

Determinants of Consumer Involvement: A Quantitative Analysis of Laptop Purchase

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ABSTRACT

Consumer involvement is defined as feelings of interest, concern, and enthusiasm held towards product categories and brands. Consumers put more efforts, perceive various risks, and give more time for information searching to purchase a product which costs high and have the property of being more durable. The purpose of the study is to find out the impact of demographic variables and attributes on consumer involvement in purchase of laptop. Zaichkowsky's (1985) uni-dimensional conception of involvement is adapted. Econometric and statistical tools viz. ANCOVA, ANOVA and two sample independent T test are used. Result shows that laptop is high priced and mostly used by erudite people, therefore, education and salary play vital role in the level of involvement with the product. Customers aged between 25 and 35 are highly involved followed by age group below 25 in purchase of laptop, while upper age categories do not show that much involvement, hence age category is also an important determinant to know consumer involvement in product. Marketers must target below 25 age group to motivate them for purchasing laptop. They should make customize laptop and should also target upper age group and educate them about the significance of the laptop.

Keyword: Involvement, Purchase, Consumer

INTRODUCTION

The era of broadening and globalization of market requires more in-depth knowledge about the consumers and their behaviour. In this context, involvement becomes one of the most important aspects to explain and predict consumer behaviour. Involvement refers to how much money, time, thought, energy, and other resources consumers devote for purchasing a product. It is one of the fundamental concepts used to explain the consumer buying process. The level of involvement is affected by the amount of efforts consumers give to learn about the product and to take purchase decision. Involvement measures the personal relevance with the product and how consumer is attached with the product. Involvement includes an assessment of the importance of the stimulus for the consumer but it produces certain behaviour as consequences such as customers pay more attention if they are involved with the product. Involvement is a mental and physical effort customer gives during purchasing a product. The intensity of these efforts may vary with different situation, different products, and different consumers.

Consumer Involvement is a source to explain the differences in the degree of both mental and physical efforts of a consumer and his decision making. Involvement can also be conceptualized as a consumer's motivation to search for information. Consumer involvement is a heightened state of awareness that motivates consumers to seek out, attend to and think about product information prior to purchase (Lindquist and Sirgy, 2008, p. 252). Kapferer and Laurent (1986) described involvement as the state of motivation or arousal induced by factors such as interest, pleasure, sign value, and risk, while Robertson (1976) expresses it as the 'strength of the individual's belief system' related to product or brand attributes. Mitchell (1979) took a similar view in defining involvement as "an individual level, internal state variable that indicates the amount of arousal, interest or drive evoked by a particular stimulus or situation".

The study of consumer behaviour is necessary because understanding of customer results in production of better product, quality, services, and effective promotions. Marketers have to understand the interest of consumers towards a product, how consumers purchase and consume a product and what are the aspects influencing their

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purchase and consumption related activity. The ignorance of studying consumer can not be compensated because an organisation that loses sight of their customer cannot compete effectively in the market.

Role of Demographics

Consumers' personal characteristics are also an important aspect of consumer behaviour research. Cultural and social values play a very important role in the Indian buying behaviour. Changing income levels, demographic structure, and attitudes influence their behaviour. Personal profile of the consumer helps marketers to identify the potential market segment; it helps in channelizing the promotional effort to those segments. Product development is more focused and will cater to specific needs of a particular segment. Consumer demographics information is important for marketers because consumers can be targeted using variable such as age, gender, occupation marital status etc.

LITERATURE REVIEW

Consumers from different age category perceive different behaviour, attitude, and involvement towards the purchase related activity. Age carries with it culturally defined behavioural and attitude norms. It affects self concept and lifestyle of the consumers. Age affects consumption process of products, media use, shopping style, reaction on marketing activities, and decision making style. Male and female can behave differently as consumer because they possess unique personality traits, interests, knowledge, judgment capabilities, and social status. Hence, some scholars believe that both sexes process and evaluate products differently (Eagly and Carli, 1981; Fischer and Arnold, 1994; Everhart et al., 2001; Sanjay 2001). Also, there are differences in the involvement levels for various products between men and women (Slama and Tashchian, 1985; Jain and Sharma, 2002).

Education influences what a consumer purchases partially determining income and occupation. It also influences consumer's thinking and decision making process. Education has a strong impact on consumer's taste and preferences. Income of the family combined with family's accumulated wealth determines the purchasing power (Hawkins et al., 2003). However, income enables purchases but does not generally cause or explain them.

