A Study of Different Factors Influencing Consumers' Pre-Purchase Buying Behaviour Towards Laptop.

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ABSTRACT

Today Laptop industry is a booming industry in India. Consumers' desires and expectations are moving on. It becomes very difficult for the laptop manufacturers to survive in the market if they don't understand the growing needs of the consumers. This paper aims to understand the present usage pattern among users and extracting factors which influence the consumers' buying decisions. 232 respondents were chosen from Ahmedabad and Gandhingar through random sampling method. The results from the study show that there are basically four factors extracted from the survey: technical specifications, Outlook of the product, purchase convenience and Affordability which affect the consumers.

Introduction

Mobile computing became highly popular in the present decade and advances in computer and devices based on mobile technology allowed the user to do their computing work from any place at any time (Sears & Arora, 2002). Laptop computers have became highly popular as portable versions of desktops with full functionality of desktop computing and portability. Before few years ago, wireless connectivity in laptop was considered to be a luxury in India but today, it became a necessity for a person. Apart from the rapidly falling prices of laptops, new technologies being packed into ultra-slick laptops and entry of non-traditional players into the laptop market given a further boost to the Indian laptop industry.

The biggest drive can be the scenario that businesses have started encouraging their employees to work from anywhere i.e workplace mobility. Now-a-days even non IT companies are providing laptops to their employees in a bid to boost productivity. Therefore, it becomes important for the manufacturer to study the exact requirements of the customers, their expectations, their perceptions, and design and present the product accordingly.

Objective of the Study

Identifying the factors affecting buying behaviour of consumers from two cities of Gujarat State: Ahmedabad and Gandhinagar, with respected to branded laptops.

Review of Literature

With the increasing disposable income, per capita consumption for electronic goods and other products is increasing. Consumers are eager to improve their standard of living with high quality products and get ride from spurious and sub-standard products **(Rajaselvi, 2010)**. As a result, Electronics products sector experienced boom in the market today. Consumers' demographic profile, purchase perceptions, and their attitudes **(Douglas, 1976)** towards products or brands influence their purchase decisions. **Jarvenpaa and Todd (1996/1997)** identified major four factors affecting buying electronics products: product understanding, shopping experience, customer service, and consumer risk.

Consumer's preference for mobility and wireless connectivity at low cost resulted in the growth of the Laptop market compared to desktops **(Aditya & Abhinav, 2009)**. Laptop's portability, sleek and easy-to-handle nature saw them take away a substantial chunk of the Indian market **(Manjari, 2010)**.

Ray (2009) studied present usage pattern, extracted factors that influence the customers' buying decisions and their relative importance towards laptop purchase. He validated a model for customer purchase decision making. In which he concluded that customers' perception about the company (i.e. brand, quality, service) depends on the price of the offer, product features, promotional offers and market maturity.

Gogoi & Kumar (2010) conducted a study in Guwahati and found that MBA students found highly conscious and well aware about their preference for laptop brand, configuration of the product, battery life, outlook and after sale service facilities while price and availability of product is not a big issue for them.

According to **Kanwar (2012)** there are seven factors influencing consumers' laptop purchase decisions: core technical features, post purchase services, price and payment conditions, peripheral specifications, physical appearance, value added features and connectivity and mobility.

Methodology

The respondents were selected from Ahmedabad and Gandhinagar, in the age group of 20 years and more, and were students, salaried and business persons. The sample size was 232.

Data Collection

Primary data was collected to conduct the study by means of structured questionnaire via one-to-one interaction with the respondents.

Data Analysis & Results

Demographic profile of the respondents

Of the 232 respondents, 66.38% were male and 33.62% were female. The age structure of the participants of this survey was as follows: 20.69% of the respondents were under the age 20, 57.90% of the respondents were between the age of 21-25, 12.07% of the respondents were between the age 26-30, 3.45% respondents were in the age group of 31-35, 1.72% respondents in the age group of 36-40, and 5.17% respondents were above the age 40. The education

level of the respondents was high as expected; 13.79% were HSC, 48.28% were graduate, 33.62% were post graduate, 0.86% were having Ph. D degree.

The Features Influencing Consumers' Laptop Purchase Decision
Respondents, who participated in this survey, were given list of various features related with laptop and then they were asked to show how important these features for them while purchasing a laptop.

