M.R.E.S

CHOICE OF VARIOUS LAPTOP BRANDS AMONG ENGINEERING AND MANAGEMENT STUDENTS

by

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ABSTRACT

Laptop market is a highly competitive market in the present scenario. Due to rapid changes in the field of technology day by day new laptop brands comes in to existence. Also, the consumer desires and expectations are moving on. It becomes difficult to survive for laptop manufacturers if they don't move fast with growing needs of consumers. This study presents a brief overview of Indian laptop industry with reference to Choice of Laptop's Brand among Engineering and Management students. The present paper highlights the laptop usage in study from student's point of view. The research paper further makes an attempt to identify and evaluate various factors which influence purchase indent of management and engineering students. This paper also presents some simple and practical suggestions to improve laptop features and that will help laptop manufacturers to develop brand management strategies and to make proper positioning of their brands.

KEY WORDS: Use of Laptop, Student's Perception, Learning.

INTRODUCTION

Whether it is a growing craze or the emergence of a new breed of technology-conscious laptop market is going to flourish in India. The need for anytime-anywhere access to information is pushing laptop demand in the market due to their convenience in terms of portability, flexibility and adaptability. In every field of life like, hospitality, railways, metro trains, corporate houses, academics, professionals etc. we found the use of laptop/computers for different purposes.

Laptops are current day demand that simplify work and life as well. It contributes towards the up-liftment of performance, work easiness by introducing the home office concept and provide a creative insight for the work. In a survey of 200 students conducted in winter 2005, a slight replacement, was notified in students behaviour. Students start preferring Laptop computer in place of desktop due to its portability feature.

India' developing economy notifies positive impact of this technology and continuously moving towards growth. Initially laptop market started functioning as a niche market but now it has various market segmentations as per their market demand. India is considered as the third

fastest growing laptop market with a compound annual growth rate of 21.9 % in the Asia-Pacific region from last few years.

In 2005 Laptop sale was accounted as 2% in India as compare to world laptop market. Near about 1.2bn computers were in use worldwide at the end of 2008. However, it has been expected that the global laptop market will be double by 2018. Increasing laptop demands also set a target to manufacturers to work as per consumer's expectations.

MAJOR LAPTOP BRANDS AND MANUFACTURERS

We found various Laptops brands available in the market at different prices, size and features. Some of the well renowned Laptop brands and manufacturers are listed below:

Major Laptop Brands	Product Line Depth
Acer	One 10, Aspire, Gateway, E Series, S Series
Apple	MacBook, MacBook Air and MacBook Pro
Dell	Inspiron, Latitude, Precision, Vostro and XPS
Toshiba	Dynabook, Satellite, Libretto
Lenova	IdeaPad, Thinkpad and the Essential B and G Series
Samsung	Pro, Chrome book
Hewlett-Packard / Compaq	HP Pavilion, HP Envy, HP ProBook, HP EliteBook
HCL (INDIA)	Me Laptop, Me Netbook,

The major players usually provides good service support, well-executed documentation and driver downloads that will remain available for many years after a particular laptop model is no longer produced.

FACTORS RESPONSIBLE FOR INCREASED LAPTOP SALE

There are various factors which affects the sale/ market of laptop:
- Availability
- Affordability
- Awareness
- Accessibility
- Govt. policies
- Career growth
- Price reduction (Discount/ offers)

OBJECTIVES OF THE STUDY

On the basis of above background the following objectives were formulated:

1. To study the laptop brands preferred by the engineering and management students.
2. To determine the laptop usage in the study from the engineering and management students point of view.

3. To identify & evaluate the factors impact on laptop purchase decision of the students.

REVIEW OF LITERATURE

Ray, S.(2009), in "Building a model for purchase decision of Laptops and Price Performance Analysis of Major Players" highlights the adoptability of Wi-Fi connectivity as a necessity in Hospitality, Airlines, Schools, Colleges and various other places. It also notifies that laptop market is boosting due to price reduction and ultra-slicks laptops.

Rungchat Chompu-inwai1 and Toni L. Doolen (2005), also advocated that this research focused on studying the impact of using laptops in a required undergraduate-level engineering course at Oregon State University (OSU) in Winter 2004 and Winter 2005. The individual usage of laptops with wireless capability both inside and outside classrooms in Winter 2005 was found to positively impact student learning outcomes and assist in the achievement of class learning objectives. No significant differences in attitudes were found in either year. Student attitudes towards laptops and the usage of laptops were unchanged by the introduction of laptops in both years.

Moses, P. et al (2008), The study "Laptop Use and its Antecedents Among Educators" focus that use of various laptop brands are empowering the teachers with the latest technology through training and concluded that laptop usage in the study as an instructional tool is an effective media to enhance students learning.

Fried, C.B. (2006) Examine in his study "In-class laptop use and its effects on student learning", highlights that the impact of laptop usage in the class and noticed a favourable improvement in students working.

