



CONSUMER PERCEPTION TOWARDS PURCHASE OF LAPTOPS

Dr.ManvinderTandon*ShivaniMalhan**

***MBA, Ph.D, Professor/Director, Department Of Management, RIMT University,
MandiGobindgarh, Punjab.**

Contact Details: 9781298406, mandytandon@yahoo.com

**** MBA, Assistant Professor, DAV University, Jalandhar, Punjab.**

Abstract

India is the fifth largest economy in the world and has the second largest GDP among emerging economies. Owing to its large population, the potential consumer demand is almost unlimited and consequently under appropriate conditions, strong growth performance can be expected. In fact, the liberalization of the economy in 1991 has led to rapid growth. The electronics industry, in particular, is emerging as one of the most important industry in the Indian market. Today, laptop industry is booming in India and this has attracted major players. The objective of the study is to study the customer perception towards purchasing of laptop and to determine the various factors that influence to selecting a laptop. The data was collected from 150 respondents from Jalandhar city. The laptop features, style of laptop, technology, after sale services, were considered important factors while purchasing the laptop but features of laptops were considered the most important factor. Moreover, Age is a determining factor for assessing the consumer perception towards purchase of laptops. It has been found that there is a significant relationship between Education and selection of features by the customer while purchasing the laptop.



INTRODUCTION

India is the fifth largest economy in the world and has the second largest GDP among emerging economies. Owing to its large population, the potential consumer demand is almost unlimited and consequently under appropriate conditions, strong growth performance can be expected. In fact, the liberalization of the economy in 1991 has led to rapid growth. The electronics industry, in particular, is emerging as one of the most important industry in the Indian market.

Laptop Industry

A laptop computer, usually called a notebook computer by manufacturers, is a battery- or AC-powered personal computer generally smaller than a briefcase that can easily be transported and conveniently used in temporary spaces such as on airplanes, in libraries, temporary offices, and at meetings i.e. it is a personal computer for mobile use. A laptop has most of the same components as a desktop computer, including a display, a keyboard, a pointing device such as a touchpad (also known as a track pad) and/or a pointing stick, and speakers into a single unit. Today, laptop industry is booming in India and this has attracted major players. Laptop sales in India have risen drastically due to a bunch of laptop brands available in the market with different attractive features, lower price, better quality, enhanced performance and improved after sale services options to the consumers. 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 come into existence. Also, the consumer desires and expectations are moving on. Laptop industry is booming in India and this has attracted major players. Laptop computers cannot completely wipe out desktop computers, because both are designed to meet different needs or different consumer segments. Today India is a young nation compared to other foreign countries like USA, Japan, and UK. More than 50% of the Indian population is in the 5-25 years of age group, who contribute to the major changes in the Economy of India. People in this age group, unlike their parents are found more techno like working with mobile and laptops and wireless technology. 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

- Acer-Gateway/eMachines /Packard Bell Travel Mate, Extensa, Ferrari and Aspire; Chrome book
- Apple- MacBook, MacBook Air and MacBook Pro
- Dell –Alienware, Inspiron, Latitude, Precision, Studio, Vostro and XPS
- Toshiba-Dynabook, Portege,Tecra , Satellite, Libretto
- Sony -Sony Vaio
- Lenova- IdeaPad, Thinkpad and the Essential B and G Series
- Samsung SENS- N, P, Q, R and X Series
- Hewlett-Packard / Compaq,HP –Pavilion, HP Envy, HP ProBook, HP,EliteBook,CompaqPresario
- HCL (INDIA)- Me Laptop, Me Netbook, Laptop and Mi leap
- Panasonic-Toughbook, Satellite, Let's Note (Japan only)
- LG –Xnote
- Asus- Asus EEE, Lamborghini, Asus G Series(ROG)



CONSUMER PERCEPTION

Consumer perception refers to the process by which a customer selects, organizes, and interprets information/stimuli inputs to create a meaningful picture of the brand or the product. It is a three stage process that translates raw stimuli into meaningful information.

