A BRAND PREFERENCE OF LAPTOP COMPUTER IN KALAYARKOIL TOWN

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Abstract

Computer is an amazing machine. People are living in the computer age today and most of our day to day activities cannot be accomplished without using computers. Sometimes knowingly or unknowingly we use computers, people to withdraw money from ATM, publish a newsletter, drive a motorbike, design a building or new dress, or to purchase some grocery things or tyres for our car all involve computer in one way or the other. When people are breathing in the computer age and gradually computer has become such a dire necessity of life that it is difficult to imagine life without it. Computer is affecting every sphere of our life. It affected government, business, education, legal practice, entertainment, defense or home – computer has become an indispensable and multipurpose tool. Supercomputers can forecast weather, embedded computers make smart devices like washing machine that beep when washing is completed or the automobiles that give you warning before breaking down.

Keywords: home – computer, Supercomputers, Dyna book, The IBM SCAMP project, PALM processor, CPU machines, SCAM prototype

Definition – Precisely, "Computer is an electronic device for performing arithmetic and logical operations", or "computer is a device or flexible machine to process data and convert it into information".

History of Laptops

As the personal computer became feasible in the early 1970s, the idea of a portable personal computer followed. A "personal, portable information manipulator" was imagined by Alan Kay at Xerox PARC in 1968 and described in his 1972 paper as the "Dyna book".

The IBM SCAMP project (Special computer APL machine portable),was demonstrated in 1973. This prototype was based on the PALM processor (Put All Logic In Microcode). The IBM 5100, the first commercially available portable computer, appeared in september 1975, and was based on the SCAM prototype.

As 8-bit CPU machines became widely accepted, the number of portable increased rapidly. The Osborne 1, released in 1981, used the zilogZ80 and weight 23.5 pounds (10.7 kg). it had no battery, a 5" CRT screen and dual 5¼" single-density floppy drives. In the same year the first laptop-sized portable computer, the Epson HX-20, was announced. The Epson had a LCD screen, a rechargeable battery and a calculator-size printer in a 1.6 kg (3.5 lb) chassis. Both tandy /radio shack and HP also produced portable Computers of varying designs during this period.

The first laptop using the flip form factor appeared in 1982. The $8150 Grid compass 1100 was used at NASA and by the military among Others. The gavilan SC, released in 1983 onwards, several new input techniques Were developed and included in laptops, including the touchpad (Gavilan SC 1983), the pointing stick (IBM ThinkPad 700, 1992) and handwriting recognition (Linus Write – Top, 1987). Some CPUs were designed specifically for low power use including laptops (Intel i386SL, 1990), and were supported by dynamic power management features (Intel SpeedStep and AMD Power Now!) in some designs. Displays reached VGA resolution by 1988 (Compaq SLT/286) and 256-color screens by 1993 (PowerBook 165c), progressing quickly to millions of colors and high resolutions. High – capacity hard drivers and optical storage (CD – ROM followed CD – R and CD – RW and eventually by DVD – ROM and the writable varities) became available in laptops soon after their introduction to the desktops.

The first Laptop Maybe Designed in 1979 by a Briton, William Moggridge, for Grid Systems Corporation, the Grid Compass was one fifth the weight of any model equivalent in performance and was used by NASA on the space shuttle program in the early 1980's. a 340k byte bubble memory lap-top computer with die-cast magnesium case and folding electroluminescent graphics display screen.

Manny Fernandez had the idea for a well- designed laptop for executive who were starting to use computer. Fernandez, who started Gavilan computer, promoted his machines as the first "laptop" computers in May 1983. Many historians consider the Gavilan as the first fully functional laptop computer.

Need for Computer Literacy

Computers have shaken up the world. They have made us dependent upon them. People expect them to be present at every place: the reservation counter, the microwave cooking or even driving a car. Now that computers have moved in our society so rapidly, one needs, at least the basic computer skills to pursue one's career goals and function effectively and efficiently, experts say that computer literacy is the need of today and voice of tomorrow to survive in the fast changing world of computers. For most of the people computer literacy is restricted to using the keyboard for typing a document or making use of it for the calculations.

Laptop Computers

They were the first portable computer and weighed about 28 pounds. Infact they were called "lug gables" initially. As the size reduce the term also changed to "laptop". They weigh about 10 to 12 pounds. The name was probably given because they are used by keeping it on the laps while users are on more.

