



ISSN Print: 2394-7500
 ISSN Online: 2394-5869
 Impact Factor: 5.2
 IJAR 2018; 4(10): 424-427
 www.allresearchjournal.com
 Received: 19-08-2018
 Accepted: 21-09-2018

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A study on the various optimal factors that influences the buying behaviour towards laptop with reference to college students

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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. This study is all about to identify the various optimal factors that influences the buying behaviour of the customers towards laptops. The questionnaire method is used to collect data. The most preferred products choice has been created through ratings. Using marketing engineering for excel tool and conjoint study analysis has been applied. The conjoint study design table ratings the various clusters of products features have been created as bundles of preferred product profile. Based on the bundles various bundles and its ratings of the respondents, the most preferred part worth of attributes created and by comparing to the existing product profile the optimal new product profiles have been generated with its possible market share.

Keywords: Laptop preference, marketing research, consumer preference

1. Introduction

Consumer decision making is always a central theme in marketing research. Understanding customer preferences is very important whether you are selling a product or offering a service. Products with features absent in other competitors can increase its demand. However, there is also argument that new features do not always improve product evaluation. Many studies aim to find product features that customers feel important or desirable. After these features have been identified, suggestions on how to improve and market the products can then be made. The rapid developments made by the manufacturers of laptop owe much of their commitment to the technological advancements in the last decade. Minimum barriers to entry in this ever expanding market has only led to increasing competition with the fallout that prospective Laptop customers are flooded with irresistible offers marked by unique product attributes. The need for Laptop manufacturer to remain sensitive to product features as demanded by prospective customer, need not be overemphasized. This research has employed a popular quantitative technique known as Conjoint Analysis to capture the buyer attributes by analyzing the data obtained from responses generated by administering structured questionnaire to a target group comprising of students from a reputed College in Tiruchirappalli in Tamil Nadu.

1.1. Business Analytics

Business analytics (BA) is the run-through of iterative, methodical exploration of an organization's data with emphasis on statistical analysis. Business analytics is used by companies dedicated to data-driven decision making

1.2 Conjoint Analysis

Conjoint Analysis is a widely used market research technique in product development, product designing and pricing research. This tool is effectively applied by market researchers to measure and predict customer preferences of a product. In particular, this analysis is used to identify the relatively important attributes preferred by customers in a product. Conjoint applications have covered many industries and virtually all aspects of managerial decision making.

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2. Review of Literature

Sultan. M. F et.al. (2016) buying preference of youth is the area which is in observation of marketers since considerable amount of time specially in last decade. Moreover, they are treated as most informed and technologically sound market. But most of the research work carried out related with their preference focused upon their preference regarding fast moving consumer goods and with mobile phone and its accessories. This research is systematically conducted in order to determine the preference of youth.

Kanwar. R (2012) In his research article stated that are highly differentiated laptops in the consumer industry. No longer does one vendor dominate the market, enjoying their product being seen as exceedingly superior to its competition. The commoditization of the market has diminished a vendor's ability to strongly differentiate themselves among consumers.

Sharma, Pinki (2012) this study presented a brief overview of Indian Laptop industry. The paper highlighted the laptop usage from student's point of view. The research paper further makes an attempt to identify and evaluated various factors which influence purchase indent of management and engineering students. Finally, this paper came out with 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.

Dietrich and List (2012) said in his theory that customer preferences are not permanent and that consumers change their preferences over time. They indicated that an agent forms their preferences by adopting a particular motivational state by focusing consciously or otherwise on certain properties of the alternatives as the motivationally salient properties. An agent may change their preferences when the motivational state changes. That is, when new properties of the alternatives become motivationally salient or previously salient properties cease to be salient.

J. Balaji and Rao (2012) this article said that Conjoint Analysis is a widely used market research technique in product development, product designing and pricing research. This tool is effectively applied by market researchers to measure and predict customer preferences of a product. Conjoint analysis is a methodology in which a decision-maker has to choose from a number of options that vary simultaneously from between two or more attributes. Researchers describe products or services by sets of attribute values or levels and then measure respondents purchase interest.

Behzadien, Hasan and Razavi (2011) also conducted the study to understand the required features of a laptop for a manager to develop marketing strategies. The study concluded that the features looking for are processor speed, size, graphics card, and price. Thus the attributes required for a student and managers differ.

3. Research Methodology

3.1 Formulation of the Research Problem

In Digital India majority of young students are using laptop for their learning and their institute is also initiated the process of learning is through E-Learning. The laptop manufactures have to find out the optimal buying behavior of end customers point of view and come out with the various new models as per the taste and preferences of the customer. In buying decision there is both word of mouth and desired

or featured technical components also involved before taking a decision to buy laptops. In this study concentrates buying behaviour of consumer and their interest on different attributes of the laptop and to find the various optimal factors that influences the buying behaviour towards laptop with reference to College students.

3.2 Pilot Study

A pilot study is done before executing the project in which customer's preference towards each feature of a laptop is obtained. Based on the pilot study the features are included in the questionnaire and for the overall study.

3.3 Scope of the Study

This study mainly concerns towards the various optimal attributes which have high influence on buying behaviour of the end customer. It will give insights to the marketers about how efficiently and effectively they can design a future product in order to increase the sales volume in the market. The study is confined to identify the attributes which are expected out of a laptop and propose the best combination of those attributes for effective purchase decision.

3.4 Research Objectives

To analyse the factors that highly influences the buying decision of Laptops.

To identify the key factors expected by graduates in Laptops.

To create an optimal combination of key factors in Laptops

To generate optimal product profiles of Laptops

3.5 Research Design

Convenience random sampling is used in this study to pick out the samples from the population. The sample size is 100. The sample is taken from the time period 8th September 2016 to 12th September 2016.

