Factors Influencing Consumer's Buying Decision on Purchasing Laptops in Bangladesh: A Study on Dinajpur and Rangpur City

HAJEE MOHAMMAD DANESH SCIENCE AND TECHNOLOGY UNIVERSITY, DINAJPUR

Internship Report

By

Monira Begum
Student ID. 1505102
MBA in Marketing
Department of Marketing
HSTU, Dinajpur

MASTER OF BUSINESS ADMINISTRATION (MBA)

(This internship report has been prepared for submission into the Department of Marketing, Hajee Mohammad Danesh Science & Technology University, Dinajpur, as a partial requirement for fulfillment of MBA Degree in Marketing)

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June- 2016

Dedicated to My

Beloved Parents

&

Honorable Teachers

Letter of Transmittal

May, 2016

To

Md. Jamal Uddin

Assistant Professor

Department of Marketing

Faculty of Business Studies

Hajee Mohammad Danesh Science and Technology University, Dinajpur-5200

Subject: Submission of Internship Report on **"Factors Influencing Consumer's Buying Decision on Purchasing Laptops in Bangladesh: A Study on Dinajpur and Rangpur City"**

Dear Sir

This a great pleasure to submit my research report on **"Factors Influencing Consumer's Buying Decision on Purchasing Laptops in Bangladesh: A Study on Dinajpur and Rangpur City",** which is a part of MBA program. To you for your kind consideration, I made sincere effort to study related documents, materials, observe operations, examine related records, and collect primary data regarding attitude for preparation the report.

Within the time, I have tried my best to complete the pertinent information as comprehensive as possible.

Therefore, I will be very much glad to hear from you for further clarification.

Sincerely yours

Monira Begum

Student ID. 1505102

MBA in Marketing

Department of Marketing

HSTU, Dinajpur**.**

Declaration

I, am **Monira Begum, Student ID No. 1505102**, MBA in Marketing, Department of Marketing, submitted my internship report entitled **"Factors Influencing Consumer's Buying Decision on Purchasing Laptops in Bangladesh: A Study on Dinajpur and Rangpur City"** after completing my internship program. I have tried my level best to get together as much information as possible to enrich the report. I believe that it was a great experience and it has enriched both my knowledge and experience.

This report has been submitted in partial fulfillment of the requirement for the degree of Master of Business Administration (MBA) in Marketing at Hajee Mohammad Danesh Science and Technology University, Dinajpur.

Monira Begum

Student ID. 1505102

MBA in Marketing

Department of Marketing

HSTU, Dinajpur**.**

Certificate of Supervisor

I, hereby declare that the internship report entitled **"Factors Influencing Consumer's Buying Decision on Purchasing Laptops in Bangladesh: A Study on Dinajpur and Rangpur City**", is a useful record of the internship work done by **Monira Begum, Student ID No. 1505102**, MBA in Marketing, Department of Marketing, Hajee Mohammad Danesh Science and Technology University, Dinajpur-5200. This report represents an independent and original work prepared on the basis of primary and secondary data collected and analyzed by the candidate. This report has not been accepted for any other degree and is not concurrently submitted in candidature of any other degree.

This entire work has been planned and carried out by the candidate and my supervision and guidance. In my opinion, this report is sufficient in terms of scope and quality for the award of the degree of Master of Business Administration (MBA) in Marketing from Hajee Mohammad Danesh Science and Technology University, Dinajpur.

———————————————

SUPERVISOR
OF THE
Internship Program
Md. Jamal Uddin
Assistant Professor
Department of Marketing
Faculty of Business Studies
HSTU, Dinajpur.

Certificate of Co-Supervisor

I, hereby declare that the internship report entitled **"Factors Influencing Consumer's Buying Decision on Purchasing Laptops in Bangladesh: A Study on Dinajpur and Rangpur City",** is a useful record of the internship work done by **Monira Begum, Student ID No. 1505102**, MBA in Marketing, Department of Marketing, Hajee Mohammad Danesh Science and Technology University, Dinajpur-5200. This report represents an independent and original work prepared on the basis of primary and secondary data collected and analyzed by the candidate. This report has not been accepted for any other degree and is not concurrently submitted in candidature of any other degree.

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CO-SUPERVISOR
OF THE
Internship Program
Md. Abdur Rouf
Lecturer
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Acknowledgement

At first, I would like to express my gratefulness and harmony to the ALLMIGHTY the supreme authority of the Universe, without whom we would be nothing. Next I would like to express my kindness to my Beloved Parent whose continuous inspiration encourages me to make a right move in my life.

I am grateful towards some respected persons for their advice, suggestions, direction and cooperation which have enabled me to have an experienced in the dynamic environment.

I would like to thank my honorable supervisor **Md. Jamal Uddin,** Assistant Professor, Department of Marketing, Faculty of Business Studies, Hajee Mohammad Danesh Science and Technology University, Dinajpur, whose help, suggestions and co-operations, the total report will be valuable.

I would like to thank my honorable co-supervisor **Md. Abdur Rouf,** Lecturer, Department of Marketing, Faculty of Business Studies, Hajee Mohammad Danesh Science and Technology University, Dinajpur, whose help, suggestion and co-operation in preparing the report.

I would like to thank from the deep of my heart to those people who are related with making of this report and make it a success.

I would like to express my indebtedness to all of the teachers, Department of Marketing, Faculty of Business Studies, Hajee Mohammad Danesh Science and Technology University, Dinajpur, for helping me and giving assistance in preparing the report.

Monira Begum
June- 2016

List of Acronyms and Abbreviations

AMD	:	Advance Micro Device.
CD-ROM	:	Compact Disc Read Only Memory.
CPU	:	Central Processing Unit.
DDR	:	Double Data Rate.
DVD	:	Digital Versatile Disk.
DVI	:	Digital Visual Interface.
GPU	:	Graphical Processing Unit.
HDD	:	Hard Disk Drive.
IBM	:	International Business Machine.
ICT	:	Information and Communications Technology.
I/O port	:	Input output port.
LCD	:	Liquid Crystal Display.
LED	:	Light Emitting Diode.
mSATA	:	Mini Serial At Attachment.
NASA	:	National Aeronautics and Space Administration.
PC	:	Personal Computer.
PCI	:	Peripheral Component Interconnect.
PCMCIA	:	Personal Computer Memory Card International Association.
RAM	:	Random Access Memory.
ROM	:	Read Only Memory.
SCAMP	:	Special Computer APL Machine Portable.
SDD	:	Solid State Drive.
SO-DIMM	:	Small Outline Dual In-Line Memory Module.
SPSS	:	Statistical Package for the Social Sciences.
USB	:	Universal Serial Bus.
VGA	:	Video Graphics Array.
WiFi	:	Wireless Fidelity.

Abstract

Wireless connectivity is not considered a luxury now-a-days. It has become a necessity for today's generation for meeting their computing needs from every place at any time. Following the success of desktop computers, laptop computers have become highly popular as versions of desktops with the full functionality of desktop computing and the portability which allows users to carry them anywhere. Hence, the sale of laptop has been increased in Bangladesh is referred as third fastest growing laptop market in the Asian region. Laptop companies are introducing new features in their laptop brands. Hence, it became difficult and confusing for an ordinary consumer to decide which laptop to purchase and how to purchase. The present study aims to study the influence of various demographic variables on the choice of laptop brands, to identify pre purchase attributes and to identify considerable decision making factors in buying a particular laptop brands. The data were collected through structured questionnaire. A total of 100 respondents were selected from both Dinajpur and Rangpur city through random sampling method. Frequency distribution, factor analysis is used to analyze data through using SPSS software. Kaiser-Meyer-Olkin Measure of Sampling Adequacy (.624) and Cronbach's Alpha (.849) is used for Scale Reliability. The results from the study show that there were eight pre purchase factors and five decision making factors which influence consumers' laptop purchase decisions most. Those factors can be stated as follows: Processor, Memory, Hard disk capacity, Guarantee warranty, Battery life, Display, Modem facility, Ease of usage, Price, Quality, Brand image, After sale service and Availability of spare parts etc.