Exploratory factor analysis (EFA)
To identify the factors affecting pre-purchase buying behaviour an exploratory factor analysis was carried out. Principle components method was used to extract the factors. The KMO Measure of Sampling Adequacy was 0.780 indicating analysis results are meritorious (Kaiser, 1970). Bartlett's test of sphericity was significant at 0.000 levels demonstrating that a high elevated degree of correlation between the variables exists.

The Kaiser-Meyer-Olkin measure of sampling Adequacy for the various product and features measured is 0.780., which indicates the scale is appropriate and helps in extracting the factor. The ideal measure for this test (KMO>0.50) and here in this case KMO is 0.780 indicates the variables are measuring a common factor. Again Bartlett's Test of Sphericity indicated the inter-correlation matrix is factorable and inter-correlation matrix come from a population in which the variables are non-collinear.

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.780
Bartlett's Test of Sphericity	Approx. Chi-Square	775.903
	Df	120
	Sig.	.000

Varimax rotation method was used with factors extraction with Eigen value over 1. The factors, their respective items with the numbers and their corresponding factor loading are given below.

Communalities		
	Initial	Extraction
Screen_Size_Impact	1.000	.611
Graphics_Card	1.000	.873
Weight	1.000	.746
Color	1.000	.573
Battery_Life	1.000	.695
Price_Of_Laptop	1.000	.822
HardDisk_Capacity	1.000	.748
Processor_Advancement	1.000	.755
Brand_Impact	1.000	.757
Design_Of_Laptop	1.000	.572
Color_of_Laptop	1.000	.789
Payment_Option	1.000	.559
Store_Location	1.000	.762
Promotional_Offers	1.000	.710
After_Sale_Services	1.000	.692
Accessories	1.000	.589
Extraction Method: Principal Component Analysis.		

Here, the table of commonalities indicate that Graphics card, price of the laptop, store location, brand impact and processor advancement having highest extraction in terms of correlation. None of the variable got less than 0.5 weightage

Total Variance Explained									
Compo-nent	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Vari-ance	Cumulative %	Total	% of Vari-ance	Cumulative %	Total	% of Vari-ance	Cumulative %
1	4.884	30.524	30.524	4.884	30.524	30.524	4.091	25.571	25.571
2	2.497	15.605	46.129	2.497	15.605	46.129	2.509	15.681	41.252
3	1.513	9.458	55.587	1.513	9.458	55.587	1.938	12.112	53.364
4	1.270	7.937	63.525	1.270	7.937	63.525	1.501	9.380	62.743
5	1.090	6.815	70.339	1.090	6.815	70.339	1.215	7.596	70.339
6	.843	5.268	75.608						
7	.665	4.159	79.766						
8	.606	3.786	83.552						
9	.487	3.047	86.599						
10	.441	2.754	89.353						
11	.401	2.506	91.859						
12	.316	1.977	93.836						
13	.301	1.880	95.715						
14	.283	1.769	97.485						
15	.228	1.423	98.907						
16	.175	1.093	100.000						
Extraction Method: Principal Component Analysis.									

It is apparent from the above table that five components cover 70% of the data under Principle Component Analysis method and cover substantial variation. Again if we extend the limit then, the statistics reveal 9 components cover almost 84% of the data. Research reveal the fact that Payment_Option, Store_Location , Accessories which have very little influence in terms of Laptop purchase. Again rotated component matrix makes the situation more apparent and helps in identifying the vital factors.

Rotated Component Matrix[a]

	Component				
	1	2	3	4	5
HardDisk_Capacity	.855	.043	-.047	.000	.117
Battery_Life	.815	.137	-.036	-.072	.077
After_Sale_Services	.803	.149	.141	-.073	.016
Brand_Impact	.797	.291	.044	.151	-.111
Processor_Advancement	.781	-.105	-.076	.086	.348
Accessories	.601	.332	.183	-.288	.033
Color_of_Laptop	.103	.865	.107	.017	-.137
Design_Of_Laptop	.372	.651	.098	.020	-.010
Color	.190	.601	.167	.018	.385
Store_Location	.095	.216	.832	.124	-.003
Promotional_Offers	.272	.359	.702	-.105	-.068
Screen_Size_Impact	.248	.395	-.622	.077	-.038
Payment_Option	-.101	.491	.501	.176	.159
Price_Of_Laptop	.132	-.125	.054	.883	-.077
Weight	-.241	.374	.014	.729	.126
Graphics_Card	.177	.009	.003	-.005	.917
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.					
a. Rotation converged in 6 iterations.					