- Select
- Organize
- Interpret

Each individual interprets the meaning of stimulus in a manner consistent with his/her own unique biases, needs and expectations. When it comes to influencing consumers to purchase a product, their perception of the brand must be taken into account. This perception may vary based on the customer or a certain demographic of customer. Customer perception can be developed from a variety of factors, such as their own personal experience or how they have heard other people experienced the product. The Internet has transformed how people experience brands and builds their perceptions. Social media and review websites provide access to reviews and details that help customers form their own perceptions about brands and their products.

LITERATURE REVIEW

Thanaphat Huansuriya (2003) in this, "study about the factor determining choice of buying computer" found that the result have drawn from the data obtained by questionnaires distribute to 359 computer buyers and 120 computer distributor in Bangkok& the finding indicates that the major factor stipulating consumes choose between personal or notebook computer are gender, term of payment, price of the computer, income. This study clearly indicates that there are different group on computer buyer in the market so it thus implies that producer should clearly separate their target group in order to maximize their operation effectiveness. Narongchai Sutheeprasert (2005) in this, "studyabout purchasing behaviour of personal computer of university student in Bangkok". It found that the student personal computer usage behaviour totally where at internal shop, university and residence with the purpose of doing the report, for entertainment and internet. The majority of sample had experienced in operating computer and realized about the value and benefit of using the computer. The student behaviour in purchasing of personal computer totally were domestic assembled and foreign brand computer and the factor affecting purchase decision on personal computer were the quality after sales service and warranty. Nasir and yoruker (2006) has found that there are seven factors which influence consumers' laptop purchase decisions. These factors can be stated as follows: core technical features, post purchase services, price and payment conditions, peripheral specifications, physical appearance, value added features, and connectivity and mobility. On the other hand, stayers, satisfied switchers and dissatisfied switchers demonstrate a significant difference only in one factor: price and payment conditions. The results show that when compared to stayers and satisfied switchers, dissatisfied switchers give less importance to price and payment conditions related factor. YateeshHoblidar, et al (2009)in their study titled "Studying the consumer buying behaviour while buying a laptop" found that there is no significant relationship between laptop choice and the gender of the buyer. Educational qualification and annual family income have a significant impact on the choice of laptop brand. Solayappan & jay Krishnan, (2010) in this study, Customer Preference for Branded Computers with Special Reference to Post Graduate Students in Chennai". The branded computers play a prestigious role in the students segment. Due to the computer world everything is in the hands of the students. Nowadays students are ready to shape up the sharpest future of the competitive world by means of computers. Everything in the world