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CHAPTER-1

INTRODUCTION

1.1 Prelude

As the personal computer (PC) became feasible in 1971, 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 Special Computer APL Machine Portable (SCAMP) was demonstrated in 1973. This prototype was based on the IBM PALM processor. The IBM 5100, the first commercially available portable computer, appeared in September 1975, and was based on the SCAMP prototype. As 8-bit CPU machines became widely accepted, the number of portables increased rapidly. The Osborne 1, released in 1981, used the Zilog Z80 and weighed 23.6 pounds (10.7 kg). It had no battery, a 5 in (13 cm) CRT screen, and dual 5.25 in (13.3 cm) 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/RadioShack and HP also produced portable computers of varying designs during this period. The first laptops using the flip form factor appeared in the early 1980s. The Dulmont Magnum was released in Australia in 1981–82, but was not marketed internationally until 1984–85. The US$8,150 (US$19,980 today) GRiD Compass 1100, released in 1982, was used at NASA and by the military among others. The Gavilan SC, released in 1983, was the first computer described as a "laptop" by its manufacturer. From 1983 onward, 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, such as the 1990 Intel i386SL, were designed to use minimum power to increase battery life of portable computers and were supported by dynamic power management features such as Intel SpeedStep and AMD PowerNow! in some designs. Displays reached VGA resolution by 1988 (Compaq SLT/286), and colour screens started becoming a common upgrade in 1991 with increases in resolution and screen size occurring frequently until the introduction of 17"-screen laptops in 2003. Hard drives started to be used in portables, encouraged by the introduction of 3.5" drives in the late 1980s, and became common in laptops starting with the introduction of 2.5" and smaller drives around 1990; capacities have typically lagged behind physically larger

desktop drives. Optical storage, read-only CD-ROM followed by writeable CD and later read-only or writeable DVD and Blu-ray, became common in laptops early in the 2000s. The terms laptop and notebook are used fairly interchangeably to describe a portable computer in English, although in some parts of the world one or the other may be preferred. There is some question as to the original etymology and specificity of either term—the term laptop appears to have been coined in the early 1980s to describe a mobile computer which can be used on one's lap, and to distinguish these devices from earlier, much heavier, portable computers (often called "luggables" in retrospect). The terms were interchangeable. (Source: https://en.wiki pedia.org/wiki/Laptop).

1.2 Statement of the problem

The laptop product category is achieved highest degree of standardization of components. Features and attributes of this product category is lost the ability to differentiate in its product offerings. This is the biggest challenge being faced by the industry. The only strategies that are left at their disposal are either expanding their product assortment or make their offerings more and more attractive to the target market. This therefore calls for an ongoing in depth study of the consumer behavior- internal drives and motives of the target market that influence their buying decision process of laptops. Laptop vendors needed to know if relationship existed between the demographic profile of these consumers, the most important pre-purchase buying criteria for a particular brand, various decision making factors they used when considering the purchase and the final brand that can be selected at point of purchase. Hence, there is a need to study consumers buying behavior towards the various influencing factors in purchasing laptop.

1.3 Research questions

a) Do the various demographic factors influence on the consumer's choice of laptop brands?

b) What are different type of features or attributes that customer prefer most before purchasing a laptop?

c) What are the various decision making factors that influence on the customers purchase decision of laptop?

1.4 Research objectives

The general objective of the study is to identify key factors that influence customer's buying decision of purchasing laptop.

Specific objectives are-

a) To study the influence of various demographic variables like- Age, gender, level of education, profession, income etc. on the choice of laptop brands.

b) To identify the user's different   pre- purchase attributes or features before buying a particular laptop.

c) To find out various considerable factors that influence the consumer's final buying decision most.

1.5 Conceptual framework

Educational author Smyth (2004) defined research framework or conceptual framework as a framework that builds from a combination of a wide range of ideas and theories and helps studies identify problems, develop questions and search for relevant literature. In this research study, two variables have been discussed, such as dependent and independent variables. Brand choice of consumers shows dependency upon two independent variables. One is pre-purchase factors that include processor speed, memory capacity, hard disk capacity, color of laptop, weight of laptop, spill resistant keyboard, battery life, display resolution quality, guarantee warranty condition, internet/modem facility, speakers, ease of usage, DVD-CD player etc. And the other is decision making factors that include price, quality, advertisement, availability, brand image, availability of spare parts, discount offer, after sale service etc. Here the figure presents the theoretical framework of this study, that is, the interrelationship between the dependent and independent variables is shown.

Figure 1.1

Factors influencing brand choice model

| Pre-purchase factors (Independent factor) | Decision making (Independent factor) |
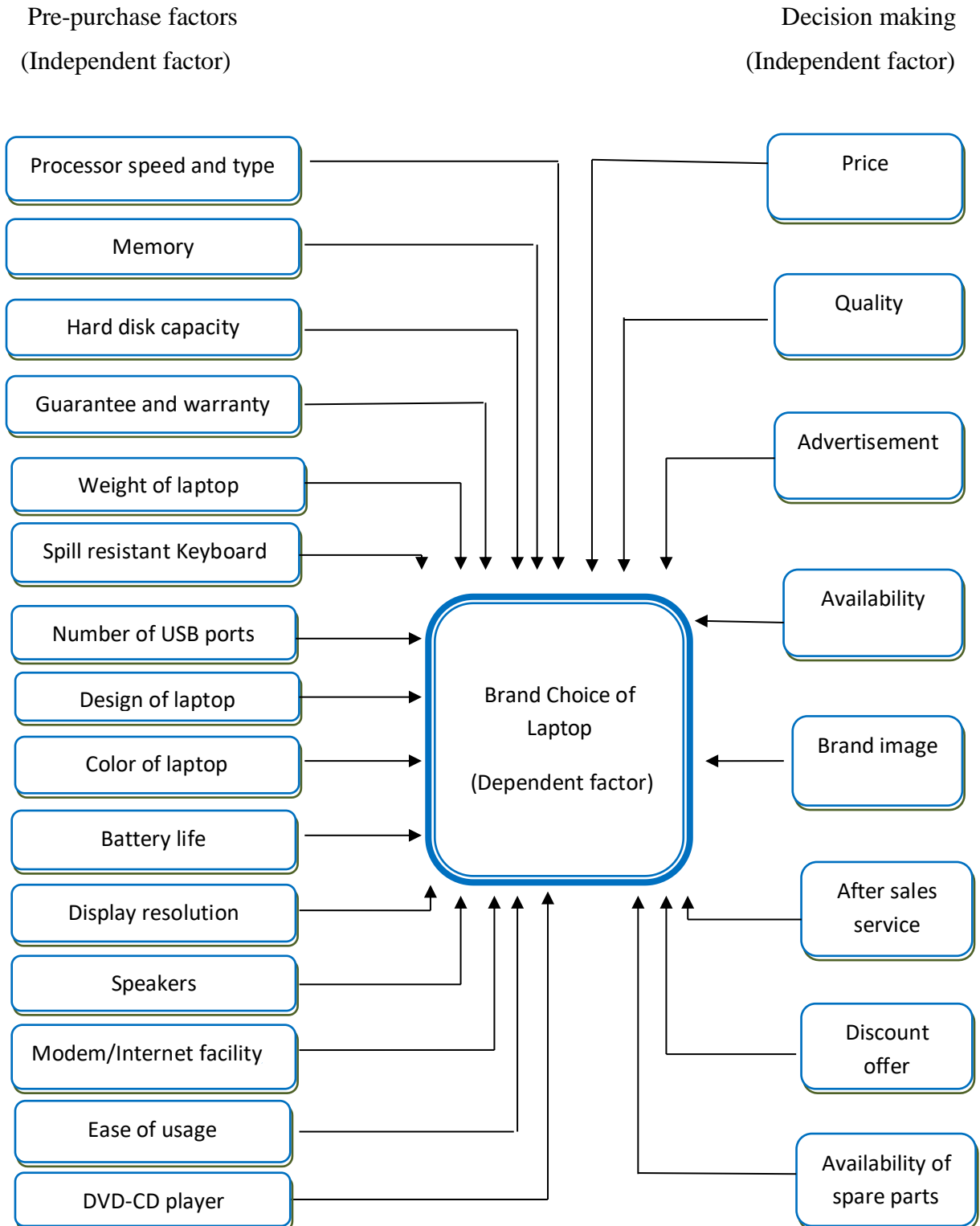
Source: Developed by Researcher

1.6 Definition of key terms

1.6.1 Laptop

A laptop is a personal computer designed for mobile use and small and light enough to sit on a person's lap while in use. A laptop integrates most of the typical a desktop computer, including a display, a keyboard, a pointing device (a touchpad, also known as a track pad, and/or a pointing stick), speakers, and often including a battery, into a single small and light unit. There chargeable battery(if present) is charged from an AC adapter and typically stores enough energy to run the laptop for two to three hours in its initial state, depending on the configuration and power management of the computer. Laptops are usually notebook -shaped with thicknesses between 0.7 – 1.5 inches (18 – 38mm) and dimensions ranging from 10x8 inches (27x22cm, 13" display) to15x11 inches (39x28cm, 17" display) and up. Modern laptops weigh 3 to 12 pounds (1.4 to 5.4 kg); older laptops were usually heavier. Most laptops are designed in the flip form factor to protect the screen and the keyboard when closed. Modern tablet laptop shave a complex joint between the keyboard housing and the display, permitting the display panel to swivel and then lie flat on the keyboard housing. Laptops were originally considered to be" a small niche market" and were thought suitable mostly for "specialized field applications" such as "the military, the Internal Revenue Service, accountants and sales representatives". But today, there are already more laptops than desktops in businesses, and laptops are becoming obligatory for student use and more popular for general use.

1.6.2 Brand choice

Brand choice actually indicates the consumer's selective choice of particular brand i.e. it shows the preference or demand of a specific brand over the competitors' brand. The theory of brand choice is one of the fundamental elements of marketing science. Virtually all decisions made by marketing managers involve assumptions – explicit or implicit – about how consumers make purchase decisions and how strategic marketing variables (such as price, advertising and distribution) impact these decisions. To support this effort, the goal of research in brand choice is to create models that both reflect the behavioral realities of consumer choice and allow accurate forecasts of future choice behavior.