Five factors are clearly emerging from the above table. As rotated component matrix reveals hard-disk capacity, battery life, after sale services, brand impact, processor advancement and accessories have higher correlation. So we clubbed those five variables and considered as a factor of technical specification of a laptop.

Factor	Items	Factor Loadings
Technical Specifications	Hard Disk capacity Battery Life After sale services Brand Impact Processor Advancement Accessories	.855 .815 .803 .797 .781 .601
Outlook	Colour of laptop Design of laptop	.865 .651
Purchase convenience	Store location Promotional offers Screen size Payment Option	.832 .702 .622 .501
Affordability	Price of laptop Weight	.883 .729

Likewise factor-2 is outlook of laptop which clubs colour and design of the laptop, factor-3 is purchase convenience which includes store location, promotional offers, screen size and payment option while factor-4 is affordability which includes price and weight of the laptop. Thus, these four factors explains pre-purchase buying preferences of consumers while purchasing the laptop.

Conclusion

As year passes, the number of persons owning computer and laptop is increasing drastically. Laptop is used by almost all the age groups and by both males and females. As consumers' desire to use portable and attractive designed System forces the companies to product customerized laptops. Hence, companies required to be aware about the consumption pattern and the affecting factors to the choice of the consumer for laptop.

In this study, it has been found that there are basically four factors which influence the consumers' laptop purchase decisions. These factors can be stated as follows: technical specifications, Outlook of the product, purchase convenience and Affordability. This study recommends companies to invest in technology through R & D and create differentiation at utmost level. This research has been limited to laptop sector and factors influencing consumers' purchase decisions in Ahmedabad and Gandhinagar area, since sectoral differences play a vital role, it is also recommended to replicate this study in distinct sectors.

REFERENCES

• Aditya S. & Abhinav D. (2009) The global laptop industry. Retrieved from: http://srl.gatech.edu/Members/ashah/laptop_industry_analysis_aditya_abhinav.pdf || • Douglas S.P. (1976), Working wife versus Non-Working Families: A Basis for Segmenting Grocery Markets? Advances in Consumer Research, 3, 191-198. | • Gogoi M., Kumar B., (May-August, 2010,) MBA Students' brand awareness and preference with regard to branded laptops: A case study in NIS academy, Guwahati, Journal of Marketing & Communication, Vol. 6, Issue-1, pp. 45-49 | • Hamann, D., Williams Jr., L.R. and Omar, M. (2007) 'Brand strategy and consumer high-technology product', Journal of Product & Brand Management, Vol. 16, No. 2, pp.98–111. | • Jarvenpaa, S. L., & Todd, P. A. (1996-97), Consumer reactions to electronic shopping on the World Wide Web, International Journal of Electronic Commerce, Vol. 1(2), pp. 59-88 | • Kanwar R. (2012), Study of consumer behaviour while purchasing Laptops in Chandigarh & Mohali, International Journal of Computing and Business Research, Vol. 3(2) | • Kumar R S & Bajaj K. (2002) Cultural Dimensions and MNC Brands-A Study in Indian Context, South Asian Journal of Management, July-Sept. Pp. 39-55. | • Manjari J. (2010) Tablets score big this time around, Express Computer, 21(34), 5-6, 10. | • Ray S. (2009), Building a model for purchase decision of Laptops and Price Performance Analysis of Major Players, The ICFAI university press. | • Rajaselvi K. (2010) Buyer Behaviour Towards Electronic Goods, International Journal of Enterprise and Innovation Management Studies, 1(3), 74-80 | • Sears, A., & Arora, R. (2002). Data entry for mobile devices: An empirical comparison of novice performance with Jot and Graffiti. Interacting with Computers , 14 (5), 413-433. | • Sriram, S., Chintigunta, K.P. a nd Neelamegham, R. (2006) 'Effects of brand preference, product attributes, and marketing mix variab les in technology products markets', Marketing Science, Vol. 25, No. 5, pp.440–456.