seems to be digital. The future growth of the country will be decided by the students themselves.. Especially, branded computers will try to safeguard the competitive race. So, these various factors discussed may definitely determine the student to purchase branded computers. Arasu (2010) in this, "Study the research on laptop buying behaviour of students in Symbiosis Info Tech Campus (SIC)" revealed that gender of the respondent, style, resale value, multimedia features, weight of the laptop are the factors which affect the buying behaviour. To an extent value for money also plays a role in determining the choice. Most of the respondents preferred Dell laptops. RanjithP.V etal(2011)in their article, "A study on consumer perception- A case study for Laptops" stated that in spite of various brands in the market, Dell is the most popular brand of laptop and actually purchased by the consumers. The majority of respondents reported that they bought their laptop based on its features and referred their brands to others also. Education and browsing were found to be the most important uses of laptops. Sudhakar (2011), " Study the opinion of students regarding laptops perception. All companies' features are not satisfying the students needs like weight and quality of adapter, advanced features are lagging etc., and innovative measures has to be taken to reduce the heat of the laptop and battery backup has to be improved. SharmaPinki(2012) conducted research on,"Brand choice of Laptop by Management and Engineering students" to determine the laptop usage and to identify & evaluate the factors impact on laptop purchase decision of the students. A total of 150 students were included in the survey. Data were analysed by using chi-square test and in the 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. Kanwar (2012)in this, "Study the Consumer Behaviour while purchasing laptop in Chandigarh and Mohali" with the objective to study the consumer behaviour while purchasing laptop. A total of 100 respondents were included in the survey. Data were analysed with the help of Mean and Standard Deviation. Result revealed that there are seven factors which influence consumer's laptop purchase decisions. These factors are core technical features, post purchase services, price & payment conditions, peripheral specifications, physical appearance; value added features and connectivity & mobility. Mohan (2013) in his study on, "A study on Laptop brand preference in b- schools" .The research instrument used was a questionnaire which was designed to capture the main factors influencing laptop purchase. The respondents where 193 students randomly chosen from different B-schools. It is defined as in this study the two main factors have been identified, namely first factor is efficiency and performance; second factor is model portability. These two factors define the seven features of laptop identified in this research. Laptop brands can plan marketing strategies and promotional activities focussed on these seven features and the two factors to attract customers to their brand.H.S Adithya (2013) in his study, "To study the consumer buying behaviour towards laptop in banglore city" .It conducted a survey of 200 respondents in Bangalore City to know the consumer buying behaviour towards laptop and to determine various factors that influence in selecting laptop. Data were collected from respondents through structured questionnaire. The finding extracted from analysis showed that there are 8 factors that helps students to make decision regarding purchase like Hardware, Design, Offer, Brand, Original Software, components, Advertisements and innovation. In addition, DELL is the popular brand among the consumers.Tripathi Shashank (2013) in his study, "A study of student's buying behaviour towards laptops" highlighted that the consumer decision-making process and buying behaviour are influenced by internal –as well as external factors. The internal factors consist of factors such as needs and motivation. External factors consist of culture, social class and family /household and reference groups. One of the important external factors is groups, friends & family. The majority of students like to shop with shopping companions. Their first choice is friends, followed by family members. The majority of student's decision-making style is quality consciousness, followed by price



sensitiveness and service orientation. Gera Sucheta (2014) in his study, "A consumer attitude and purchase behaviour towards foreign brands". In this study consumer attitude and purchasing behaviour of different consumer regarding television, wrist watch, refrigerator, Car, washing machine. Consumers may prefer foreign brands because of association of higher prestige. In general foreign brands have high prestige because of their relative scarcity and higher price compared to local brands. In this study consumers have shown positive opinion towards foreign made product. Kumar Sunil (2015) in his study, "A study of consumer buying behaviour and perception towards laptop in Orissa". In this study customers are interested on service and feature are the most important dimension to purchase a laptop

OBJECTIVES OF THE STUDY

- To study the customer perception towards purchasing of laptop.
- To determine the various factors that influence to selecting a laptop.
- To study the demographic variables of customer who are purchasing a laptop.

RESEARCH METHODOLOGY

Primary data was collected through a structured questionnaire. In this study the target sample size was 150 respondents from Jalandhar City. The questionnaire contained multiple choice questions as well as it also consists of various parameters that were identified for analysing the customer perception towards laptop. This study is descriptive in nature. The quantitative technique will be used to collect the data by conducting the survey with the help of structured questionnaire. The research design is Descriptive studies. Descriptive studies are well structured, they tend to be rigid and its approach cannot be changed every now and then. The objective of this kind of study is to answer the why, who, what, when and how of the subject under consideration. I have taken descriptive because my research includes the knowing the perception of customer towards purchase of Laptop. I have analysed how people of various age groups respond towards laptop or their perception towards laptop. The questionnaire for the present study was designed based on the objectives of the study. Five point Likert scale is used for this study. Questionnaire was divided in two sections. Part-A consisting questions relating to personal profile of the respondents and Part- B consisting factors which are most preferred by the customers while purchasing a laptop. We have used multi stage sampling in which we have used random sampling and multi stage sampling and using random no table. In this we first select any random number from random no table then we can move towards right left upward and forward selecting the last two digit of the number. We identify all the market of Jalandhar which had laptop shops. We identify 17 markets using random no table