Notebook Computers

As the name suggests, their size is about 8.5 by 11 inch and can easily fit inside a briefcase. They were initially called laptops only but gradually as the size decreased smaller ones were called notebooks. They can be operated on batteries also. They are fully functional microcomputers. They can have input devices Hard Disk Drivers, Floppy Disk Drivers, a CD-ROM, a Modem and an in built Mouse.

Tasks associated with Computers: The Multipurpose tool

In the 1950's computers were special purpose machines that could cater to only government or huge industries due to their high cost. In 1964, IBM brought its system – 360 mainframe computer in to the market and sold about 33 thousand of these machines. After their grad success. IBM became a standard for computer manufactures. In early 1970's, DEC (Digital Equipment Corporation) took a step ahead by introducing its PDP-II and VAX computers.

Business

Today, computer has become such an integral part of lives. It has become such an important part of our business that it is difficult to think about without it.

Medicine and Health care

In the health care industry, computers are vary useful. They are used for diagnosing the illness of a patient, performing surgeries and even controlling the robots who work as assistants to the doctors.

Education

Computer has brought about a revaluation in the education industry too. They can be everywhere and anywhere. They are present in classrooms, libraries, laboratories and museums. Even a child of 3 years of age uses them.

Science

It would have been almost impossible to explore this world, specially the solar system, so intricately without the help to computers. It would have also been difficult to predict the natural calamities like earthquakes, hurricanes, volcanoes, and the like warm people beforehand so that safety measures could be taken well in time.

Engineering

One of the most extensive uses of computers is CAD. It helps the engineers tremendously in designing the aircrafts, missiles or even small airplanes. CAE is one step further. It helps designers to even specify the type of to be used in respective parts and to

estimate whether the part will be able to withstand the required stresses and temperatures. Major Laptop Brands

Acer	– Travel Mate, Extensa, Ferrari and Aspire
Apple	– MacBook, MacBook Air and MackBook pro
ASUS	– Asus Eee, Lamborghini
Dell	– Inspiron, Latitude, Percision, Studio, Vostro and XPS
Fujitsu	
Gateway	
HCL	
Hewlett	– Packard – HP Pavilion, Compaq Presario
Lenovo	– ThinkPad, IdeaPad, and 3000series
Panasonic	– Toughbook, Satilite, Let's Note(Japan only)
Samsung	– SENS: M, P, Q, R and X series
Sony	– VAIO: FJ series, UX,TZ,NR,SZ,CR,FZ, and AR series
Toshiba	– DynaBook, Equium, Portage, Tecra, Satellite, Qosmio, Libretto

Advantages to the Consumers

*   Generally branded goods are of good quality because bran owners try to maintain the quality in order to secure strong market position.
*   Branded goods are produced on mass scale and are readily available. Therefore, the customer need not face any hardship in purchasing the products.
*   Price in case of branded goods are uniform throughout the country. This avoids exploitation of the consumers in the hands of the retailer.

Objectives of the Study

*   To analyzes the brand preference of Education wise laptop users.
*   To analyzes the factor influencing the brand preference of laptop users.

Methodology

The present investigation has been basically designed as a 'Descriptive Study' with 'survey' as the technique of the research. A questionnaire was constructed and validated by the researcher for the collection of data.

Collection of Data

This study is based on both primary and secondary data. The required primary data were collected from the students and professionals by using the questionnaire constructed and validated from the published and unpublished records, books, journals, magazines, newspapers, websites and the like

Sampling Design

The researcher has followed the method of multi stage random sampling for collection data from students and professionals in Kalayarkovil Town. The study was conducted among 100 respondents comprising 50 students, among them are 25 male and 25 female and 50 professionals, among there are 25 male and 25 female.

Geographical coverage of the Study

The study has been confined to the Kalayarkovil Town. This Town is chosen the study as it has relevant and positive variables of the study. This Town is described as a metro city, which is known for its education centers and emerging business. There are colleges and schools in and around the Town. There are so many companies, in this Town who are having the maximum use of laptops. So the researcher wants to select this area.

Framework of Analysis

The data were collected, coded, tabulated and analyzed using statistical techniques. Data collected through questionnaire were presented in a master table. From the master table sub – table were prepared. The statistical techniques used in this study are percentage analysis, Garrett's ranking technique analysis, Chi-Square test analysis.