Grimes,D.& Warshauer, M. (2010) also conducted a study on the students of three different schools of California by mean of one-to-one laptop program and found that in second after introducing this program the students perform better than non-laptop user students.

Vuojärvi, H. (2010) In his study "Domestication of a laptop on a wireless university campus", advocated that qualitative interview data with twenty students (identified and selected by quantitative survey) was analyzed using the grounded theory approach during which a multi aspect domestication process was identified. Results highlight the importance of a structured way of organizing laptop initiatives in universities.

RESEARCH METHODOLOGY:

Research Design:

Following Methodological steps are followed for conducting the research:

1) Literature / Internet Survey:

Paper Id: **IJRDTM –0530152**

This study started with the literature survey via various journals, magazines that helped to comprehend the various facts of the Laptop Industry. Also, internet survey was conducted to understand the latest occurrences in the industry.

2) Design Of Questionnaire:

The questionnaire for the present study was designed based on the objectives of the study. Questionnaire for present study has been divided into three parts:

a) **Explanatory Information:** It was provided by researcher to respondents to explain the purpose of the study.
b) **Student's Personal Information:** This part considered questions with the sole purpose of gathering personal details of the students regarding their name, educational stream, gender, etc.
c) **Basic Information:** The second section consisted of ten questions, first question pertaining to 'top of the mind awareness/recall of laptop brand', 'brand of laptop presently being used', ' brand of laptop they intend to purchase if they are not using one at present", second question is related to the laptop usage in their study were measured on 5 point Likert Scale where 1 represented strongly disagree and 5 denoted strongly agree, third and fourth questions were asked to know about the students preference level towards laptop size and price range. Fifth question was asked to evaluate the purchase criteria. In the sixth question, eleven statements on different parameters of the brand were asked which consumer considers while deciding the brand of the laptop. Impacts of various factors were considered on a rating scale where 1 represented always and 5 denoted never.

3) Design Of Sample Survey:

In this study, the target sample size was 170 students, in the age group of 18 years and more, and was students of different Management and Engineering Colleges from Ghaziabad city. Random sampling method was adopted in this study where students were approached directly and requested to fill the questionnaire.

4) Data Collection Method:

Primary data was collected by means of a structured questionnaire to conduct the study and arrive at conclusions based on the findings.

5) Data Tabulation/Validation:

After the data collection the data was tabulated and then edited, coded and verified for validity. During the survey, 170 respondents were interviewed from the target group, as mentioned earlier.

6) Determination Of The Data Analysis Methods:

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In this study simple statistical technique has been used. Percentage of respondents has been calculated in respect of most of the data collected. The following steps are taken in the present study in order to analyze the data correctly-

i)Editing,

ii)Tabulating, and

iii)Graphic Representation

7) Interpretation Of The Result:

Finally the results that emerged from the study was analyzed and interpreted and suitable conclusions were drawn from those results.

8) Limitation Of The Study:

Some limitations of the present study were as follows:

1. Sample Size: Sample size is limited to 170 respondents only which may not be representatives of universe. A large sample could not be taken due to limited time.

2. Unwillingness and inability of the respondents to provide information: Especially question regarding the demographical factors. Many persons were unable to answer accurately due to ignorance of facts.

3. Time constraints: Time available at the disposal was not enough. Therefore it was not feasible to go in depth and choose wider area.

4. Limitation regarding analysis: Due to limited resources and time, a deeper statistical analysis like analysis of variance, rank correlation could not be carried out.

Data Analysis:

The null hypothesis was framed, which states that the attributes are uncorrelated in the population. Brand awareness was tested by applying top of the mind recall technique. Detailed frequency analysis was conducted to understand people's preference on laptop price range and how much they are ready to spend. Finally different brand were compared to know which company is fulfilling the consumer's desire in better way.

Respondent Characteristics: A Sample size of 170 students were taken, out of them 59% (100 students) were Engineering students and 41% (70 students) were management students from different colleges of Ghaziabad city in year 2011. This sample consist of 56% (95 students) male and 44% (75 students) female. Out of total 170, 46% (78 students) were from rural areas and 54 % (92 students) were from urban areas. Also 58% (98 students) were having a laptop and 42% (72 students) were not.

Table 9.1: Performance of various laptop brands

Streams of Students	Laptop brands									
	Acer	Apple	Dell	HCL	Toshiba	Lenovo	Samsung	HP	Others	Total

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Engineering Students	8	0	30	14	13	4	3	16	12	100
Management Students	4	0	26	16	7	1	1	10	5	70
Total	12	0	56	30	20	5	4	26	17	170

Table reveals that Dell was most preferable/ desirable brand among Management & Engineering students than HCL and others brands. Apple is good brand but due to high price, it was not preferable among students. 11% students voted for Toshiba because they got laptop from their college.