Selecting the markets and shops for survey

Sr.no	Markets	Shops
1	Model town	Gtcomputer, SMdot, SatyaSai, Computercampus, Touch Automotive, Tatacroma
2	LajpatNagar	Computer solution,futurecomp,Reliancedigital,Superdot,Pcworld,Logic computer
3	Milapchowk	Computer arcade,Ashirwad ,Thukral ,Divine,Raunak ,Digital
4	Chitti tower market	Computer mass, key point
5	Gurmeet building	Dell exclusive store,
6	BMC Chowk	Spdot,HP computer world
7	Garha road	Impel, friends,impel Infosys. laptop world, Logic computer,kc international
8	Luxmipura market	Ambika,Indian computer
9	MBD market	Hp, New computer Infotech
10	Parwana market	Computer solution,IMB solution
11	Udham Singh nagar market	Sonly world,unified,computer concept
12	Urban estate market	Affinstechnosoft,Giptech
13	Railway road market	Shambucomputer,IMBcomp,Astha
14	Phagwara gate market	Nexus, Base printer kumar, Axus
15	Mai Hira gate market	Universals ,Asthma
16	Ladowali road market	Apple world, New rays, new generation
17	Jawaharnagar market	Super Infotech, Hp world solution
18	Bus stand market	BBC, Hpworld, friends computer,kc international

We identify 17 markets using random number table and we reduced the markets to 5. We use random no table to reduce the shops corresponding to the market and finally we selected these shops.

Selecting the shops for survey

Sr. no	Markets	Shops
1	BMC Chowk	Sp dot computer ,Hp computer world
2	Parwana market	Computer solution, IDM solution pvt ltd
3	Phagwara gate market	Base printer kumar, Nexus
4	Mai hira gate market	Universal, Astha computers
5	Jawaharnagar market	Super Infotech ,Hp world

Data analysis and interpretation

Data was analysed with the help of tools like factor analysis, one way Anova, and Descriptive statistics.

Data Analysis & Interpretation

This form of analysis is just one of the many steps that must be completed when conducting a research experiment. Data from various sources is gathered, reviewed, and then analyzed to form some sort of finding or conclusion. Researcher has applied factor analysis to find out the factor that effect the perception of customer before the actual purchase of laptop.

Descriptive statistics

Q1.Gender

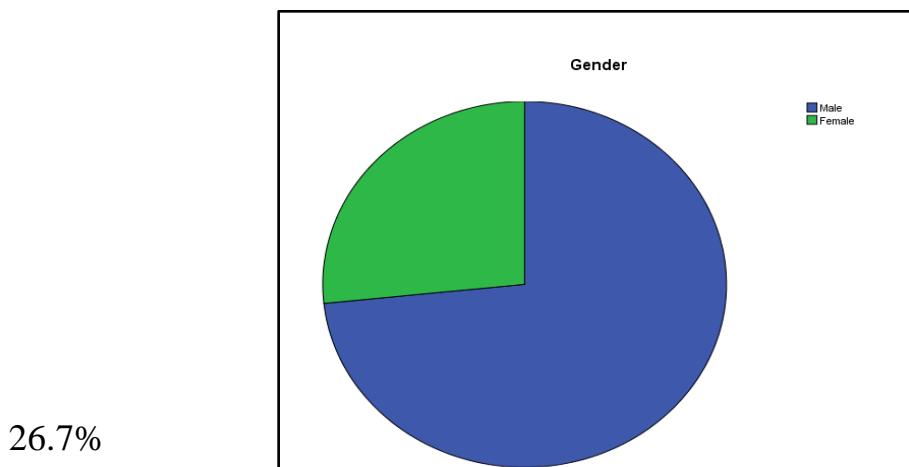


Fig no.1

- As per the graph above,
73.3% of the population are males and 26.7% are females