It is likely that the occupation and education directly influence the preferences for products, media and activities; income provides the means to acquire them (Mulhern et al., 1998). Jain and Sharma (2002) and Slama and Taschian (1985) identified that income influences the involvement levels.

The study is undertaken with the assumption that consumers put more efforts, perceive various risks, and give more time for information searching to purchase a product which costs high and have the property of being more durable. Product like laptop is one of the breakthroughs in the IT sector. It has eased the work as it provides mobility and compactness. Usually it is used for business but now a days it has become a necessity for non-business units also. A laptop is useful to an employee, a student, an entrepreneur, a media person equally. The present study is an attempt to find consumers inclination towards buying laptop.

OBJECTIVE

The purpose of the study is to find out the impact of demographic variables and attributes on consumer involvement in purchase of laptop.

METHODOLOGY

To find how level of consumer involvement varies with different salary, gender, education, marital status, and age level. Zaichkowsky's (1985) unidimensional conception of involvement is adapted. Zaichkowsky presented a 20 items bipolar 5 point Likert scale called Personal-Involvement-Inventory (PII). As the items were measured using a five point Likert scale with minimum value of 1 and maximum value of 5 hence the theoretical values of the responses for each product is ranged between 20 to 100.

The study has been carried out on the consumers of laptop in Indore city. Data were collected from household, college students, and various occupational categories residing in Indore city. Various malls and stores of Indore city were taken for sample unit. Survey was done in all the seven days of the week to have all types of the consumers. The non-probability quota sampling (non-proportional) was used to select sample respondents. In non-probability quota sampling (non-proportional) the population is first segmented into mutually exclusive sub-groups then

people are selected non-randomly according to some fixed quota. But the minimum number of respondent in each category is specified. In the study the consumers purchasing laptop (population) are first segmented in different groups (age, gender, income, education, and marital status) then minimum 50 respondents from each group have been taken for the study.

STATISTICAL TOOLS

Analysis of Covariance (ANCOVA) is used to find the impact of various demographic variables and attributes such as salary, gender, education, and marital status on consumer involvement in laptop where salary is continuous variable while gender, education, and marital status are defined as dummy variable. Analysis of Variance is used to find the significant effect of various level of age on consumer involvement.

HYPOTHESES

H₀₁ Salary has no significant effect on consumer involvement in laptop.

H₀₂ Various education levels have no significant effect on consumer involvement in laptop.

H₀₃ Gender has no significant effect on consumer involvement in laptop.

H₀₄ Marital status has no significant effect on consumer involvement in laptop.

H₀₅ Various stages of age make no significant difference in level of consumer involvement in laptop.

DATA ANALYSIS

The impact of salary, education, gender and marital status on consumer involvement in laptop is given by

$$Y_{il} = \beta_0 + \beta_1 X_i + \beta_2 D_{1i} + \beta_3 D_{2i} + \beta_4 D_{3i} + U_i$$

where Y_{il} = Consumer Involvement in Laptop

X_i = Income

D_{1i} = Dummy Variable as Education
(Undergraduate = 0, Postgraduate = 1)

D_{2i} = Dummy Variable as Gender (Male = 0,
Female = 1)

D_{3i} = Dummy Variable as Marital Status
(Unmarried = 0, Married = 1)

Table 1: ANOVA: Showing Linear Relationship among the Variables

	<i>Sum of Squares</i>	<i>Dof</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
Regression	1572.00	4.00	393.00	3.05*	0.02
Residual	31910.30	248.00	128.67		
Total	33482.30	252.00			

Predictors: constant, income, education, marital status
Dependent variable: Consumer Involvement

Where * indicate p value is less than 5% ($p < .05$) F value is significant as ($p < .05$) i.e. hypothesis of non-linearity is rejected and the model fits into the data accurately, which means some or all variables are the significant predictors of consumer involvement.

Table 2: Regression Model Summary

<i>R</i>	<i>R Square</i>	<i>Adjusted R Square</i>	<i>Std. Error of the Estimate</i>
.22	.05	.03	11.34

Predictors: constant, income, education, marital status

Table 2 shows that salary, education level, gender, and marital status jointly explained only 5% variation in Consumer Involvement in Laptop.

