RESEARCH HYPOTHESIS:

1. Perceived Price has a positive relationship with Purchase Decisions
2. Shopping Experience has a positive relationship with Purchase Decisions
3. Perceived Value has a positive relationship with Purchase Decisions
4. Social Media Marketing has a positive relationship with Purchase Decisions
5. Perceived Risk has a positive relationship with Purchase Decisions

6. RESEARCH METHODOLOGY:

Perceived Price (PP), Shopping Experience (SE), Perceived Value (PV), Social Media Marketing (SMM) and Perceived Risk (PR) are the independent Variables and Purchase Decisions (PD) is the dependent variable taken into consideration for the study. Quantitative research methodology is adopted for this study. In this quantitative research, the data is collected and is analyzed using the Statistical Package for the Social Sciences and the output are expressed as numerical data. The

questionnaire for the data collection is framed on a structured basis for the study. Moreover, empirical type research is adopted for the study. The sampling method used in the study is convenience sampling where 230 questionnaires were distributed online. 202 respondents were recorded out of which 8 responses are either incomplete or invalid. Therefore, the sample size is 194. A 5-point Likert scale is used for obtaining the responses, where 5 denoted strongly agree and 1 denotes strongly disagree. The pilot study was conducted to check the content validity, reliability, errors, sequence of the questions. PLS3 software was used to analyze the data. Tools like Regression analysis, Correlation analysis, Discriminant analysis, factor analysis, reliability analysis and Co linearity analysis were used to analyze the data.

6. DEMOGRAPHIC ANALYSIS:

Table 1: Demography Analysis

S.No	Demography	Category	Frequency	Percentage (%)
	Variable			
1	Gender	Male	128	66
		Female	66	34
2	Age	13-25	95	50
		26-30	47	24
		31-40	23	12
		40-50	20	10
		50 and above	9	4
4	Education	Secondary School	112	58
		Diploma	39	20
		Under graduation	22	11
		Post Graduation	14	7
		Doctorate	7	4
5	Income	0-20,000	25	13
		21,000- 50,000	95	49
		Above 50,000	74	38

The number of responses obtained for the study is 194. From the above table, 128 respondents are male and 66 respondents are female corresponding to 66% and 34% of total respondents respectively. In terms of age, 95 respondents fall under the category of age group between 13-25, which constitutes 50% of total responses. 47 respondents fall under the category of age group between 26-30, which constitutes to 24% of total respondents. 23 respondents fall under the category of age group between 31-40, which constitutes to 12% of total respondents. 20 respondents fall under the category of age group between 40-50, which constitutes to 10% of total respondents. 9 respondents fall under the category of age group 50 and above, which constitutes to 4% of total respondents.

In terms of Educational Qualification, 112 respondents fall under the category of secondary school education, which constitutes to 58% of total respondents. 39 respondents fall under the category of Diploma education, which constitutes to 20% of total respondents. 22 respondents fall under the category completion of Undergraduate degree, which constitutes to 11% of total respondents. 14 respondents fall under the category completion of Postgraduate degree, which constitutes to 7% of total respondents. 7 respondents fall under the category completion of Doctorate degree, which constitutes to 4% of total respondents. In terms of income earned, 25 respondents fall under the category earning around Rs 0-20000, which constitutes to 13% of total respondents. 95 respondents fall under the category earning around Rs 21,000-50,000, which constitutes to 49% of total respondents. 74 respondents fall under the category earning above 50,000, which constitutes to 38% of total respondents.

7. CONSTRUCTS RELIABILITY AND VALIDITY:

Table 2: Reliability and Validity of Constructs

Constructs	Items	Loadings	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)	VIF
Purchase Decision	PD1	0.857	0.753	0.763	0.858	0.668	1.505
	PD2	0.809					1.742
	PD3	0.838					1.798
Perceived Price	PP1	0.791	0.712	0.732	0.782	0.547	1.552
	PP2	0.854					1.624
	PP3	0.806					1.413
Perceived Risk	PR1	0.855	0.733	0.725	0.821	0.609	1.276
	PR2	0.786					1.190
	PR3	0.763					1.157
Perceived Value	PV1	0.831	0.787	0.816	0.873	0.697	1.450
	PV2	0.821					1.192
	PV3	0.863					1.550
Shopping Experience	SE1	0.761	0.765	0.783	0.864	0.680	1.424
	SE2	0.851					1.757
	SE3	0.858					1.620
Social Media Marketing	SM1	0.792	0.747	0.719	0.788	0.558	1.353
	SM2	0.890					1.444
	SM3	0.701					1.126

8.1. Loading of each item taken for the study:

In order to identify the item strength of constructs taken for the study, validity is measured using AMOS and SPSS. The item Social Media Marketing 2 has the highest loading of 0.890 and the item Social Media Marketing 3 has the lowest loading of 0.701. It is also seen from the table that all the item loadings are above the recommended value of 0.7 and above.

8.2. Composite Reliability (CR):

In order to investigate how consistent the constructs are, the values of composite reliability are taken into consideration. From the above table, the values of composite reliability of each construct are above the acceptable value of 0.60-0.70. The construct Perceived value has the highest reliability of 0.873 and Perceived Price has a minimum reliability of 0.782.

8.3. Average Variance Extracted (AVE):

In order to check the positive relation of items with each other, the convergent validity is proved using the Average Variance Extracted. So as to prove the convergent validity, the constructs need to have the value of Average Variance Extracted above 0.5. From the above table, it is seen that the value of AVE for each of the construct is above 0.5.