Q2.Age

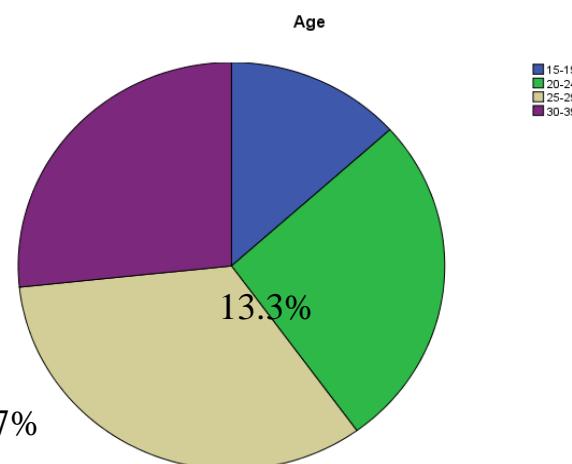


Fig no.2

- As per the graph above, 13.3% of population fall in 15-19 age group 26.7% population falling in 20-24 age group and 33.3% population falling in 25-29 age group and 26.7% population falling in 30-39 age group.

Q3.Income

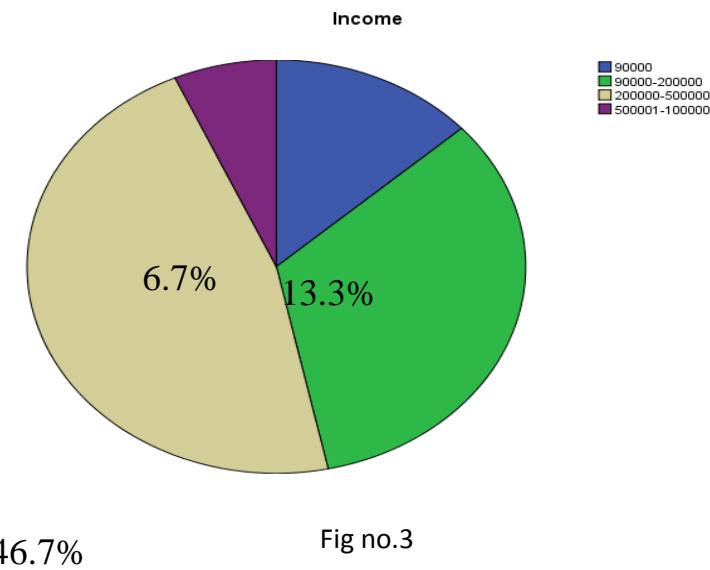
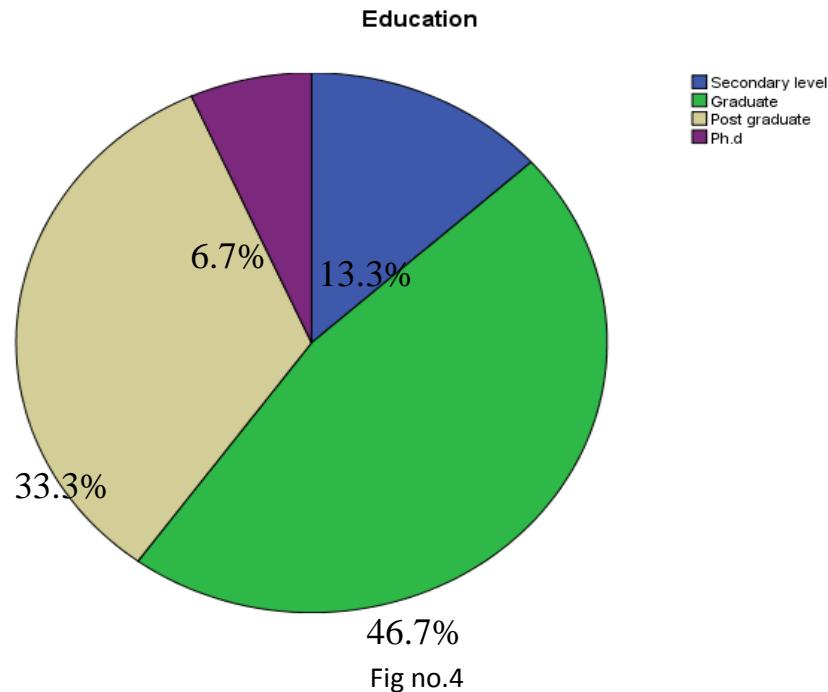


Fig no.3

As per the graph above 13.3% of people have fall in 90000 income and 33.3% of people have falling in 90000-200000 income and 46.7% of people have falling in 200000-500000 income and 6.7% of people have fall in 500001-100000 income.