1.6.3 Brand Image

Consumers are more inclined to trust familiar brands. A good brand image perception of the quality of service makes a brand more attractive. Brand image is an important factor which impacts customer loyalty and is considered a vital factor for creating, building and maintaining relationships (Das, 2012).Ismail (2009) defined brand as "a name, term, sign, symbol, or design, or a combination of these that identifies the maker or seller of a product or service." The definition of image given by (Shahzad and Sobia, 2013) is the perceptions about a brand as reflected by the brand association held in consumer memory. Moreover, brand image usually indicates to the set or bundle of beliefs which a customer holds concerning a particular brand. Aaker (1991) adds that brand image creates importance and helps the consumer in collecting information, differentiate the brand, create reason to purchase, and creates constructive feelings extension. Therefore, positive brand image helps a company convey its brand value to customers. Furthermore, a good brand image is conducive to positive word-of-mouth by customers, favorable company reputation and marketing communication. On the other hand, negative brand image has the opposite effect on consumers.

1.6.4 Consumer Decision Making

One of the fundamental issues in consumer behavior is the way consumers develop, adapt and use decision-making strategies (Moon, 2004). Consumer decision making could be defined as the "behavior patterns of consumers, that precede, determine and follow on the decision process for the acquisition of need satisfying products, ideas or services" (Du Plessis et al., 1991). Consumer decision making has long been of great interest to researchers. Early decision making studies concentrated on the purchase action (Loudon and Bitta, 1993). It was only after the 1950's that modern concepts of marketing were incorporated into studies of consumer decision making, including a wider range of activities (Engel, Blackwell and Miniard, 1995). The contemporary research indicates that more activities are involved than the purchase itself. Many other factors influence the consumer decision making than the final outcome. Vast numbers of studies have investigated this issue and many models have been developed accordingly.

1.7 Importance of the study

Laptop is a high involvement product which regards the target consumers' interpretations for product features, promotional offers, price, after sales services, guarantee or warranty conditions, etc. about the product. Therefore, it becomes important for the manufacturer to understand the exact customer requirements, and thereby, adapt accordingly. Introducing an increased offers and lucrative schemes does not always ensure a larger customer base or a larger market share. The manufacturer should also understand customers' perceptions about the company, i.e. company's image in customers' mind, and then there should be an effort to match the requirements with the image. Therefore it requires an ongoing in depth study of consumer behavior which influences the buying decision process of laptop. This study is very important because this study will provide the laptop companies a launching idea and will act as a guide to finalize the strategies to increase the market share, consumer awareness in the market for the product and also enhance the level of awareness among consumers. In short, it can be claimed to be an accurate report that may help them to gain a competitive edge over their competitors.

1.8 Methodology of the Study

1.8.1 Nature of the study

The research was descriptive in nature. Both qualitative and quantitative approach was used in this study.

1.8.2 Sample size and Sampling method

The population of the study was the consumers of laptop brand users. 100 consumers were purposively selected for this study. 50 consumers from Dinajpur city and the other 50 consumers were selected from Rangpur city by using convenience sampling method. Data were collected from the respondent as per convenience and co-operative with them.

1.8.3 Sources of data

Both primary and secondary data were used in the present study. Primary data for statistical analysis and secondary data for literature review. Primary data were obtained from both Dinajpur and Rangpur city through a well-designed questionnaire. Secondary data were collected through several sources such as online directory, journals, reports, media publications and various periodicals, internet search engine, related dissertation, related books and newspapers.

1.8.4 Tools for data collection

For the purpose of collecting data, Non Comparative scaling in the form of itemized rating scaling technique was used through 5 point Likert scale which is ranging from 1 to 5 where 5= Strongly agree, 4=Agree,3=Neutral, 2= Disagree and 1= strongly disagree.

1.8.5 Data Analysis Techniques

The primary and secondary data were analyzed through the statistical methods. SPSS was used for analyzing the data collected. Some analytical techniques like Frequency Distribution of demographic profile, Frequency Distribution of pre-purchase factors, Frequency distribution of decision making factors, Reliability Statistics, Factor analysis were used to analyze the collected data.

1.9 Scope and Limitations

This study will cover a number of randomly chosen 100 people of Dinajpur and Rangpur city. The data collection is reliable in terms of gender or age among this100 participants from both city. There are some limitations that help to conduct future research in a wider scope which will produce more accurate and unbiased information.

In every research work there are some limitations and this research is no exception.

1. The study is limited to the attitudes and perceptions of the selected sample respondents and may not be universally applicable.

2. There was a possibility of the respondent bias in self-reporting perceptions of the survey.

3. The study is 'micro' in nature, and its survey findings and observations cannot be generalized and may be subjected to change from time to time and place to place.

4. As the sample size was only 100 respondents, is not necessary that it truly represents the population universe.

5. Money was also one of limitations faced while conducting this research.

6. Some of the people were not interested in filling questionnaire; some people were taking this research seriously. Some people were engaged in their job hesitate to fill questionnaire and their personal details.

1.10 Layout of dissertation

The findings of the study are presented here in the form of dissertation. The chapter outlines of the dissertation are as follows:

Chapter- 1	**Introduction:** Introduction chapter includes: prelude, statement of the problem, research question, research objectives, definition of key terms, importance of the study, methodology of the study, scope and limitations of the study.
Chapter- 2	**Literature review:** This chapter includes a brief review of results of some previous studies which are related to the present research work and the research gap between the present study and previous studies.
Chapter- 3	**Theoretical explanation of laptop buying behavior of consumer:** This chapter focuses on the fundamentals of laptop, classification of laptop, components of laptop, Market share of laptop, consumer buying behavior model, factor influencing buying behavior.
Chapter- 4	**Data analysis and interpretation:** This chapter includes analysis of primary data which were collected from the respondents through questionnaire.
Chapter- 5	**Findings, Recommendations and Conclusion:** This chapter includes findings, recommendations, conclusion and scope for further research.
	References
	Appendices

Figure 1.2

Layout of dissertation

Chapter 1: Introduction
- Research problem, Research question, Research objectives.
  - Research methodology, Scope and Limitations.

Chapter 2: Literature Review
- Review of literature, Research gap.

Empirical Study

Chapter 3: Laptop Buying Behavior of Consumer

- Definition, classification, component of laptop.
- Market share of laptop brands.
- Buying behavior model.
- Influencing factors of consumer behavior.

Chapter 4: Data Analysis and Interpretation

- Data analysis of demographic profile.
- Data analysis of pre purchase and decision making factors.
- Reliability and Factor Analysis of data.

Chapter 5: Findings, Recommendations and Conclusion
- Research findings, Recommendation, Conclusion.
- Scope of further research.

Source: Developed by Researcher

CHAPTER-2

LITERATURE REVIEW

2.1 Review of literature

Dr. V. Aslıhan Nasır, Sema Yoruker, Figen Güneş and Yeliz Ozdemir (2003) Conducted A Study On "Factors Influencing Consumers' Laptop" .The purpose of the research was to develop a better understanding of the factors influencing consumers' laptop purchases. This research also seeks the differences among three consumer groups (stayers, satisfied switchers, and dissatisfied switchers) of a company with respect to the factors influencing consumers' laptop purchases. In line with the research purposes of this study, an on-line questionnaire was prepared. A total of 903 responses were collected, but only 360 of the respondents declared that they had a laptop. It was found that core technical features, post purchase services, price and payment conditions, peripheral specifications, physical appearance, value added features, and connectivity and mobility are the seven factors that are influencing consumers' laptop purchases. Furthermore, price and payment conditions factor shows significant difference among three consumer groups of a company's customer base.

Rachel V. Mc Clary (2006) Conducted A Study On "Evaluation Of Consumer Buying Criteria And Its Impact On The Purchase Of Commoditized Laptops". The purpose of this study was to determine if a relationship existed between the brand of laptop consumers selected and a variety of demographic and evaluative buying criteria considered in the process. They seek to answer the many questions the self-administered, on-line survey consisted of seventeen questions, including nine descriptive, demographic questions as mentioned above with drop down menus, Likert-scale choices or ranking requests. The research seeks out information in a variety of ways and a relationship exists with 192 how the consumer does that and who the consumer is. Different consumers purchase different laptops for different reasons. It found that there were significant relationships between demographic variables of the consumer and the information sources they valued in contributing to their purchase decision. The level of technical competence of the consumer plays a key role in the determination of what sources are sought, as does gender and age to a certain degree.

Mr. Rahul Kanwar (2012) Conducted A Study On "Consumer Behaviour while Purchasing Laptops in Chandigarh & Mohali". Objective of the research was to study the influence of various demographic variables on the choice laptop brands, to map the profile of customers in terms of lifestyle, attitude and perception, to Identifying if a consumer tendency existed toward the use of tangible product attributes, (i.e. "speeds and feeds") versus less tangible criteria (i.e. brand awareness). The study collect information mainly from the primary sources and even from secondary sources. The primary source consists of the data analyzed from questionnaire and interaction with the user at that time only and internet is used as secondary source. Data was collected through questionnaire schedule method. Findings was that it had been found that there were seven factors which influence consumers' laptop purchase decisions. Those 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, slayers, satisfied switchers and dissatisfied switchers demonstrate a significant difference only in one factor: price and payment conditions.

