

Customer Purchase Intention on Computer Hardware and Peripheral – An Introspective Study

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ABSTRACT

Several factors influence a customer while purchasing a product. With the high consumption volume of electronic products and short life cycles, decision-making before purchase becomes very crucial. There is, thus, a need for the companies to understand what factors are highly influencing customers while purchasing computer hardware and peripherals. Studies have propagated cost, features, quality, accessibility, and convenience as factors. There are studies propagating factors like lifestyle, return policy, behavioural comfort, value-added services, and sustainable purchase habits. There are, however, conflicting opinions on characteristics with behavioural factors for purchasing electronic products and peripherals. The present study aims to evaluate customers' purchase intention on buying computer hardware and peripherals. There are relatively few studies on reverse logistics. The logistics and its importance in business performance, sustainability and environment, and responsible consumption habits. The present study contributes to the existing literature by filling this gap. The study identifies indicators of evaluation used by customers and to what extent it influences purchase intention. The study considers 223 consumer responses towards computer hardware and peripherals in Bengaluru City. The study concludes by marking out major factors influencing return policy with a greater impact on consumer intention to buy.

Index Terms—Buying Behaviour, Computer Hardware and Peripherals, Purchase Intentions, Reverse Logistics.

I. INTRODUCTION

In the adverse competitive market, manufacturers pay high attention to consumers' purchase intention on consumer products, especially on lifestyle products like computer hardware and peripherals to maintain their brand image and reputation in the industry.

Factors influencing a consumer while buying products and services are product functionality, price, design, features, packaging, knowledge, prior experience, utility, quality, etc. (Shafiq et al 2011)¹ Several studies made earlier have shown the price as an important influencing variable, but variables like product quality, after-sales service and lifestyle habits are also important and have its influence in the process of buying. Consumers are sensitive and skeptical about their purchase decisions in India, a country with diverse lifestyles, cultures, and habits. The demographic factors of certain age groups (youth or millennials) will buy a product and make decisions on the spot or change the decisions based on their moods. (Abdul Razal & Kamarulzaman 2009)² Purchase intentions have become complicated with several choices and influencing decision-makers (Madahi and Sukati 2012)³. With the emergence of e-commerce and online shopping, consumers are encumbered with product information and are well aware of the competitors' strategies. The previous studies have researched factors like brand equity (Irshad 2012⁴, Chi et al., 2008,⁵ Tin & Lee 2013)⁶ Product quality (Gogoi, 2012,⁷ Tin & Lee, 2013,⁶ Tsotsou, 2005,⁸ 2006,⁹ Bao et al., 2011)¹⁰ Packaging and Price (Kotler and Armstrong, 2010)¹¹ as factors influencing purchase intention. The present study explores other factors that are based on millennials' lifestyles.

The study helps businesses and marketers in decision-making on formulating marketing and promotional strategies according to the recent trends in purchase intentions. The study helps businesses design the return policy for both physical and online purchases and provides insights and future directions to academics and researchers.

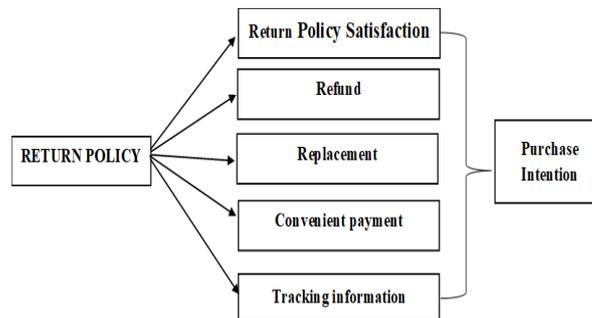
The change in consumer behavior over decades has reigned the businesses to venture into the psychology of consumers. Emotions, changing needs, and multiple media influencers are important factors that influence consumers' decisions. The behavior purchase intentions are high concerning the online platform. The product characteristics like quality, variety, price, and accessibility are well researched, behavioural purchase intentions are return policy convenience and satisfaction, lifestyle influence and habits, perceived trust, social media influencers are to be researched upon. The present study aims to fill the gap in identifying those influencing factors. The study tries to unveil some major determinants of purchase intentions of computer hardware and peripherals in the Indian scenario.