Q4.Education

- As per the graph below, 13.3% are the secondary level and 46.7% are the graduate and 33.3% are the post graduate and 6.7 are the Ph. d.



Factor Analysis

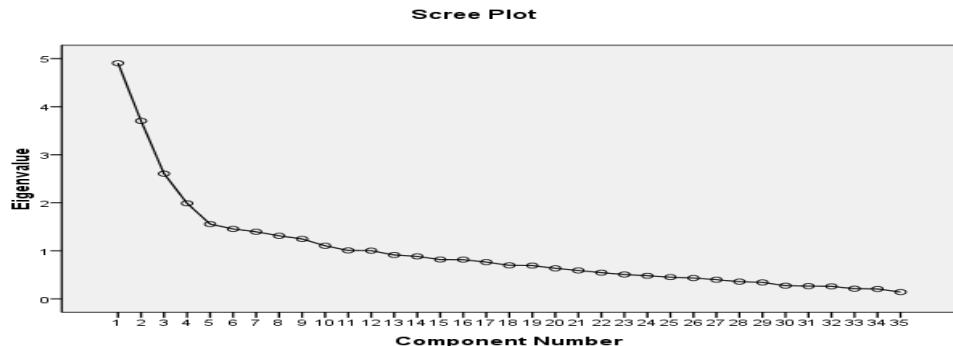
Factor analysis is a general name denoting a class of procedures primarily used for data reduction and summarization. In marketing research, there may be a large number of variables, most of which are correlated and which must be reduced to manageable level.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.638
Bartlett's Test of Sphericity	Approx. Chi-Square	1.6323
	Df	595
	Sig.	.000

The value of the KMO statistic is 0.638 which is greater than the required value of 0.5.

Bartlett's test of sphericity: the null hypothesis that the population correlation matrix is an identity matrix is rejected by Bartlett's test of sphericity. The approximate chi square statistic is 1.6323 with 595 degrees of freedom which is significant at 0.05 levels.



The factor having the Eigen more than 1 that factor is considered.

Determination of number of factors: 12 factors have been predefined for the purpose of the analysis as can be seen in the table.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.906	14.017	14.017	4.906	14.017	14.017	2.935	8.387	8.387
2	3.704	10.583	24.599	3.704	10.583	24.599	2.906	8.303	16.690
3	2.605	7.443	32.042	2.605	7.443	32.042	2.225	6.357	23.047
4	1.989	5.682	37.724	1.989	5.682	37.724	2.112	6.034	29.081
5	1.557	4.447	42.171	1.557	4.447	42.171	1.863	5.324	34.404
6	1.455	4.157	46.329	1.455	4.157	46.329	1.836	5.247	39.651
7	1.397	3.991	50.320	1.397	3.991	50.320	1.757	5.020	44.671
8	1.313	3.751	54.071	1.313	3.751	54.071	1.643	4.695	49.367
9	1.248	3.564	57.635	1.248	3.564	57.635	1.628	4.652	54.018
10	1.105	3.157	60.792	1.105	3.157	60.792	1.520	4.344	58.362
11	1.009	2.882	63.674	1.009	2.882	63.674	1.481	4.233	62.595
12	1.004	2.869	66.543	1.004	2.869	66.543	1.382	3.948	66.543
13	.914	2.611	69.154						
14	.885	2.528	71.682						
15	.819	2.339	74.022						
16	.817	2.333	76.355						
17	.766	2.188	78.543						
18	.699	1.996	80.539						

19	.694	1.982	82.521					
20	.636	1.818	84.339					
21	.592	1.691	86.031					
22	.547	1.562	87.592					
23	.508	1.452	89.044					
24	.481	1.375	90.419					
25	.453	1.293	91.712					
26	.434	1.241	92.953					
27	.400	1.142	94.095					
28	.359	1.026	95.121					
29	.343	.980	96.101					
30	.275	.786	96.887					
31	.267	.762	97.649					
32	.261	.746	98.394					
33	.213	.608	99.002					
34	.207	.592	99.594					
35	.142	.406	100.000					

Extraction Method: Principal Component Analysis.