Table 3: Coefficients of Predictors obtained from Regression Analysis

		<i>Un-standardized</i>		<i>t</i>	<i>Sig.</i>
<i>Model</i>	<i>Predictors</i>	<i>B</i>	<i>Std. Error</i>		
1	(Constant)	55.58	1.91	29.13	0.00*
	Dummy Education	2.77	1.47	1.88	0.04*
	Dummy Gender	-1.46	1.48	-0.99	0.32
	Dummy Marital Status	-2.82	1.58	-1.78	0.08
	Salary	0.76	0.34	2.21	0.03*

Dependent variable: Consumer Involvement

Consumer Involvement in Laptop = 55.58 + 0.76 (Salary) + 2.77 (Education) - 1.46 (Gender) -2.82 (Marital Status)

t = 29.13* 2.21* 1.88*
-0.99 -1.78

Where * indicate p value is less than 5% (p<.05)

The ANCOVA model reveals that education and salary have significant effect on consumer involvement in laptop as t value is significant (p<.05) at 5% level of significance. Hence null hypothesis H₀₁ and H₀₂ are rejected.

Consumer level of involvement in laptop in different age group is shown in Table 4.

Table 4: Descriptive Statistics: Showing Mean, SD, SE of Consumer Involvement in Laptop with Various Age Categories

Age	N	Mean	Std. Deviation	Std. Error
below 25	137.00	60.45	9.63	0.82
25-35	124.00	60.87	10.58	0.94
36-45	59.00	57.37	12.29	1.60
46-55	70.00	53.11	10.60	1.22
above 55	52.00	42.97	9.77	1.47
Total	442.00	57.16	11.78	0.56

Table 5: ANOVA: Comparing Mean Involvement in Various Age Categories

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	13333.03	4.00	3333.26	30.42*	0.00
Within Groups	47888.61	437.00	109.58		
Total	61221.64	441.00			

Where * indicate p value is less than 5% (p<.05)

ANOVA shows that consumer involvement in purchase of laptop varies with various stages of age as F value is significant at 5% level of significant (p<.05) hence we reject H₀₅.

Table 6 shows that consumers aged between below 25 and 25-35, and between below 25 and 36-45 do not perceive significant difference in purchase of laptop therefore they

have same level of involvement. On the contrary other groups of age perceive different level of involvement in purchase of laptop.

Table 6: Comparison of Age Groups

Age	N	Mean	SD	SE	t	df	Sig
below 25	137	60.45	9.63	0.82			
25-35	126	60.87	10.58	0.94	-0.34	261	0.73
below 25	137	60.45	9.63	0.82			
36-45	59	57.37	12.29	1.60	1.88	194	0.06
below 25	137	60.45	9.63	0.82			
46-55	76	53.11	10.60	1.22	5.14	211	0.00*
below 25	137	60.45	9.63	0.82			
above 55	44	42.97	9.77	1.47	10.44	179	0.00*
25-35	126	60.87	10.58	0.94			
36-45	59	57.37	12.29	1.60	1.99	183	0.05*
25-35	126	60.87	10.58	0.94			
46-55	76	53.11	10.60	1.22	5.05	200	0.00*
25-35	126	60.87	10.58	0.94			
above 55	44	42.97	9.77	1.47	9.85	168	0.00*
36-45	59	57.37	12.29	1.60			
46-55	76	53.11	10.60	1.22	2.16	133	0.03*
36-45	59	57.37	12.29	1.60			
above 55	44	42.97	9.77	1.47	6.41	101	0.00*
46-55	76	53.11	10.60	1.22			
above 55	44	42.97	9.77	1.47	5.19	118	0.00*

CONCLUSION

Laptop is high priced and is mostly used by erudite people, therefore education and salary play vital role in the level of involvement with the product. As laptop is mostly used by educated people so they have different concern, relevancy, value, benefits, and need of this product category. They also get more involved because they understand the features and technical aspects of laptop. The changing scenario of education sector, where all the teaching activities are done on computer/ laptop, is a major factor of involvement in purchasing laptops. Students also necessarily require laptop because as it provides mobility and smoothen their day to day learning related activities. These facilities induce customers to get involved in laptop. Laptop is high priced product hence salary makes significance difference in the level of consumer involvement.

Customers aged between 25 and 35 are highly involved followed by age group below 25 in purchase of laptop, while upper age categories do not show that much involvement. Lower age group perceive same level of involvement in purchase of laptop as consumers aged below 25 and 25-35 perceive same level of involvement. But consumers in the age group 25-35 and 36-45 differ significantly in their level of involvement. All the other above age group differ significantly. Marketers must target below 25 age group to motivate them for purchasing laptop. They should make customized laptop for the same age group and should also target upper age group and educate them about the significance of the laptop.

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