3.6 Data Collection Method

Primary data collection is used to collect the data for reaching the objective of the research. Questionnaire is framed based on the pilot study done earlier to know the laptop attributes which are considered as essential by the students in an institute for making decision in buying laptops.

3.7 Tools Used

- Microsoft Excel 2016 - Marketing Engineering for Excel Add Ins
- SPSS 20.

3.8 Project Flow Diagram

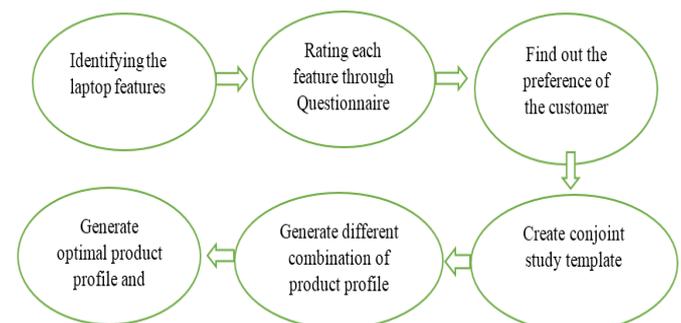


Fig 1: Process of this Research

4. Data Analysis and Interpretation

Table 1: Attributes and levels of the Conjoint Study

Attributes and attribute levels of the Conjoint study.					
Attributes / Levels	Level 1	Level 2	Level 3	Level 4	Level 5
Brand	Dell	HP	Sony	Asus	Acer
Operating System	Linux	Windows 7	Windows 8.1	Windows 10	
Screen Size	13-13.9 Inches	14-14.9 Inches	15-15.9 Inches	16-16.9 Inches	
RAM	1 Gb	2 Gb	4 Gb	6 Gb	
Hard Disk Capacity	500 Gb	1 Tb	2 Tb		
Processor Type	Intel Quad Core	Intel Dual Core	Intel i3(th gen)	Intel i5(th gen)	
Graphics Card Memory	500 Mb	1 Gb	2 Gb		

The 1.0 clearly describes that the various attributes and factors which are used in framing the conjoint analysis study design based on the Laptop features as per the most

preferred preferences of the respondents. Based on the above study design other various optimal laptop designs have been generated.

Table 2: Optimal Bundles

Attributes	Bundles							
	1	2	3	4	5	6	7	8
Brand	Dell	HP	Asus	Sony	HP	Dell	Sony	Asus
Operating System	Linux	Linux	Linux	Linux	Windows 7	Windows 7	Windows 7	Windows 7
Screen Size	13-13.9 Inches	14-14.9 Inches	13-13.9 Inches	14-14.9 Inches	13-13.9 Inches	14-14.9 Inches	13-13.9 Inches	14-14.9 Inches
RAM	1 Gb	1 Gb	2 Gb	2 Gb	4 Gb	4 Gb	6 Gb	6 Gb
Hard Disk Capacity	500 Gb	2 Tb	1 Tb	1 Tb	1 Tb	1 Tb	500 Gb	2 Tb
Processor Type	Intel Quad Core	Intel Dual Core	Intel i3(th gen)	Intel i5(th gen)	Intel Quad Core	Intel Dual Core	Intel i3(th gen)	Intel i5(th gen)
Graphics Card Memory	500 Mb	1 Gb	2 Gb	1 Gb	1 Gb	2 Gb	1 Gb	500 Mb

The table 2.0 elucidates that the different options of featured cum optimal products bundles which helps to create product

part worth based on the respondents' ratings which has been used for the further analysis.

Table 3: Part Worth of Attributes and Levels

Attributes and Levels	Averages
Dell	3.54
HP	7.96
Sony	10.14
Asus	12.98
Acer	10.2
Windows 7	15.32
Windows 8.1	13
Windows 10	7.82
1 GB	5.14
2 GB	3.8
4 GB	5.84
Intel core i3(5 th gen)	3.88
Intel core i5(5 th gen)	4.56
500 MB	4.82
1 GB	6.54

The table 4.3.0 indicates the attributes levels of each features which has been generated by the tool which is has been used for creating an optimal model. Optimal model has been

created based on the existing product in the market. The existing product profile is shown on the below table by comparing which the optimal product is created.

Table 4: Optimal Products Profile Predicated Market Share

Scenario / Products Profile	Market share of Optimal Product Profile
Predicated Market Share with Optimal Product 1	45%
Predicated Market Share with Optimal Product 2	55%
Predicated Market Share with Optimal Product 3	50%
Predicated Market Share with Optimal Product 4	55%

5. Findings and Suggestions

- Consumer's buying behaviour or buying decision of Laptops mostly influences by the name of the product.

System Ram & Hard Disk Capacities and Graphics Card Memory all these features are major influencing factors of buying decision of the products by the

consumers. Majority of the Male respondents are given important to brand, Ram, HDC, Processors Types and graphics card Memory.

- At present the need of Laptops has been increased in considerably. Consumers are more aware of the choosing the products feature before they buy. They buy laptops which are more comfortable and highly configured in all manner. Hence the laptop manufactured have pay a greater attention in producing the product based on the end consumer's preferences and tastes. Mainly, while manufacturing the upcoming or any new laptop model the manufacturer has to keenly notice the following key features such as Ram. Hard Disk capacities, System Processor Types and Graphics Card.

6. Conclusion

The purpose of this study is to know the various factors which influences the buying behaviour of the end consumer before buying a laptop and to list them based on the customers rating about the features of the laptop for which a questionnaire has been used. Furthermore, in marketing knowing the customer's preferences is the most essential part in order to boost up the sales. Hence this study helped in both ways that figuring out the customer preferences about the product and for the manufactured it would be more useful to produce the customer centric product in order to increase the sales.

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