The formula for Chi-Square test is used to test the association between age, education, occupation and monthly income:

$$X^2 = \frac{\Sigma(O - E)^2}{E}$$

Where,

O – Observed Frequency

E – Expected Frequency

$$E = \frac{\text{Row total X Column total}}{\text{Grand total}}$$

Degrees of freedom = (r – 1) (c – 1)

Where,

r – Number of rows

c – Number of columns

Hypotheses

- There exists no relationship between the educational, qualification and the brand preference.

Level of Brand Preference Education – Wise Classification

The Chi-square test is used to know whether the educational qualification of the respondents has any influences on the brand preference of laptop users.

Table 1
Level of Brand Preference Education – Wise Classification

Sl. No	Education level	Level of Brand Preference			Percentage
		High	Medium	Low	
1	Graduate and post-graduate level	12	34	8	54
2	Professional and Any other specify	8	30	8	46
	Total	20	64	16	100

Source: primary data

Table 1 revealed that the out of 20 respondents with high level of brand preference, 12 respondents belong to graduate and post-graduate level and the remaining 8 respondents belong to professional level and any other specify education. out of 64 respondents with Medium level of brand preference, 34 respondents belong to graduate and post-graduate level and the remaining 30 respondents belong to professional level and any other specify education. out of 16 respondents with Low level of brand preference, 8 respondents belong to graduate and post-graduate level and the remaining 8 respondents belong to professional level and any other specify education.

Table 2
Results of Chi-Square Test

H_0 = There is no relationship between the education qualification of the respondents and brand preference.

H_A = There is relationship between the education qualification of the respondents and brand preference.

O	E	O-E	$(O-E)^2$	$(O-E)^2/E$
12	10.8	1.2	1.44	0.133
8	9.2	-1.2	1.44	0.156
34	34.56	-0.56	0.3136	0.009
30	29.44	0.56	0.3136	0.011
8	8.64	-0.64	0.4096	0.047
8	7.36	0.64	0.4096	0.055
Total				0.411

Inference

Since the calculated value (0.411) is less than the table value (5.99) at 5% level with 2 degrees of freedom, the null hypothesis is accepted. Hence it may be concluded that there is no significant between the educational qualification of the respondents and brand preference.

The following formula was used to find out Garrett's ranking:

$$\text{Percentage position} = \frac{100 \, (R_{ij} - 0.5)}{N_j}$$

Where,

R_{ij} – Ranking given for the ith variables by the jth respondents.

N_j – Number of variables ranked by the jth respondents.

Hypotheses

- There exists no relationship between the Purpose of Using Laptop and the brand preference.

Factor Influencing Purpose of Using Laptop

Laptop is used for the purpose of having business purpose, educational purpose, entertainment purpose to official purpose and all the above. The Garrett's ranking technique is applied to rank the purpose of using laptop of the respondents.

Table 3
Factors Influencing Purpose of Using Laptop

Rank	Number of Respondents					Total Respondents
Factors	I	II	III	IV	V	
Business purpose	38	18	19	16	9	100
Educational purpose	50	24	13	8	5	100
Entertainment purpose	11	12	19	20	38	100
Official purpose	31	21	16	15	17	100
All the above	36	23	18	14	9	100

Garrett's Ranking

The result obtained was compared with Garrett's ranking table and the scores are given (vide Appendix – B). The total scores of each item were added ranks were given according to its total value. The table 3 exhibits the Garrett's ranking of the purpose.

Table 4: Garrett's Ranking of the Purpose

Sl. No	Factors	Number of Respondents		
		Score	Average Score	Rank
1	Business purpose	5763	57.63	III
2	Educational purpose	6309	63.09	I
3	Entertainment purpose	4251	42.51	V
4	Official purpose	5431	54.31	VI
5	All the above	5788	57.88	II

Source: Primary data

According to the Garrett's ranking technique first rank is assigned to education purpose, second rank assigned to all the above, third rank is given to business purpose, fourth rank is given to official purpose and last rank is assigned to the factor for entertainment purpose.

Conclusion

Many respondents are aware of more popular brands of laptop in India, especially in Kalayarkovil Town of Tamilnadu. They feel that the brand name of laptop tells them something about the products its quality, its utility and its technology. The brand preference is influenced by age, educational, qualification, occupation, income, quality and price of the laptop. Thus the researcher has found out that the price of the laptop, quality and portability influence the brand preference of the users.

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