Rinal B. Shah (2012) Conducted "An Empirical Study On Factors Influencing Brand Equity Towards Laptop Brands" .The objective of the research was to find the relationship between the attributes like gender of laptop user, preferred brand, importance of features & information sources used by them in purchase decision. The study also investigates the relationship between overall brand equity & different brand equity dimensions like perceived quality (PQ), brand awareness (BAW), brand association (BAS) & brand loyalty (BL) referring to Aaker's model. Primary research was done through questionnaire survey in Ahmedabad city, using convenient sampling of 139 respondents. The research reveals that the ownership of laptop is dependent on gender of respondent. Only gender or budget of laptop user, information source or features of product is not related with preference of particular brand. It also reveals that perceived quality & brand loyalty has strong & positive impact on overall brand equity while brand awareness & brand association will not influence overall brand equity directly. The result can also be strengthening by adding performance measurement in model.

Vijay. R. Kulkarni (2013) Conducted "A Factorial Study Of Consumer Buying Behavior Of Laptops Of Post Graduate Students In Pune". The purpose of the study was to do the factorial analysis of consumer buying behavior of Post Graduation students of laptops in the city of Pune, Maharashtra, India. The study was used Exploratory Research Design. Convenience sampling method was adopted for the study. Survey method was used for collecting the data. The data is collected from Post Graduate students in Pune city. The sample for the study is 152 respondents. Nominal scale is used for all the variables. The study was conducted during the period 15.09.12 to 31.10.12. Kaiser-Meyer-Olkin Measure of Sampling Adequacy & Cronbach's Alpha is used for Scale Reliability. Factor Analysis resulted in five factors viz. 1) Brand and Features *2)* Price, Visibility & Service Center 3) Reliability & Responsiveness 4) Store Atmospherics & Assurance and 5) Warranty, Guarantee & After Sales Service.

Jeevan Jain (2013) Conducted "A Study Of Consumer Behaviour On Purchase Of Laptops". The objectives of this particular study were to know the personal views of people regarding choices among various branded PC Laptop, to study which branded PC Laptop is mostly preferred by people as per their choices Comparison between various branded PC Laptop, to Find out factor influencing the people at the time of purchasing Laptop regarding quality, durability, variability and price. The sampling technique adopted for the study was Random sampling technique according to the convenience of the researcher. A questionnaire was administered to different students and working professionals to obtain data for the purpose of analysis. Data is collected using a sample of 20 Respondents. The study was found that there is no significant relationship between the laptop choice and the gender of the buyer, there is a significant relation between the degree and the kind of laptop selected, educational qualification, annual family income and work experience has a significant impact on the choice of laptop brand selected.

Kanwal Gurleen, Pooja Bhandari (2014) Conducted "A Study On Customer Satisfaction And Factors Influencing The Purchase Decisions Of Notebook Computers In Punjab". The objective of the research was to study the customer satisfaction level towards various brands of Notebook computers in Punjab, to identify the various factors responsible for influencing the purchase decisions of customers while buying a Notebook computer in Punjab. The data was collected in the form of questionnaires. The study has been conducted in 4 cities of Punjab, a sample of Rural and Urban respondents were

selected from the districts of Jalandhar, Ludhiana, Patiala and Amritsar. The survey was carried out on 200 respondents. The data was collected personally (and via emails) in the months of October 2012 to December 2012. The data has been analyzed by using statistical software SPSS, meticulously. It was reveals that most of the respondents purchases a notebook computer with the price ranging between Rs.20, 000 to Rs.30, 000 and the percentage reduces considerably for lower end and higher end prices. The statistics obtained about the market share of the various Notebook brands in Punjab shows a stiff competition in the market with Sony leading marginally followed closely by Lenovo. The Compaq was least preferred in Punjab as per the respondents. It was seen that there was no significant difference in the satisfaction level of respondents by different age groups. However it was seen that as the age increases the respondent's dissatisfaction towards their computers decreases. It was seen that rural customers are more satisfied then the urban customers. The results of the factor analysis concluded that following four factors were significant in influencing the purchase behavior of notebook computers: Price Consciousness, Memory and Processor, Aesthetics and Brand Image.

S. Pandisiva and S. Pandian (2014) Conducted "A Study On Factors Influencing On Buyer Behavior Towards Laptop In Dindigul District". The aim of this paper was to identify reasons for buying laptop, factors influencing for buying laptop, and decision making for product attributes factors in this factors motivated based on Buyer behaviour in Dindigul district general people. The sample included 150 of general people based on laptop buyers. The survey was completed within 70 days and respondents include both male and female respondents in laptop buyer. The study made use of primary and secondary data. A well structured questionnaire was prepared to collect primary data. Then secondary data collected Books, Articles, Journals, through internet, etc. The collected data were coded, calculated and analyzed with the help of statistical tools like t-test, ANOVA, Regression analysis. The result shows that there is no significant difference between products attributes with gender and Occupation, and Buyer behaviour factors contributed in reasons for buying laptop, Influencing factors, and product attributes.

Dr. Reeta Arora, Dr. Asha Chawla (2014) Conducted "A Study On Mapping Of Consumer Perceptions For Laptops" .The Purpose of the study was to ascertain the laptop consumer's preference over the various counts of laptop brands they use. The study also throws light on the consumers' perceptions with respect to laptops. The data were

collected using a structured questionnaire-based survey. A total of 110 respondents were considered for the study. Chi-square test, weighted average score method, Kendall's coefficient of concordance test and cross tabulation were used to analyze the data. The Findings of the study was majority of consumers preferred to purchase a brand of their own choice from local dealers and showrooms after going through information available from reference groups like friends, relatives, dealers etc. Features of laptops were considered the most important factor while purchasing laptop. A large number of consumers were brand loyal regarding new purchase of laptop but a majority of consumers were in favor of moving to new brand for their future purchase of a laptop.

A C Brahmbhatt, Sejal Acharya (2015) Conducted "A Study On Different Factors Influencing Consumers' Pre-Purchase Buying Behaviour Towards Laptop"**.** Objective of the Study was to identify the factors affecting buying behaviour of consumers from two cities of Gujarat State: Ahmedabad and Gandhinagar, with respected to branded laptops, to understand the usage pattern among users and extracting factors which influence the consumers' buying decisions. The respondents were selected from Ahmedabad and Gandhinagar, in the age group of 20 years and more, and were students, salaried and business persons. The sample size was 232. Primary data was collected to conduct the study by means of structured questionnaire via one-to-one interaction with the respondents. In this study, it has been found that there are basically four factors which influence the consumers' laptop purchase decisions. These factors can be stated as follows: technical specifications, Outlook of the product, purchase convenience and Affordability.

2.2 Research gap

Consumer behavior towards laptop brands help to know relationship existed among the demographic profile of the consumers, the most important pre-purchase buying criteria for a particular brand, and various decision making factors they used when considering the purchase. The review of literature reveals that various scholars at the international level have initiated different studies on different aspects of consumer behavior towards laptop. But at the national level there are very few studies initiated towards this topic. Moreover, in Bangladesh there is hardly any study about consumer behavior towards laptop. So that the present study will be an attempt to fill this gap.

CHAPTER-3

LAPTOP BUYING BEHAVIOR OF CONSUMER

3.1 Laptop

A laptop, often called a notebook, is a portable personal computer with a "clamshell" form factor, with a keyboard on the lower part of the "clamshell" and a thin computer screen on the upper portion, which is opened up to use the computer. The keyboard and screen are folded shut for transportation of the laptop. Laptops are suitable for mobile use. Although originally there was a distinction between laptops and notebooks, the former being bigger and heavier than the latter, as of 2014, there is often no longer any difference. Laptops are commonly used in a variety of settings, such as at work, in education, and for personal multimedia and home computer use. A laptop combines the components, inputs, outputs and capabilities of a desktop computer, including the display screen, speakers, a keyboard, pointing devices (such as a touchpad or track pad), a processor and memory into a single unit. Most 2016-era laptops also have integrated webcams and built-in microphones. The device can be powered either from a rechargeable battery or by mains electricity from an AC adapter.

3.2 Classification of laptop

Since the introduction of portable computers during late 70s, their form has changed significantly, spawning a variety of visually and technologically differing subclasses.

a) Traditional laptop

The form of a traditional laptop computer is a clamshell, with a screen on one of its inner sides and a keyboard on the opposite. It can be easily folded to conserve space while traveling. The screen and keyboard are inaccessible while closed. Devices of this form are commonly called a 'traditional laptop' or notebook, particularly if they have a screen size of 11 to 17 inches measured diagonally and run a full-featured operating system like Windows 10, OS X or Linux.

b) Subnotebook

A subnotebook or an ultraportable is a laptop designed and marketed with an emphasis on portability (small size, low weight and often longer battery life). Subnotebooks are usually

smaller and lighter than standard laptops, weighing between 0.8 and 2 kg, with a battery life exceeding 10 hours. Netbooks are a more basic and cheap type of subnotebook, and while some ultrabooks have a screen size too large to qualify as subnotebooks, certain ultrabooks fit in a subnotebook category. One notable example of a subnotebook is Apple Macbook Air.