Modern lifestyle, short product life cycle, and lenient return policy are the reasons for the high consumption of Computer products and peripherals. The study identifies factors that influence consumer purchase intention on computer hardware and peripherals in both online and offline modes of purchase. (Sales of computer hardware stats- online store/offline store) High sales indicate companies design their marketing strategies and formulate policies concerning purchasing intention factors more efficiently and effectively than earlier. There are relatively a few studies on reverse logistics. The logistics and its importance in business performance, sustainability and environment, and responsible consumption habits. The present study contributes to the existing literature by filling this gap. The study identifies indicators of evaluation used by customers and to what extent it influences their buying intention.

Customer Purchase Intention

Purchase intention is the self-implied promise to buy the product and repeat the purchase in the market (Halim & Hameed, 2005)¹² Purchase intention is a preference, or a choice made by the consumer while purchasing a product or service, it also means that the consumer will purchase a product after evaluating several factors. The purchase decisions are also affected by the group influence of a known brand. The studies have projected a strong relationship between buying behavior and purchase intention. Marketers show interest in understanding and forecasting consumers' buying intentions to predict the existing and future sales of products and services. (Bearden, Calcich, Netemeyer, and Teel (1986)¹³ showed how society and social influence have an impact on buying. There is a paradigm shift in the way a product is used and its utility pattern in the e-commerce business has paved the way for the culmination of online relationships.

Fig I- A Theoretical Framework



Source: Author

Return Policy

A Policy document formulated by the businesses on the product returns. A consumer's experience of returning a product is a major factor that influences purchase. If the company's return policy is satisfactory, more sales are bound to happen. With the increased importance of online shopping, a convenient return policy is seen as a criterion for purchase intention. Online retail in India is growing much faster than traditional retail. Indian customers have adopted both "search online buy in the store" and "see at the store and buy online". (Kim, (2004),¹⁴ Thamizhvanan, A. and Xavier, M.J. (2013)¹⁵ Consumers read and expect return policy before they purchase, especially for products like electronics, apparel, and products of higher value. The more favourable a return policy is, the more repeat purchase is seen. A consumer is satisfied with the return policy if the refund, replacement/ exchange on the product is quick, hassle-free, less complicated process, etc., besides convenient payment method, and easy product tracking information is also considered to be given importance in the return policy. (Narayan Janakiraman 2016)¹⁶ The presence of a return policy is a form of trust in the brand equity of the company. (Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995)¹⁷, Lee, J., Park, D., Han, I., & Park, D.-H. (2011)¹⁸, similarly a return policy with concern for the environment and climate change policy is one of the major factors influencing consumers of minimalist living. (Mehrabian, A., & Russell, J. A. (1974)¹⁹. Further studies have also proved that social influencer's role on consumers' purchase intentions. (Rosen, D. L., & Olshavsky, R. W. (1987)²⁰. Bearden, Calcich, Netemeyer, and Teel (1986)¹³

The study focuses on identifying factors influencing purchase intentions for computer hardware, the other objectives can be as.

1. To examine the association of demographic factors with customer purchase intentions of computer hardware.

- To assess the significant effect of the return policy on purchase intentions.

II. RESEARCH METHODOLOGY

A quantitative study of a sample size of 223 respondents was administered through a questionnaire method in Bengaluru city. The sample population in the study includes youth and working professionals. The respondents of various age groups and income groups were classified. The demographic factors included in the study are age, gender, income, education, occupation, job type, computer usage purpose, and computer literacy level were tested on purchase experience and intentions. Both online and offline modes of computer hardware and peripheral purchase were considered. 5- point Likert type scale was used for the study non-probability convenient sampling method was applied. A pilot study indicates the reliability and validity of the study design. Data were interpreted using analytical tools like SPSS, statistical data analysis, descriptive statistics, One-way ANOVA correlation, and Linear Regression models were applied. The study observes the effect of independent variables on the dependent variable (purchase intention). The study describes the relationship between dependent and independent variables having a significant relationship with purchase intention. The study is limited to the framework of computer hardware and peripherals. A comparative analysis can be done to know the rational and emotional buying behavior of other consumer products.

Hypothesis

H₀₁: Demographic factors and purchase intention of customers have no statistical significance for computer hardware.