As can be seen from the table, All 12 factors explain 66.54% of variance with the 1st factor explaining the maximum variance of 14.01%.

FINDINGS

Following results are obtained by using factor analysis:

- The factors explain 66.54% of total variance cumulatively.

The three conditions for selection of factors are:

- Factor loading of each variable on a given factor must be greater than 0.5
- There should be a difference of at least 0.2 in loadings of variables onto the factors.
- There should be at least 3 items per factor.

Based on these criteria, the some statements can be reduced under each factor.

- Features:**the results in the rotated component matrix show that all 4 statements have significantly high factor loadings on this factor and satisfy all 3 criteria for loading. Therefore, no items have been deleted from further analysis.
- Technology:**the results in the rotated component matrix show that all 3 statements have significantly high factor loadings on this factor and satisfy all 3 criteria for loading. Therefore, no items have been deleted from further analysis.
- Style and foreign brand name:** the results in the rotated component matrix show that all 4 statements have significantly high factor loadings on this factor and satisfy all 3 criteria for loading. Therefore, no items have been deleted from further analysis.

Sr. no	Factors	No of items
1	Features	4
2	Technology	3
3	Style foreign brand name	3

Ranking factor of customer perception

The following table shows the influence of customer perception factors on purchase decisions of laptop in Jalandhar city.

Sr. no	Factors	Ranking
1	Features	1
2	Technology	2
3	Style & foreign brand name	3

According to the factor analysis, features is the most important factor. The second most important factor is technology and the third most important is the style and foreign brand name.

- Here, in this study the respondents are the customer. The respondents are 150 in which 73.3% are male and 26.7% are females. Most of the respondents fall in the 25-29 age category which is 33.3% and rest from 15-19 & 25 above are having just 26.7%.
- In this study 13.3% of people have fall in 90000 income and 33.3% of people have falling in 90000-200000 income and 46.7% of people have falling in 200000-500000 income and 6.7% of people have fall in 500001-100000 income. So most of the customers in the study were from the income group were 200000-500000.
- In this study 13.3% are the secondary level and 46.7% are the graduate and 33.3% are the post graduate and 6.7 are the Ph.D. So most of the customer who are possessing are graduates.
- Majority of the respondents (33.3%) possessing laptops were less than 30 years.
- The majority of the customer preferred to purchase a brand of laptop which have better features and with new technology. So the Customer search for information to obtain a better features and when they plan to buy expensive products.
- The laptop features, style of laptop ,technology, after sale services, were considered important factor while purchasing the laptops but comparatively features of laptops were considered the most important when customer purchasing a laptop.
- Age is a determining factor for assessing the consumer perception towards purchase of laptops.
- There is significant relationship between income group and selection of features by the customer while purchasing the laptop.
- There is significant relationship between Education and selection of features by the customer while purchasing the laptop.



- There is significant relation between Age and preference of stylish laptop, and laptop of foreign brand selected by the customer while purchasing a laptop.

MANAGERIAL IMPLICATIONS

- In order to improve the market share, companies should provide better featured laptops and, In order to retain the market share and improve the market share, marketers should also find out their loopholes, especially they should work on quality aspect and services aspect on their branding. The marketers should also plan and make strategies in order to tap the consumers from all segments.
- This type of research can help the organization to know what customer want and by looking at the customer needs company can proceed further.
- As customer are more educated now a days so the technology that must be used should be up to date.
- As now a day's customer focuses on the aesthetic of the laptop before buying so the company should focus on design and the flexibility of the laptop.
- In the highly competitive laptop market, they should work to have better perception in minds of customers about the quality by giving better features & provide better technology as well as good service. They should also work to keep their loyalty and gain their repeat business.
- In this research, it has been found that the features of laptop, technology, style & foreign brand name, all these factors influence consumers' laptop purchase decisions. In order to improve the market share, and companies should provide better featured laptops and stylish laptop & should work on new technology. This study recommends companies to invest in technology through R&D and create differentiation at utmost level.