Figure 3.1

Classification of laptop
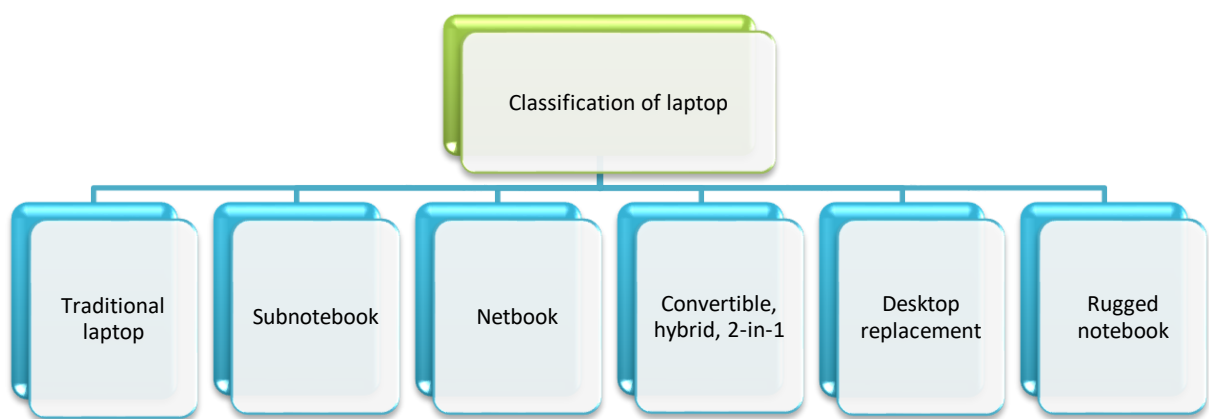
Source: Developed by Researcher

c) Netbook

The netbook was an inexpensive, light-weight, energy-efficient form of laptop, especially suited for wireless communication and Internet access. Netbooks first became commercially available around 2008, weighing under 1 kg, and with a display size of under 9". The name netbook (with net short for Internet) is used as "the device excels in web-based computing performance". To begin with, netbooks were mostly sold with light-weight variants of the Linux operating system, although later versions often have Windows XP or Windows 7 operating systems.

d) Convertible, hybrid, 2-in-1

The latest trend of technological convergence in a portable computer industry spawned a broad range of devices, with a combined feature of several previously separate device types. The hybrids, convertibles and 2-in-1s emerged, crossover devices, which share traits of both tablets and laptops. All such devices have a touchscreen display designed to allow users to work in a tablet mode, using either multi-touch gestures or a stylus/digital pen.

Convertibles are devices with a some possibility to conceal a hardware keyboard. Hybrids have a keyboard detachment mechanism, and due to this fact all critical components are situated in the part with the display. 2-in-1s can have a hybrid or a convertible form, often dubbed 2-in-1 detachables and 2-in-1 convertibles respectively, but are distinguished by the ability to run a desktop OS, such as Windows 10.

e) Desktop replacement

A desktop-replacement laptop is a class of large device, which is not intended primarily for mobile use. They are bulkier and not as portable as other laptops, and are intended for use as compact and transportable alternatives to a desktop computer. Desktop replacements are larger and typically heavier than other classes of laptops. They are capable of containing more powerful components and have a 15-inch or larger display.

f) Rugged notebook

A rugged laptop is designed to reliably operate in harsh usage conditions such as strong vibrations, extreme temperatures, and wet or dusty environments. Rugged laptops are usually designed from scratch, rather than adapted from regular consumer laptop models. Rugged laptops are bulkier, heavier, and much more expensive than regular laptops, and thus are seldom seen in regular consumer use. The design features found in rugged laptops include a rubber sheeting under keyboard keys, a sealed port and connector covers, a passive cooling, very bright displays, easily readable in daylight. Rugged laptops are commonly used by public safety services (police, fire and medical emergency), military, utilities, field service technicians, construction, mining and oil drilling personnel.

3.3 Components of a laptop

In general, laptop components are not intended to be replaceable or upgradable. This is one of the major differences between laptops and desktop computers, because the large "tower" cases used in desktop computers are designed so that new motherboards, hard disks, sound cards, RAM and other components can be added.

The following list summarizes the differences and distinguishing features of laptop components in comparison to desktop personal computer parts.

a) Display

Most modern laptops feature a 13 inches (33 cm) or larger color active matrix displays based on LED lighting with resolutions of 1280×800 (16:10) or 1366×768 (16:9) pixels and above. Models with LED-based lighting offer lesser power consumption, and often higher brightness. Netbooks with a 10 inches (25 cm) or smaller screen typically use a resolution of 1024×600, while netbooks and subnotebooks with a 11.6 inches (29 cm) or 12 inches (30 cm) screen use standard notebook resolutions. Having a higher resolution display may allow more items to fit onscreen at a time, improving the user's ability to multitask.

Figure 3.2

Components of laptop
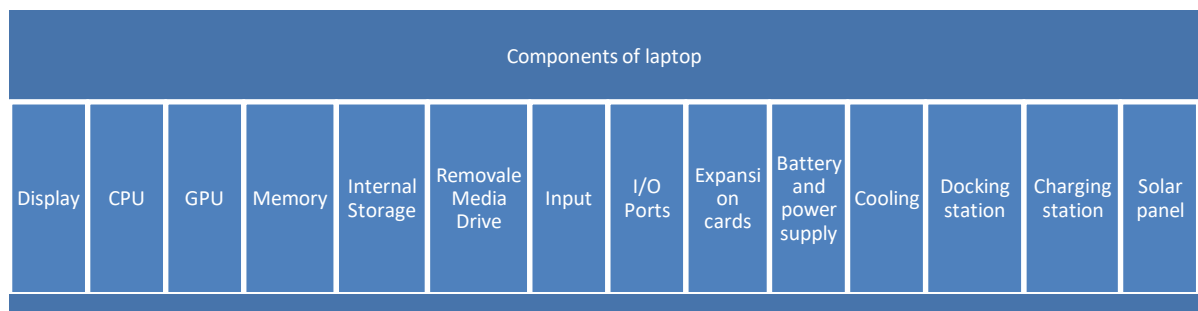
Source: Developed by Researcher

b) Central processing unit

A laptop's central processing unit (CPU) has advanced power-saving features and produces less heat, than one intended purely for desktop use. Typically laptop CPU have two processor cores, although 4-core models are also available. For low price and mainstream performance, there is no longer a significant performance difference between laptop and desktop CPUs, but at the high end the fastest 4-to-8-core desktop CPUs are still substantially outperform the fastest 4-core laptop processors, at the expense of massively higher power utilization and heat generation — the fastest laptop processors top out at 56 watts of heat, while the fastest desktop processors top out at 150 watts.

c) Graphical processing unit

Most laptops a graphical processing unit is integrated into the CPU to conserve power and space. This was introduced by Intel with the Core i-series of mobile processors in 2010, and similar APU processors by AMD later that year. Prior to that, lower-end machines tended to use graphics processors integrated to the system chipset, while higher end machines had a separate graphics processor. Since 2011, these almost always involve switchable graphics so that when there is not demand for the higher performance dedicated graphics processor, the more power-efficient integrated graphics processor will be used. Nvidia Optimus is an example of this sort of system of switchable graphics.

d) Memory

Most laptops use SO-DIMM memory modules, these are about half the size of desktop DIMMs. They may be accessible from the bottom of the laptop for ease of upgrading, or placed in locations not intended for user replacement. Most laptops have two memory slots, although some of the lowest-end will have only one, and some high end models have four. Most mid-range laptops are factory equipped with 4–6 GB of RAM. Netbooks are commonly equipped with only 1–2 GB of RAM and generally only expandable to 2 GB, if at all. Because of the limitation of DDR3 SO-DIMM to a maximum of 8 GB per module, this means most laptops can only be expanded to a total of 16 GB of memory, until systems using DDR4 memory start becoming available.

e) Internal storage

Traditionally laptops had a hard disk drive (HDD) as a main non-volatile storage, but it proved inefficient for use in mobile devices due to high power consumption, heat production and a presence of moving parts, which can cause damage to both the drive itself and the data stored, when a laptop is unstable physically. With the advent of flash memory technology, most mid- to high-end laptops opted to a more compact, power efficient and fast solid-state drives (SSD), which eliminated a hazard of a drive and data corruption, caused by a laptop physical impacts. A solid-state drive (SSD) is one of the most effective upgrades to make in a laptop and an excellent choice for a primary system disk. With their superior read and write speeds, they can instantly make operating system more responsive. Boot up and shut down times are significantly shorter as compared to mechanical disk, and applications will typically open much faster. SSDs have a higher

data transfer rate, lower power consumption, lower failure rate, and a larger capacity compared to HDDs. However, HDDs have a significantly lower cost. The largest current capacity of a hard drive is 10TB, while the largest capacity of a SSD is 16TB.