H₀₂: Return policy has no significant effect on purchase intention.

One Way Analysis of Variance				
Sl No.	Particular	F value	Sig.	Decision
1	Computer Usage Purpose and annual income	3.493	0.005	H1 Rejected
2	Computer Usage Purpose and age	1.921	0.108	H0 Accepted
3	Computer Usage Purpose and education	1.627	0.169	H0 Accepted
4	Computer Usage Purpose and job type	14.038	0.000	H1 Rejected
5	Computer Usage Purpose and occupation	4.634	0.004	H1 Rejected
6	Computer Usage Purpose & computer literacy level	0.848	0.469	H0 Accepted

III. ANALYSIS AND FINDINGS

Pilot Research Data Analysis and Interpretations:

The analysis of descriptive statistics has been done using the sample mean, sample standard deviation, and relative standard error for 223 respondents, the validity of the instrument has been tested using the instrument of reliability and KMO statistics. The reliability of the instrument is assessed at 0.97 for all standardized variables. The KMO statistics is 0.935, the value of KMO statistics closer to value 1 indicates a high-level capture of variations across all variables and sampling adequacy. (N=223) Sign of Bartlett's test is proven at (21410.529, p=0.000).

Several hypotheses have been tested concerning demographic variables and computer use. The purpose of this analysis is to see whether there exists a relationship between the demographic variables and the usage variable.

Several hypotheses have been tested using a one-way analysis of variance under a fixed-effects model. The results of one-way ANOVA are presented in the table given below.

Table1: One Way ANOVA-Table of Relationship Variables

i. One-way Analysis of Variance

The type two error is fixed at alpha = 0.05, interestingly, there exists a strong association between computer usage and annual income, age, education, job type, occupation, and computer literacy level. There is no relationship between computer usage, job type, and occupation, the null hypotheses have been accepted at alpha 0.05 similarly income and age,

and computer usage is not related (ho accepted) similarly education and occupation have no significance in terms of the job that a person occupies, this is typically true in India, academic education level and occupation are two different entities even in this age of information technology and computers.

Analysis of Descriptive Statistics:

Consumers generally consider durability, popularity, good quality, affordability, and ease of use as product characteristics to be considered in a buying decision. The service aspects considered are efficiency in delivery, customer support after sales, service center accessibility, the responsiveness of service center, availability of product varieties, clarity in product specifications, and satisfaction of performance as already experienced. The 3rd set of variables they considered before buying is the convenience of return, accessibility in the market, and experience of people across all other variables mentioned for making a buying decision. The consumers look into the return of the product refund, replacement, duration of getting the return with shorter processing time, no questions asked as to why they are returning. There is however some instability regarding the time taken for return (32.8 percent) and satisfaction of time duration of return (32.28 percent) and on reimbursement (32.38 percent). The most unstable part of buying is on purchase decision based on the return policy (41.95 percent), the consumers' clarity express the operational of the return policy as not credible.

There is a peculiar tendency reflected by consumers who claim to be "lazy to return until the last date" this is a return experience as such the heard tendency of people to keep everything at the last minute is exhibited as a policy of return implementation, one way of making consumer withdraw from this kind of habituated experience is to remind the consumer 2 or 3 times in advance. The tendency is further reflected here by a very high level of related standard error at 42.9 percent. Habits die hard as such; the branded companies can make an effort to reverse this habit of returning in advance. When a brand has established its credibility in terms of quality, appeal, outlook durability and so on it is essential to have a return policy. These traits of a product brand will always make customers buy but a return policy will make it more stable according to this survey.

** Significant at 1% level.

Table2: Correlation Statistics

ii. Correlation Statistics

Variables	Pearson correlation
Frequency of purchase decision return policy -return policy on products replacement is satisfactory	
Frequency of Purchase decision Return policy- return policy on refunds is satisfactory	.784**
Frequency of online Purchase-convenient Return policy	
Frequency of online Purchase-satisfied pricing	.766**
Frequency of online Purchase-convenient payment, refund policy	
Frequency of online Purchase-quick refund payment process	.735**
Frequency of online Purchase-hassle free payment	
Frequency of online Purchase-convenient payment	.853**
Frequency of online Purchase-check tracking information	
Frequency of online Purchase- perceived high brand value	.704**
Frequency of online Purchase-convenient payment	.763**
Frequency of online Purchase-hassle free payment	.738**

