A STUDY ON CUSTOMER SATISFACTION LEVEL TOWARDS HP LAPTOPS

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ABSTRACT
Today technology has brought the world in own hands human being very much to the complicated work in to easier. Gradually the invention and discoveries are made from time to time has head us to a comfortable world. One such significant is the laptop. The objectives of the study are to know access the cost and performance of HP laptop and evaluate satisfaction level of the customer towards HP laptop. The sample size of the study was conducted in Coimbatore city with 115 respondents through random sampling method. The tools and techniques are used frequency distribution method. Majority of the members use the laptop for studies. Majority (45.45%) of respondents awareness are through friends & relatives. Majority (37.27%) of the respondents are aware of the hardware configuration in laptops.

KEYWORDS: HP Laptops, Customer Satisfaction.

OBJECTIVES OF THE STUDY
- To analysis the level of satisfaction towards HP laptop spares.
- To analysis the problems of the laptop users.

RESEARCH METHODOLOGY
Research methodology is a way to systematically solve the research problem a research design is purely and frame work or plan to study the system that guides the collection and analysis of data.

Data collection
There are two types of data
- Primary data
- Secondary data

Primary data
The study mainly uses primary data collection through a specifically designed questionnaire these questionnaire are given to the customer to collect data from them.

Secondary data
Were collected from customer report manuals journals magazines websites etc., These data are help full in describing about details like its nature profit of the product etc..

Sampling size
Out of the entries population 110 respondents were chosen as the samples.

Sample design
The type of the study for this project is descriptive research includes survey and fact finding enquiries of different kids the major purpose of descriptive research is description of the state of affairs as it exists of present the main characteristic of this method is that Research has no control over the variable he can only report what has happened or what is happened.

Sampling
The sampling design used in this project is convenient sampling.
Tools of analysis
The statistical tools used for this research are

- Simple percentage analysis
- Chi-Squared test

Simple percentage
The percentage refers to a special kind of ratio percentage is used in making comparison between two or more serifs’ of data. Percentage analysis helps to find which factors is significant among a number of factors.

\[
\text{Percentage analysis} = \frac{\text{No of respondents}}{\text{Total no of respondents}} \times 100
\]

Chi-Squared test

\[
\chi^2 = \sum \frac{(O_i - E_i)^2}{E_i}
\]

A chi-squared test, also written as \(\chi^2\) test, is a statistical hypothesis test that is valid to perform when the test statistic is chi-squared distributed under the null hypothesis, specifically Pearson's chi-squared test and variants thereof. Pearson's chi-squared test is used to determine whether there is a statistically significant difference between the expected frequencies and the observed frequencies in one or more categories of a contingency table.

Chi-squared distribution, showing \(\chi^2\) on the x-axis and p-value (right tail probability) on the y-axis. In the standard applications of this test, the observations are classified into mutually exclusive classes. If the null hypothesis that there are no differences between the classes in the population is true, the test statistic computed from the observations follows a \(\chi^2\) frequency distribution. The purpose of the test is to evaluate how likely the observed frequencies would be assuming the null hypothesis is true.

Test statistics that follow a \(\chi^2\) distribution occur when the observations are independent and normally distributed, which assumptions are often justified under the central limit theorem. There are also \(\chi^2\) tests for testing the null hypothesis of independence of a pair of random variables based on observations of the pairs.

Chi-squared tests often refers to tests for which the distribution of the test statistic approaches the \(\chi^2\) distribution asymptotically, meaning that the sampling distribution (if the null hypothesis is true) of the test statistic approximates a chi-squared distribution more and more closely as sample sizes increase.

RANKING ANALYSIS

Ranking is one of the simple and efficient data collection techniques to understand individuals' perception and preferences for some items such as products, people, and species. Ranking data are frequently collected when individuals are asked to rank a set of items according to a certain preference criterion.

REVIEW OF LITERRATURE

A literature review is a description of the literature relevant to a particular field or topic. This is often written as part of a thesis proposal, or at the commencement of a thesis. A critical literature review is a critical assessment of the relevant literature. Literature covers everything relevant that is written on a topic: books, journal articles, newspaper articles, historical records, government reports, theses and dissertations, etc. The important word is ‘relevant’. A literature review gives an overview of the field of inquiry: what has already been said on the topic, by the key writers.

Raghbir Singh (2002) conducted a study “consumers brand choice behaviour for television sets “ in Amristar. They found that consumers purchase decision are always influenced.

S.L. Jarvenpaa (2008) in their article entitled, “Exploring the Implications of M-convenience for Markets and Marketing” have identified that the unique intrinsic attributes mentioned by the end users are unhindered time and space attributes of the mobile phone. The extrinsic attributes are divided as direct and indirect network. Direct network is the effect of the size, speed and capacity of the network, whereas, indirect network is the effect originating from the information, transaction, or machine interactive services.

Mishra B.S. (2012) examines whether allocative efficiency of Indian banking system has improved after the introduction of financial sector reforms in the early 1990s. Efficiency for 23 states of India is also compared and finds improvement in overall allocative efficiency of majority states in the post reforms period. The study also concludes that improved efficiency is more marked for the service sector than for industry
across the states as agriculture and industry sector witness a decline in allocative efficiency.