f) Removable media drive

CD/DVD/BD optical disc drive was nearly universal on full-sized models, and it remains fairly common for now in laptops with a screen wider than 15 inches (38 cm), although the trend towards thinner and lighter machines is gradually eliminating it. It is very uncommon in compact laptops, such as subnotebooks and netbooks. Laptop optical drives tend to follow a standard form factor, and usually have a standard mSATA connector. It is often possible to replace an optical drive with a newer model.

g) Input

A pointing stick, touchpad or both are used to control the position of the cursor on the screen, and an integrated keyboard is used for typing. An external keyboard and/or mouse may be connected using USB port, or wirelessly, e.g. via Bluetooth. With the advent of ultra books and support of touch input by recent operating systems, such as Windows 8.1, multitouch touchscreen display is a common feature of a modern laptop.

h) I/O ports

On a typical laptop there are several USB ports, an external monitor port (VGA, DVI, HDMI or Mini Display Port), audio in/out (often in form of a single socket) are common. It's possible to connect up to three external displays to a modern laptop via a single Mini Display Port, utilizing a multi-stream transport technology. Apple, in a 2015 version of its MacBook, transitioned from a number of different I/O ports to a single USB-C port. This port can be used both for charging and connecting variety of devices through the use of aftermarket adapters. Legacy ports such as a PS/2 keyboard/mouse port, serial port, parallel port or Firewire are increasingly rare. On Apple's systems, and on a handful of other laptops, there are also Thunderbolt ports.

i) Expansion cards

In the past, a PC Card (formerly PCMCIA) or Express Card slot for expansion cards was often present on laptops to allow adding and removing functionality, even when the laptop is powered on, these are becoming increasingly rare since the introduction of USB 3.0.

Some internal subsystems such as: Ethernet, Wi-Fi, or a Wireless cellular modem can be implemented as replaceable internal expansion cards, usually accessible under an access cover on the bottom of the laptop. The standards for such cards is PCI Express, which comes in both mini and even smaller M.2 sizes. In newer laptops it is not uncommon to also see Micro SATA (mSATA) functionality on PCI Express Mini or M.2 card slots allowing the use of those slots for SATA-based solid state drives.

j) Battery and power supply

Current laptops utilize lithium ion batteries, with some thinner models using the flatter lithium polymer technology. These two technologies have largely replaced the older nickel metal-hydride batteries. Battery life is highly variable by model and workload, and can range from one hour to nearly a day. A battery's performance gradually decreases over time, substantial reduction in capacity is typically evident after one to three years of regular use, depending on the charging and discharging pattern and the design of the battery. A laptop's battery is charged using an external power supply, which outputs a DC voltage typically in the range of 7.2—24 volts. The power supply is usually external, and connected to the laptop through a DC connector cable.

k) Cooling

Waste heat from operation is difficult to remove in the compact internal space of a laptop. Early laptops used heat sinks placed directly on the components to be cooled, but when these hot components are deep inside the device, a large space-wasting air duct is needed to exhaust the heat. Modern laptops instead rely on heat pipes to rapidly move waste heat towards the edges of the device, to allow for a much smaller and compact fan and heat sink cooling system. Waste heat is usually exhausted away from the device operator, towards the rear or sides of the device. Multiple air intake paths are used since some intakes can be blocked, such as when the device is placed on a soft conforming surface like a chair cushion.

l) Docking station

A docking station (sometimes referred to simply as a dock) is a laptop accessory that contains multiple ports, and in some cases also expansion slots and/or bays for fixed or removable drives. A laptop connects and disconnects easily to a docking station. These

devices simply mates to the connectors on the back of the laptop, or connects via a standardized port such as USB or FireWire.

m) Charging station

Laptop charging trolleys, also known as laptop trolleys or laptop carts, are mobile storage containers to charge laptops, netbooks and tablet computers all together. The trolleys are predominantly used in schools that have replaced their traditional static ICT suites of desktop computers with laptops, but do not have enough plug sockets in their buildings to charge all of the devices. Laptop charging trolleys were designed and constructed to protect against theft. They are generally made out of steel, and the laptops remain locked up while not in use.

3.4 Market share of laptop brands

Global notebook shipments dropped significantly in 2015 mainly due to the impact of currency depreciation on the demand in Europe and the emerging markets, such as Latin America. The release of Windows 10 in the third quarter and Skylake CPU in the fourth also influenced consumers' decision making and delayed notebook purchases. According to the global market research firm TrendForce, worldwide notebook shipments for 2015 totaled 164.4 million units, representing a year-on-year decline of 6.3%."HP and Lenovo will still be rivaling for the top spot in the notebook market during 2016," said TrendForce notebook analyst Anita Wang. "HP has a good chance of holding the most market share this year and maintaining its leadership position because of the relatively stronger U.S. market. Dell will likely retain third place in the notebook shipment ranking for this year. As for ASUS, Apple and Acer, their struggle for the fourth, fifth and sixth positions in the 2016 ranking will be fierce since they have similar market shares of just around 10%."Wang added that competing brands are waiting to take over Toshiba's remaining international market share as the Japanese brand may soon give up selling its notebooks abroad. Furthermore, South Korea's Samsung may try to revitalize its notebook business this year and aggressively expand the brand's market share. Microsoft and new entrants such as Xiaomi and Huawei will also roll out notebook products. However, shipments from these three brands will be limited this year because they will be just testing the market initially.

Table 3.1

Top Laptop Brands Worldwide by shipments, 2014-2016

Ranking	2014 Company	Market Share	2015 Company	Market Share	2016 Company	Market Share
1	HP	20.1%	HP	20.5%	HP	20.7%
2	Lenovo	17.5%	Lenovo	19.9%	Lenovo	20.0%
3	Dell	12.3%	Dell	13.7%	Dell	14.0%
4	Asus	11.0%	Apple	10.34%	Asus	10.7%
5	Acer	10.0%	Asus	10.31%	Apple	10.3%
6	Apple	9.3%	Acer	8.9%	Acer	9.0%
7	Toshiba	6.6%	Toshiba	4.2%	Samsung	2.4%
8	Samsung	2.7%	Samsung	1.7%	Toshiba	1.6%
9	Vaio(Sony)	0.6%				
	Others	9.9%		10.3%		11.4%
Shipmenmt Toal (Unit:M)		175.5		164.4		159.2

Note: Vaio (sony) was included in "others category" in 2015

Source: TrendForce, Feb, 2016

These figures fit into a general trend. A report from Gartner published in January showed that there was an 8.3 percent decline in PC shipments in the final quarter of 2015. The margin between HP and Lenovo is pretty tight, both teetering around the 20 percent mark, said TrendForce and the two will continue to duke it out for the rest of the year.

3.5 Buyer Behavior Model

Consumer behaviour is a wide range of study about the decision making processes that a consumer make at the time of making a purchase. According to Kotler (2009) "Consumer behaviour is the study of how individuals or groups buy, use and dispose of goods, services, ideas or experience to satisfy their needs or wants".

These actions are determined by psychological and economical factors, and are influenced by environmental factors such as cultural, group, and social values. The process of buyer behavior is given below.

a) Need Recognition

The first stage in the consumer decision-making process is need recognition. Need recognition occurs when consumers are faced with an imbalance between actual and desired states. Need recognition is triggered when a consumer is exposed to either an internal or an external stimulus. Internal stimuli are occurrences you experience, such as hunger or thirst. External stimuli are influences from an outside source such as someone's recommendation of a new restaurant, the design of a package, or an advertisement on television or radio.

Figure 3.3

Buying Behavior Model
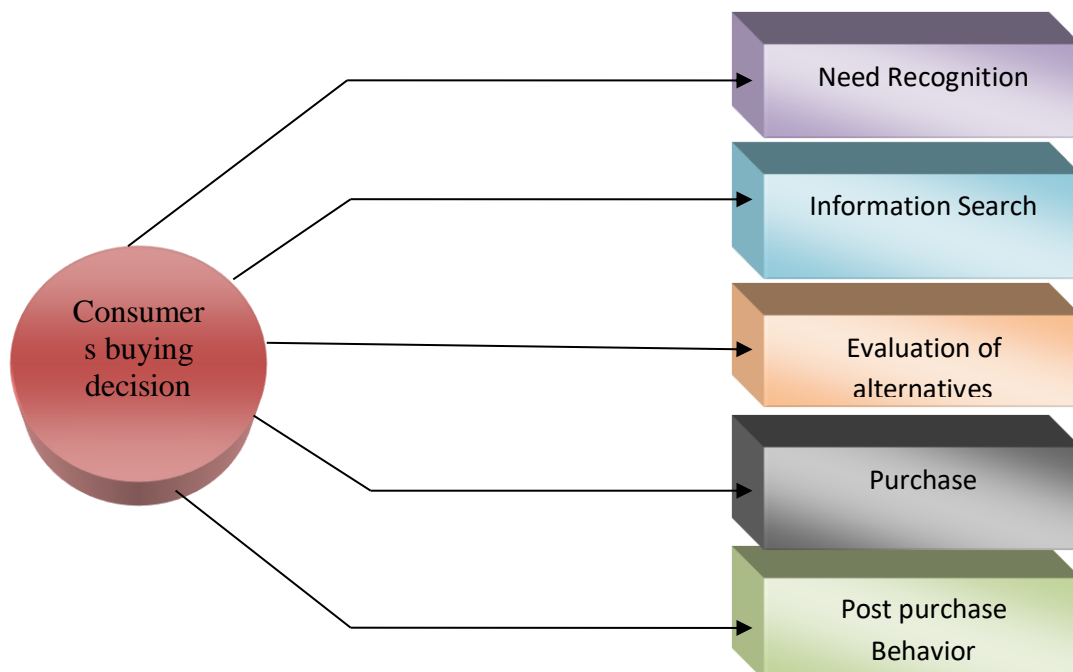
Source: Developed by Researcher

b) Information Search

After recognizing a need or want, consumers search for information about the various alternatives available to satisfy it. An information search can occur internally, externally, or both. In an internal information search, the person recalls information stored in the memory. This stored information stems largely from previous experience with a product, for example, recalling whether a hotel where you stayed earlier in the year had clean rooms and friendly service. In contrast, an external information search seeks information in the outside environment. These information sources include personal experiences; personal sources (family, friends, acquaintances, and coworkers); and public sources, such

as Underwriters Laboratories, Consumer Reports, rating organizaions, mass-media advertising (radio, newspaper, television, and magazine advertising), sales promotion (contests, displays, premiums),salespeople, product labels and packaging, and the Internet.