Correlation analysis has been done for those correlations which are 0.7 and above, which shows statistical significance at a 1 percent level. It is noted here that the correlations are showing as significant in terms of linear relationships between variables under the study, the null hypothesis $r= 0$, against $H1$ are not equal to 0; being a two-sided test, the alpha value of type 1 error will get divide into half on either side of the normal curve. The main determinants of success of online

shopping are the availability of variety, convenient payment, hassle-free payment, and return and check on tracking information matter in the further consolidated marketing process, this can be replicated to other products too other than computer products. There is some level of satisfaction with the return policy and refund. However, purchase decision on return policy should be made by making return policy a return mandatory document to enable stamping of the product and its brand in minds of consumers. The return policy has to be taken care of along with the perception of the consumer in terms of the high value created by the brand. There is a high correlation significance of satisfactory return policy with the purchase intention (0.784) at a 1% level of significance. This indicates that the higher the satisfactory attributes of the return policy higher the reason to purchase computer hardware in both online and offline modes of the purchase transaction. Consumers look for a convenient return policy in terms of quick product replacement, the shorter processing time for returns, free shipping, no restocking fee on returns, and ease of contacting e-tailers on their return status.

Table3: Regression Analysis of Relationship Variables

ii. Regression Analysis (a)

Computer usage Purpose	R	R2	Adj R2	DW	F	Sig level
1. Drop product at a physical store	0.19	0.036	-0.032	2.08	8.276	0.004
2. Like to wait a few days before returning	0.153	0.023	0.019	1.976	5.273	0.023
3. Lazy to return until the last date	0.154	0.024	0.019	1.816	5.389	0.021
4. Prefer a refund	0.08	0.006	0.002	1.697	1.413	0.236
5. Prefer a replacement	0.135	0.018	0.014	1.902	4.089	0.044
6. Satisfied time duration to make a return	0.193	0.037	0.033	2.025	8.592	0.004
7. Shorter processing time	0.13	0.017	0.012	2.019	3.796	0.053
8. Quick response from the company	0.188	0.018	0.034	2.002	8.075	0.005
9. Shorter Reimbursement & refund time	0.19	0.036	0.032	2.084	8.27	0.004
10. Convenient payment process	0.13	0.017	0.012	1.897	3.776	0.053
11. No questions asked	0.195	0.038	0.034	1.845	8.747	0.003
12. Free shipping	0.202	0.041	0.036	2.022	9.392	0.002
13. Repeat purchase	0.141	0.02	0.016	2	4.5	0.035

iii. Regression Analysis (b) continued

Regression Interpretation:

Computer usage Purpose	R	R2	Adj R2	DW	F	Sig level
14. Read return policy before purchase	0.192	0.037	0.032	1.97	8.433	0.004
15. Return policy on refunds is satisfactory	0.166	0.028	0.023	2.068	6.265	0.013
16. Return policy on products replacement is satisfactory	0.195	0.038	0.034	1.901	8.697	0.004
17.No additional charges on returns	0.205	0.042	0.038	1.938	9.662	0.002
18. Look for a Return policy	0.189	0.036	0.031	1.985	8.177	0.005
19. Check the return policy when I return	0.025	0.001	-0.004	1.986	0.136	0.713
20.Satisfied Return policy	0.132	0.017	0.013	2.801	3.901	0.05
21. Contact e-tailers on the return status	0.028	0.001	-0.004	1.837	0.174	0.677
22. Convenient return policy	0.072	0.005	0.001	1.921	0.149	0.285
23.Return policy must when purchase	0.067	0.004	0	2.125	0.982	0.323
24. Quick refund payment process	0.153	0.023	0.019	2.003	5.301	0.022
25. Convenient payment on refund policy	0.148	0.022	0.017	1.993	4.932	0.027
26. Hassle-free payment	0.021	0	-0.004	1.966	0.101	0.75
27. Check to track information	0.105	0.011	0.006	2.197	2.452	0.119

There is always confusion about regression policy and its framework in the context of the return of the product. A consumer would expect to return without hurting the relationship between an unknown producer and his product. However, a decision to return would mean the product is not satisfactory, not good to own, not enough to reflect his expectations, not worth what its value is, not enough to derive its paid value, and so on. Many characteristics of an Indian consumer come into wherein you find that must live long, as long as we live and should live with our future generation and derive antique value. The possessive characteristic of an Indian consumer is not largely universal. However, such a trait inherited needs to be examined for formulating a return policy for a company. The regression analysis is a lead for us to get into the elements

of a returns policy for the sample consumers.