8.4. Variance Inflation Factor (VIF):

In order to detect the multicollinearity issue in the proposed model, the results of Variance Inflation Factor (VIF) is used. Upon the usage of Regression analysis, the values of VIF are obtained. From the above table, it can be seen that the VIF values of all the constructs are between the accepted value ranges of 1 to 5. Hence the multicollinearity issue doesn't exist.

8.5. Discriminant Analysis:

Table 3: Discriminant Analysis

Fornell-Larcker Criterion						
	Perceived Price	Perceived Risk	Perceived Value	Purchase Decision	Shopping Experience	Social Media Marketing
Perceived Price	0.817					
Perceived Risk	0.363	0.740				
Perceived Value	0.348	0.387	0.780			
Purchase Decision	0.489	0.524	0.463	0.835		
Shopping Experience	0.493	0.325	0.417	0.472	0.824	
Social Media Marketing	0.007	-0.030	0.006	0.174	0.142	0.747

In order to prove that the constructs taken for the study has a significant difference among each other and unique, the Discriminant analysis is used. The highlighted diagonal values in the above

table are obtained by taking the square root of the Average Variance Extracted (AVE) of the particular construct. The Discriminant validity is determined by comparing the correlation of the constructs and the square root of AVE.

8.6. Regression Analysis:

Table 4: Regression analysis showing relationship between Predictor variables and Purchase Decision as the dependent variable

	R Square	R Square Adjusted	Std.	Significance
Purchase Decision	0.470	0.457	2.554	0.000 ^b

From the table, the regression model results measuring the correlation coefficient (0.697) is seen. R Squared value is 0.470 which literally explains that almost 47% of the variance was explained by Purchase Decision. Adjusted R Square value comes to 0.457 with a standard error approximation of 2.554. Since the significance of P value (0.000) is less than the alpha value (0.05), thus proving the significance of model.

8.7 Path Coefficient:

Table 5: Coefficients of constructs of Proposed Model measuring Purchase Decision

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Perceived Price -> Purchase Decision	0.229	0.224	0.065	3.523	0.000
Perceived Risk -> Purchase Decision	0.322	0.328	0.067	4.812	0.000
Perceived Value -> Purchase Decision	0.196	0.196	0.058	3.381	0.001
Shopping Experience -> Purchase Decision	0.150	0.152	0.064	2.363	0.019
Social Media Marketing -> Purchase Decision	0.159	0.169	0.061	2.628	0.009

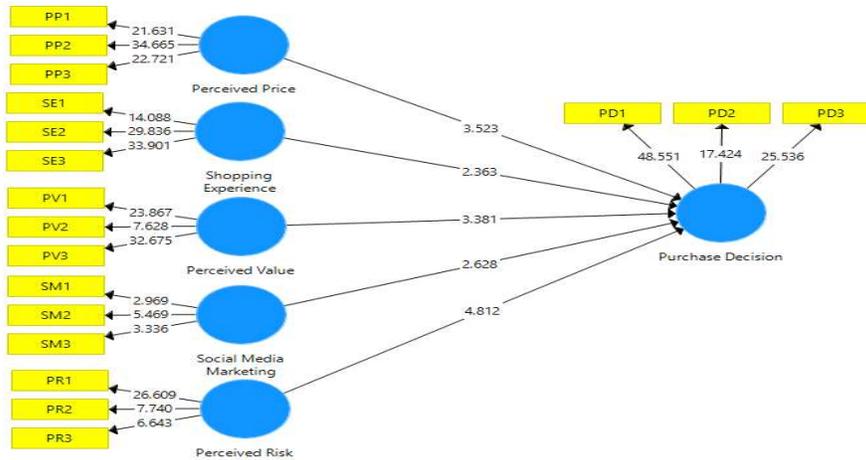


Figure 2: Model Fit Summary

From the table 4.94, it is clearly seen that there is a significant relationship between the external variables being considered and Purchase Decision. The P values of the variables are well within the accepted value of 0.05. Perceived Price ($t=3.523$, 0.000) followed by perceived risk ($t=4.812$, 0.000) are nearly closer to the variables having high level of significance. Perceived Value ($t=3.381$, 0.001) and Social Media Marketing ($t=2.628$, 0.009) follows the list with values of 0.001 and 0.009.

8. Model Fit Parameters:

Table 6: Model Fit Parameters

	Saturated Model	Estimated Model
SRMR	0.062	0.076
d_ ULS	0.570	0.570
d_ G	0.228	0.331
Chi-Square	661.852	661.852
NFI	0.938	0.938

From the above results, the value of Standardized Root Mean Square Residual (SRMR) is 0.076 which is lessert than the acceptable limit of 0.08 (Hu and Bentler, 1999). The squared Euclidean distance (d_ ULS) and the geodesic distance (d_ G) has a value of 0.570 and 0.331 which is acceptable. The Normative Fit Index (NFI) is above the acceptable value of 0.9 (Bentler and Bonett, 1980). Thus the results show a good model fit for the proposed model.

10. Conclusion and Suggestion:

Shopping online using the online websites have drastically grown in India. The various factors influencing the purchase decision of buying mobile phones have been discussed. It is seen that Perceived Price and Perceived risk have the highest significance with Purchase Decision. Other factors including Shopping experience, Social media marketing and perceived value also have significant influence over the purchase decision. This study have provided evidence that there are

factors which has an influence over the purchase decision of buying mobile phones using online websites. This study helps to better understand the consumer intention of purchase. Future researchers may include variables like budget, interest, capability and trust to find their influence on purchase decisions. Search Engine Optimization (SEO), faster responsiveness of web pages might boost the purchase decision of consumers.

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