c) Evaluation of Alternatives

After getting information and constructing an evoked set of alternative products, the consumer is ready to make a decision. A consumer will use the information stored in memory and obtained from outside sources to develop a set of criteria. These standards help the consumer evaluate and compare alternatives. One way to begin narrowing the number of choices in the evoked set is to pick a product attribute and then exclude all products in the set that don't have that attribute.

d) Purchase

Following the evaluation of alternatives, the consumer decides which product to buy or decides not to buy a product at all. If he or she decides to make a purchase, the next step in the process is an evaluation of the product after the purchase.

e) Post purchase Behavior

When buying products, consumers expect certain outcomes from the purchase. How well these expectations are met determines whether the consumer is satisfied or dissatisfied with the purchase. For the marketer, an important element of any postpurchase evaluation is reducing any lingering doubts that the decision was sound. When people recognize inconsistency between their values or opinions and their behavior, they tend to feel an inner tension called cognitive dissonance.

3.6 Factors influencing buying behavior

Influence is the power to have an important effect on someone or something. Sometimes a person who influences another doesn't intend to have any effect, but sometimes they are using influence to benefit themselves. There are some influencing factors that cause consumers to develop product and brand preferences.

3.6.1 External Influence on consumer behaviour

I.   **Culture**

Culture is the accumulation of shared meaning, rituals, norms and traditions among the members of an organization or society. A consumer's culture determines the overall

priorities he/she attaches to different activities and product. Culture can be considered as a lifestyle which is then passed on from one generation to the other generation.

II.   **Demographic**

An age cohort consists of people of similar ages who have undergone similar experience. They share many common memories about culture heroes, importance of historic event and so on. Marketers often target products or services to one or more specific age cohorts. They recognize that the same offering will probably not appeal to people of different ages, nor will the language and image they use to reach them.

Figure 3.4

Factors influencing buying behavior

External Influence	Internal Influence
Culture	Perception
Demographic	Learning
Social status	Memory
Reference group	Motivation
Family	Personality
Marketing activities	Attitude
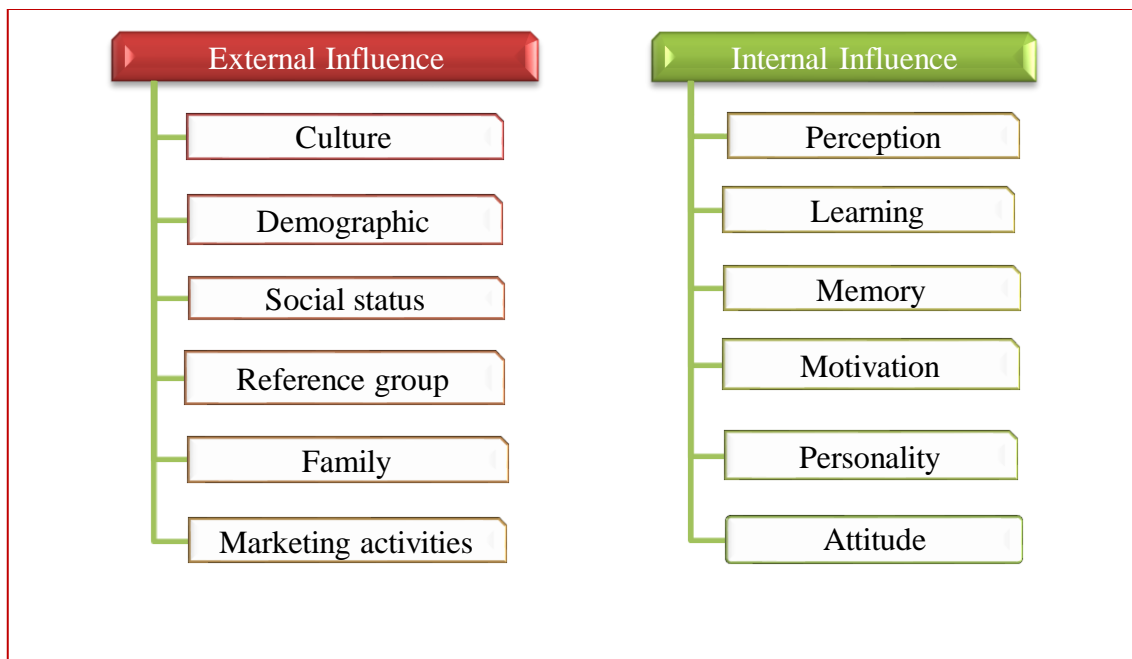
Source: Developed by Researcher

III.   **Social Status**

Different products and stores are perceived by consumers to be appropriate for certain social classes .Working class consumer tends to evaluate products in more utilitarian terms such as sturdiness or comfort rather than style or fashion. They are less likely to experiment with new products or styles. Each individual's social status or personality also influences the consumption behaviour.

IV. **Reference Groups**

A reference group is an actual or imaginary individual or group conceived of having significant relevance upon an individual evaluations, aspiration or behaviour. Reference group that affect the consumption can include parents, fellow enthusiast, team members, classmate etc. A reference group can take the form of a large, formal organization that has a recognized structure, regular meeting times and officers, or it can be small and informal, such as a group of friends or student living in hostels.

V. **Family**

Family is considered as the most important consumer consumption organization in society, and members of a family constitute the most influential primary reference group. Family members play certain roles in the decision-making process, namely the information gatherer who has the influence on how and where information is gathered, the influencer who has the influence on different brands are evaluated, the decision maker who has the influence on which product will be bought.

VI. **Marketing Activities**

We are surrounded by marketing stimuli in form of advertisement, shops and products competing for our attention and our cash. Popular culture, the music, films, sports, books and other forms of entertainment consumed by mass market is both a product of and an inspiration for marketers (Solomon, 2006).

3.6.2 Internal influence on consumer behaviour

I. **Perception**

Perception refers to the many different ways that an individual can sense external information, select particular sources of information and how they interoperate this information. Perception is the process by which people select, organize, and interpret information to form the image of certain things. People perceive the same situation differently because they interpret and organize information uniquely.

II. **Learning**

Learning induces changes in consumers' behaviour arising from experience. Actually most human behaviour is learned. Learning is formed through the interplay of drives, stimuli, cues, responses, and reinforcement. A drive is a strong internal stimulus that propels actual action. Cues such as advertising are minor stimuli, which determine when, where, and how a person responds. Response is an effort that people make to satisfy the drive by obtaining

a product. Reinforcement happens once a consumer has bought the product and is satisfied after using it.

III.   Memory

All the information and experiences people confront, as they go through life, become part of the memory. Consumer brand knowledge can be considered as a spreading activation process in the memory network with a variety of linked associations that determines how people retrieve and what information people can recall in the given situation. These linked associations are important determinants for people to recall about the brand, including brand-related thoughts, feelings, perceptions, images, experiences, beliefs, and attitudes.

IV.   Motivation

Factors that stimulate desire and energy in people to be continually interested and committed to a job, role or subject, or to make an effort to attain a goal. Motivation results from the interaction of both conscious and unconscious factors such as the intensity of desire or need, incentive or reward value of the goal, and expectations of the individual and of his or her peers. These factors are the reasons one has for behaving a certain way.

V.   Personality

Personality describes a person's disposition, helps show why people are different, and encompasses a person's unique traits. The "Big Five" personality traits that psychologists discuss frequently include openness or how open you are to new experiences, conscientiousness or how diligent you are, extraversion or how outgoing or shy you are, agreeableness or how easy you are to get along with.

VI.   Attitude

"Attitudes are learned predispositions to respond to an object, or class object, in a consistently favourable or unfavourable way". Attitudes are "mental positions" or emotional feelings, favourable or unfavourable evaluations, and action tendencies people have about products, services, companies, ideas, issues, or institutions. Attitudes tend to be enduring, and because they are based on people's values and beliefs. they are hard to change. Laptop companies want people to have positive feelings about their offerings.