Twenty-nine variables have been identified for ascertaining the structure of the return policy. With return policy as the dependent variable, all other variables are tested. The results indicate acceptance of null hypotheses which make no difference in their effect. The consumers are aware that no return policy is made aware of at the time of purchase. The policy must be convenient for payment to the consumer. What kind of convenience? It needs to be explored. There is no linking of policy with e-tailing. This must be addressed. A relook at the return policy will enable the company to further probe into the operation of the policy for ease of use. There must be a consumer convenient repayment process. Any consumer would prefer a refund of money in full. How to evolve a policy such that no costs are involved and that the returned product consumer is not hurt? This question needs detailed elaboration.

A look at the acceptance of alternate hypotheses would facilitate the generation of a solution. As many as twenty-four null hypotheses have been rejected. What does that mean for us here in the context of reverse logistics? A typical consumer would like to drop the product at the physical store. Or he may like to delay it to hand it over at his convenience. He expects the return policy to be flexible to deliver as he has to find his time too. No specification of the last date of return would please him. He has used the product to derive satisfaction from its use. That duration of making up his mind to retain or return must be enumerated. He needs larger time for all these. However, he wants the company to short time to refund his money without hurting the consumer on his return. He may prefer replacement with a new product of the same or a new model so that he gets the best from return. His return should be hassle-free irrespective of whether it is a low or a high-involvement product. A typical consumer would bargain only when he is sure to gain at the cost of the company. These results are critical and yet vital for any company to assess the consumer and the policy of return.

Limitations:

1. The study results are tentative because of the small sample size.
2. The study area of Bengaluru city with its business practices.
3. The results may vary in other contexts where practices of business vary.
4. The instrument needs further standardization for a larger sample launch of the study

IV. DISCUSSION AND IMPLICATIONS

Five factors were examined in the Return policy, i.e., Return policy satisfaction, refund, replacement, convenient payment, and tracking information. The study indicates that the Purchase intentions of consumers are a priority for marketers to know for short life cycle products like computer hardware. From the study, it is clear that consumers chase computer hardware due to return policy attributes. Research also indicates that consumers consider refund, replacement, and hassle-free process of payment as a high priority while purchasing computer hardware. Marketers can use these findings for formulating and developing return policies, decision-making on product designing, and improving marketing strategies.

The study explores factors that can improve the purchase intentions in the new era of millennials and lifestyle living. The study helps companies in decision-making in formulating marketing and promotional strategies according to the recent trends in purchase intentions. The study helps businesses design the return policy for both physical and online purchases and provides insights and future directions to academics and researchers. The study helps businesses to revamp the existing return policy and develop corporate strategies based on the Triple bottom approach. It's time for businesses to adapt to the modern era of marketing. With the present generation and new trends of lifestyle, businesses need to foresee the psychology of the consumers much before competitors and act accordingly and quickly

CONCLUSION AND FUTURE RESEARCH

It's time for all marketers and businesses to restructure their marketing strategies based on the present purchase experience and habits. Lenient return policy is a new dimension to be considered as an important factor influencing purchase intentions in recent times. With the increase in the online purchase habit, the Computer hardware industry needs to further re-strategize the return policy document to be more favorable to the consumers in terms of hassle-free payment, shorter cycle time for refunds, and return processing period. Further companies also have to advance in handling return abuse through better machine learning and analytics, identifying repeat return behavior. Behavior aspects like eco-friendly products, minimalistic choices, and sustainable habits are emerging trends. Millennials are interested to purchase vegan products, environment-friendly clothing, and minimalistic living. Further research can be made on testing these factors on purchase intentions.

This study is confined to computer hardware products, the variables can be further extended and applied to other consumer durable products. Researchers can also explore the behavioral factors of service products across industries.

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