Table 9.2: Use of laptop in study

Stream of Students	Do you think that laptop is useful in your study?					
	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total
Engineering Students	57	24	11	6	2	100
Management Students	35	22	9	4	0	70
Total	92	46	20	10	2	170

We can see that most of the students (81%) were agreeing towards the fact that laptop is helpful in their studies, in which approx 54% students were strongly agreed and approx 7% students felt that laptop is not useful for their studies.

Table 9.3: Influence of Price to prefer Laptop brand

Stream of Students	Price impact on Purchase					
	Always	Often	Occasionally	Rarely	Never	Total
Engineering Students	59	19	12	7	3	100
Management Students	41	8	20	0	1	70
Total	100	27	32	7	4	170

Out of 170 respondents, approx. 60% students agrees that price of laptop is the most influencing factor that influence the purchase decision and to shift to other brand which had almost desired features. Approx. 6% students reveals that their purchase decision doesn't influenced by price.

FINDINGS:

The findings of the study were as follows:

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1. The study reveals that 33% students thinks dell is satisfying consumer desires in a better way, 18% students thinks HCL, 15% says HP, 12% prefers Toshiba and rest 22% favoring other brands.

2. This study highlight that out of total 170 students, 54% strongly agree, 27% agree, 12% not sure, and rest 7% were shared by disagree & strongly disagree towards the laptop use in their study. It means most of the students were agreeing towards the fact that laptop is helpful in their studies.

3. Factors like Price, Friends/ Family member, Brand image, Features and Technology, After sale service, Availability in your area, Availability of service centre in your area always effect the purchase decision and the factor like Advertisement (TV, News paper), Financial schemes (installment payment etc.), Discount/gift/lucky draw etc, Brand Ambassador (Sportsman, film stars, etc), often effect the purchase decision.

   The following table showing the impact of factors on purchase decision in percentage form as chosen by the students:

Factors	Always	Often	Occasionally	Rarely	Never
Price	59%	16%	19%	4%	2%
Advertisement	29%	36%	19%	11%	5%
Financial Scheme (Installment/ Discount)	20%	23%	21%	19%	17%
Brand Ambassador	20%	28%	18%	17%	15%
Brand Image	57%	21%	11%	6%	5%
Features & Technology	87%	9%	1%	1%	2%
After Sale Service	56%	23%	13%	6%	2%
Availability of Brand in your area	49%	29%	14%	5%	3%
Availability of Service Centre in your area	56%	15%	23%	16%	14%

Price: it is clear that approx 75% students agrees that price influenced the purchase. A minority of 6% students voted that price has no significance.

Advertisement: 36% respondents said that advertisement is often influence the purchase decision. And 15% said that advertisement has no any significance.

Financial Scheme: 43% students said that financial schemes like discount/ installment payment play significant role in purchasing decision.

Brand Ambassador: Out of 170 students, role of brand ambassador didn't influenced the purchasing decisions as such.

Brand image: 57% students believes that brand image plays a significant role while selecting laptop whereas approx 11% students said that brand image didn't influence decision.

Features & Technology: Out of 170 respondents, approx 87% respondents believes that features & technology is major influencing factors.

After Sale Service & Availability of Service Centre: It is very influencing factor because electronic items needs after sale services and approx 80% students believes that if there is no any service centre in nearby areas then their brand preference was shifted to those brand who has service centre in approachable distance.

Availability of Brand: 49% students believes that their purchase decision was influenced by the availability of the brand in area whereas approx 8% students believes that availability in area doesn't influence the purchase decision.

SUGGESTIONS:

Students faced various problems while using laptop like Internet Speed, Battery Backup, window installation, Software, Volume Scaling, Virus, costly and it get hot in very short time etc. Students recommended various features to improve laptop quality like water proof, Laptop having Insurance coverage, Inbuilt Graphic Card, Good Looks, Long Battery Life, Use of renewal solar energy to increase battery life, Fully secured system from VIRUS and hacking anti threats, Software compatibility according to invention of a new processor, Small size, Improve Sound System, Connectivity and security system, Make it more portable, Light Weight, More Plugs better Wi-Fi, Stylish and stronger body etc.

There is a another recommendation regarding the introduction of voice adaptability feature in laptops, so that we can enter input without the use of Keyboard and Mouse.

One of the suggestion is regarding the shape of Laptop. As per the suggestion Laptop shape should like a paper (Foldable, Thin, Light).Another suggestion is towards making it more portable with a wide screen and improve the processor speed. Also, Software compatibility should be provided within one genuine pack with good operating system and increased RAM size.

CONCLUSION:

The entire study shows that Laptop usage is very much popular in between the students whether their residential status is urban and rural. It's the present day demand to run hand with the latest technology. This technology not only simplify students task but it also seem to morale boost up of the students. Students found themselves connected with the entire world with the help of Laptops and by mean of this they can contribute a lot for the nation.

SCOPE FOR FURTHER RESEARCH:

Due to various limitations like limited sample size, time shortage etc. the study being carried out only in Ghaziabad city. Also it focuses upon only Engineering and Management students. Further research can be carried out at large scale to know about different streams student perception level across the geographical boundaries.

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