LIMITATIONS

Our study is limited to many factors. Limitations of study are given below:

- Firstly, the main limitation of the research is generated from the small size of the Sample. Under time and cost constraints, the study was performed only with a Small portion of the population for the whole population. This may influence the Generalizability of the samples and may get the incorrect results.
- Secondly, the selection of the survey location has limitation. Only Jalandhar city is selected for conducting the survey. Therefore, the result would be representative of the users of the specific area rather than of the target population as a whole because Different cities may reflect different consumer behaviour.
- Finally, as the survey was conducted in a laptop market and the respondents were Random selected, thus, the respondents might, intentionally or unintentionally provide Inaccurate answers to the questions. Thus the findings may not be accurate.
- Few customers are hesitate to deliver some information due to the time wasted in the providing the same.



CONCLUSION

Customer behaviour study is based on consumer buying behaviour, with the customer playing the three distinct roles of user, payer and buyer. Consumer buying behaviour has become an integral part of strategic market planning. Apart from this point the customer also specifies other dimensions are DVD drive, and trend, design, weight, size. In this research, it has been found that the features of laptop, technology, style & foreign brand name, all these factors influence consumers' laptop purchase decisions. In order to improve the market share, and companies should provide better featured laptops and stylish laptop & should work on new technology. This study recommends companies to invest in technology through R&D and create differentiation at utmost level. This research has been limited to laptop and the factors influencing customers' purchase decisions in this market.

BIBLIOGRAPHY

<http://www.ibef.org/industry/electronics-presentationjan> 2.23pm

http://www.calce.umd.edu/general/AsianElectronics/pref_ind.html 15 8.50

<http://www.aims-international.org/aims10/AIMS10Proceedings/PDF/P701-done.pdf>

http://raijmr.com/wp-content/uploads/2013/03/2_10-15-Dr.-Nilesh-B.-Gajjar.ISSN2320-771x oct 22 7.50

Arasu K.N.T (2010) Research on laptop buying behaviour on student in sic *Golden Research Thought of journal* ISSN No.2231-5063

Brahmbhatt A.C,(2015)"Pariphex mapping of consumer perception of laptop. *Indian journal of research*.ISSN2250-1991 Volume: 4 9 Sept 2015

Brosekhan, A; Velayutham, M. (2015).An Empirical Study on Consumers Buying Behaviour towards Selected Home Appliance Products in Ramanathapuram.IOSR Journal of Business and Management. Vol. 4, pp.13-24

Dhal, S. K. (2015). A Study of Consumer Buying Behaviour and Perception towards Laptops in Orissa.*Growth*, 2, 2012.

Gera, S. (2014).Consumer attitude and purchase behaviour towards foreign brands.*International Journal of Research in Finance and Marketing*, 4(1), 74-87.

Nadia Nisar, (2014) "A study into purchasing decision of laptops owing to shift to consumer attitude from perception to specification in reference with apple computer. *Abhinav publication journal*.Volume:3 ISSUE 11, 2014.

Percival, J., & Percival, N. (2009). A case of a laptop learning campus: how do technology choices affect perceptions? *Research in Learning Technology*, 17(3).



Ranjith, P. V., &Goyal, E. (2011).A study on consumer perception-a case study for Laptops.*Indian Journal of Marketing*, 41(6), 42-54.

Reeta&Asha (2014) "A mapping of consumer perception of laptop.*International journal of advanced research in management and social science*. ISSN 2278-6236

S.pandisiva (2014) "A study on factor influencing on buyer behaviour towards laptop in dindigul district. *Golden research thought*.Volume:4, Issue4, Oct 2014.

ShashankTripathi, (2013) "A study on Student's Buying Behaviour towards laptops with special reference to HP & dell in Gandhi nagar.Volume: 3 No 7 July2014.