Casu B. and Molyneux P. (2016) evaluate the productive efficiency of European banks during 1993-1997 by using efficiency measures derived from Data Envelope Analysis (DEA). The study concludes that since the EU’s Single Market Program there has been a small improvement in bank efficiency level and there are marked differences in bank efficiency levels across EU countries which are mainly because of country specific aspects of the banking technology.

**Lewis (2019)** says “For a given capital outlay on oil and renewable, how much useful energy at the wheel do we get? Our analysis indicates that for the same capital outlay today, new wind and solar-energy projects in tandem with battery electric vehicles will produce six to seven times more useful energy at the wheels than will oil at Rs.3200 per barrel for gasoline powered light-duty vehicles, and three to four times more than will oil at Rs.3200 per barrel for light-duty vehicles running on diesel”.

**CHI-SQUARE ANALYSIS**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Chi-Square test</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Value</td>
<td>DF</td>
</tr>
<tr>
<td>Price</td>
<td>3.634a</td>
<td>3</td>
</tr>
<tr>
<td>Labour</td>
<td>2.602a</td>
<td>4</td>
</tr>
<tr>
<td>Profit</td>
<td>10.032a</td>
<td>4</td>
</tr>
<tr>
<td>Demand</td>
<td>7.951a</td>
<td>5</td>
</tr>
<tr>
<td>Storage facilities</td>
<td>9.555a</td>
<td>4</td>
</tr>
</tbody>
</table>

Chi-Square
- We conclude that there is no relationship between Gender and satisfaction with the price.
- We conclude that there is no relationship between Gender and satisfaction with the labour.
- We conclude that there is relationship between Gender and satisfaction with the Profit.
- We conclude that there is relationship between Gender and satisfaction with the Demand.
- We conclude that there is relationship between Gender and satisfaction with the Storage Facilities.

**TABLE.1**

**Ranking Analysis**

<table>
<thead>
<tr>
<th>FACTORS</th>
<th>1 (6)</th>
<th>2 (5)</th>
<th>3 (4)</th>
<th>4 (3)</th>
<th>5 (2)</th>
<th>6 (1)</th>
<th>TOTAL</th>
<th>RANK</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTER BASE</td>
<td>37 (222)</td>
<td>43 (215)</td>
<td>20 (80)</td>
<td>29 (87)</td>
<td>16 (32)</td>
<td>15 (15)</td>
<td>651</td>
<td>I</td>
</tr>
<tr>
<td>DATA TRANSFER</td>
<td>14 (84)</td>
<td>26 (130)</td>
<td>40 (160)</td>
<td>22 (66)</td>
<td>28 (56)</td>
<td>30 (30)</td>
<td>526</td>
<td>VI</td>
</tr>
<tr>
<td>PROCESSOR</td>
<td>49 (294)</td>
<td>31 (155)</td>
<td>14 (56)</td>
<td>26 (78)</td>
<td>8 (16)</td>
<td>32 (32)</td>
<td>631</td>
<td>III</td>
</tr>
<tr>
<td>SCREEN DISPLAY PROBLEM</td>
<td>36 (216)</td>
<td>17 (85)</td>
<td>29 (116)</td>
<td>23 (69)</td>
<td>31 (62)</td>
<td>24 (24)</td>
<td>572</td>
<td>V</td>
</tr>
<tr>
<td>AUDIO PROBLEM</td>
<td>18 (108)</td>
<td>56 (280)</td>
<td>32 (128)</td>
<td>24 (72)</td>
<td>17 (34)</td>
<td>13 (13)</td>
<td>635</td>
<td>II</td>
</tr>
<tr>
<td>OVERHEATING PROBLEM</td>
<td>9 (54)</td>
<td>41 (205)</td>
<td>33 (132)</td>
<td>57 (171)</td>
<td>5 (10)</td>
<td>15 (15)</td>
<td>587</td>
<td>IV</td>
</tr>
</tbody>
</table>
The above table shows the overall satisfaction level of the respondents have given,
- We consider as First rank to Inter base.
- We consider as Second rank to Audio problem.
- We consider as Third rank to processor.
- We consider as Fourth rank to Overheating problem.
- We consider as Fifth rank to Screen display problem.
- We consider as Sixth rank to Data transfer.

SUGGESTIONS
- Television advertisements should take up in a wide angle to create more awareness about the products.
- To make aware of the customers about the good quality provided for the HP laptop.
- Customer felt that gift session can be increased.
- Qualitative of service helps to increase the sale of the product.
- Cost efficiency is comparatively better than other products
- Discount and gifts can boost up the sales of the product.

CONCLUSION
To conclude the project work done at H.P Laptop has widened the present satisfaction level of customers. We have gained more knowledge about the sales and services of HP laptop further implementing the suggestion given by the customers help them to create more satisfaction on their sales. The companies can provide proper facilities to retain and satisfy the customers.

REFERENCES
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