CHAPTER-4

DATA ANALYSIS AND INTERPRETATION

4.1 Frequency Distribution of Demographic Profile

Table 4.1.1

Gender distribution of the respondent

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	58	28.7	58.0	58.0
Female	42	20.8	42.0	100.0
Total	100	49.5	100.0	

Source: Field Survey 2016.

Chart 4.1.1

Gender distribution of the respondent
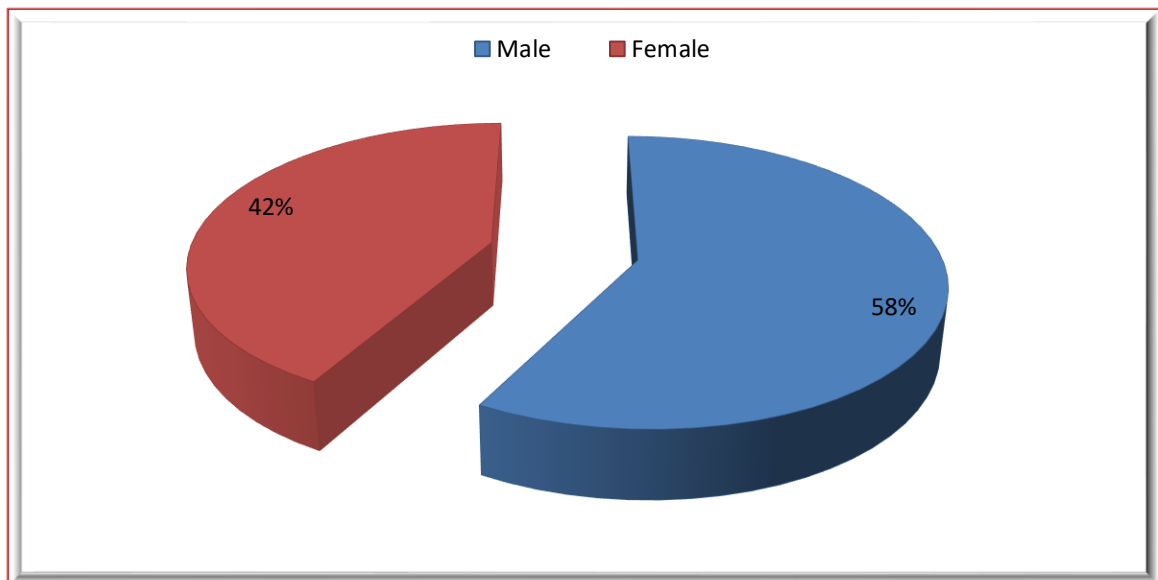
Interpretation: Gender is highly involved with the consumer buying decision of purchasing laptop. From the gender table and pie chart, it is shown that 58 percent male and 42 percent female are involved of buying decision of purchasing laptop.

Table 4.1.2

Age distribution of the respondent

	Frequency	Percent	Valid Percent	Cumulative Percent
Less than 25	50	24.8	50.0	50.0
25-34	36	17.8	36.0	86.0
35-44	10	5.0	10.0	96.0
45-above	4	2.0	4.0	100.0
Total	100	49.5	100.0	

Source: Field Survey 2016.

Chart 4.1.2

Age distribution of the respondent
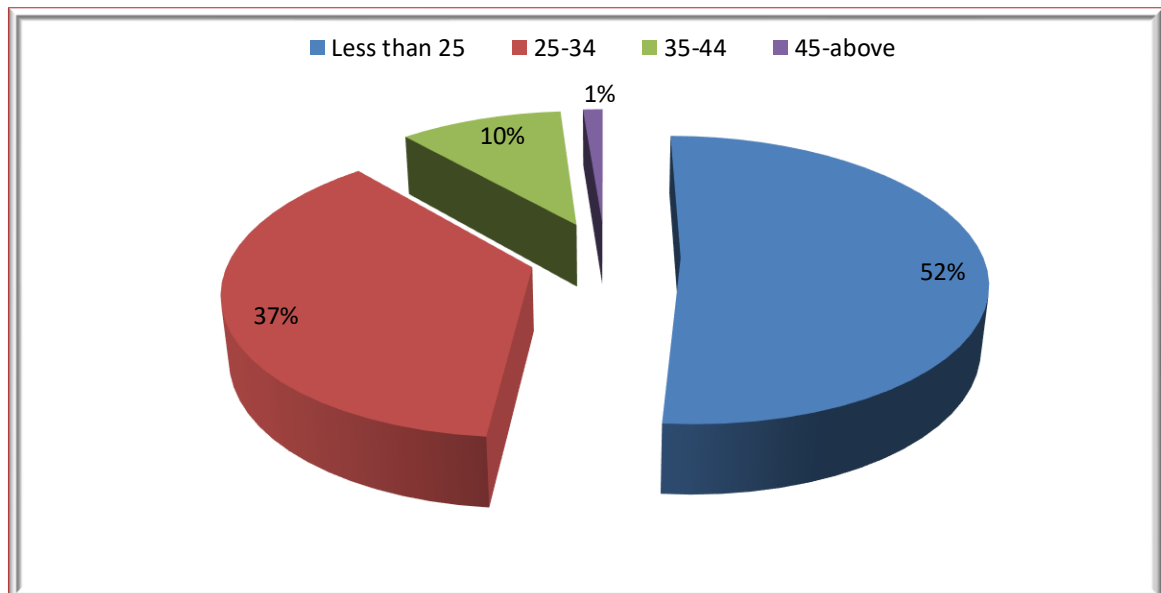
Interpretation: Age of the people is highly involved with buying decision of purchasing laptop. From the age table and pie chart, it is shown that 50 percent of people used laptop having age less than 25 years. Besides this, 36 percent, 10 percent and 4 percent of people involved who have age between 25-34years, 35-44 years and 45+ years respectively.

Table 4.1.3

Education distribution of the respondent

	Frequency	Percent	Valid Percent	Cumulative Percent
S.S.C.	2	1.0	2.0	2.0
H.S.C.	6	3.0	6.0	8.0
Bachelor	54	26.7	54.0	62.0
Masters and above	38	18.8	38.0	100.0
Total	100	49.5	100.0	

Source: Field Survey, 2016.

Table 4.1.3

Education distribution of the respondent
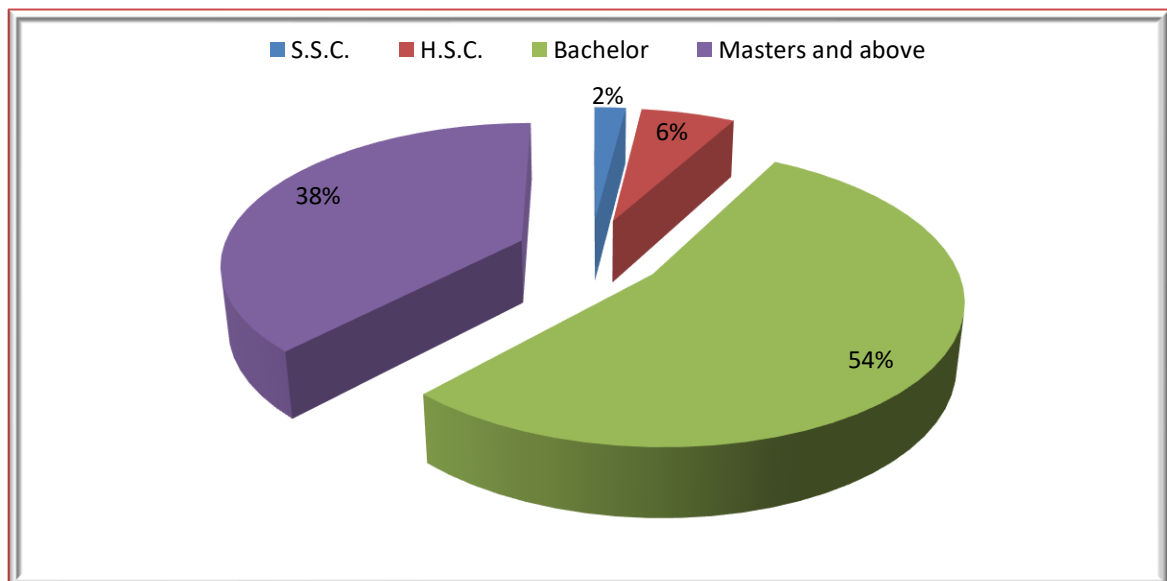
Interpretation: Education is very important demographic factors for buying decision of purchasing laptop. From the above table and pie chart, it is shown that, among the 100 respondents only 2 percent are S.S.C, 6 percent are H.S.C.54 percent are Bachelor and 38 percent are Masters and above.

Table 4.1.4

Profession distribution of the respondent

	Frequency	Percent	Valid Percent	Cumulative Percent
Student	56	27.7	56.0	56.0
Business	16	7.9	16.0	72.0
Service holder	24	11.9	24.0	96.0
Others	4	2.0	4.0	100.0
Total	100	49.5	100.0	

Source: Field Survey, 2016.

Chart 4.1.4

Profession distribution of the respondent
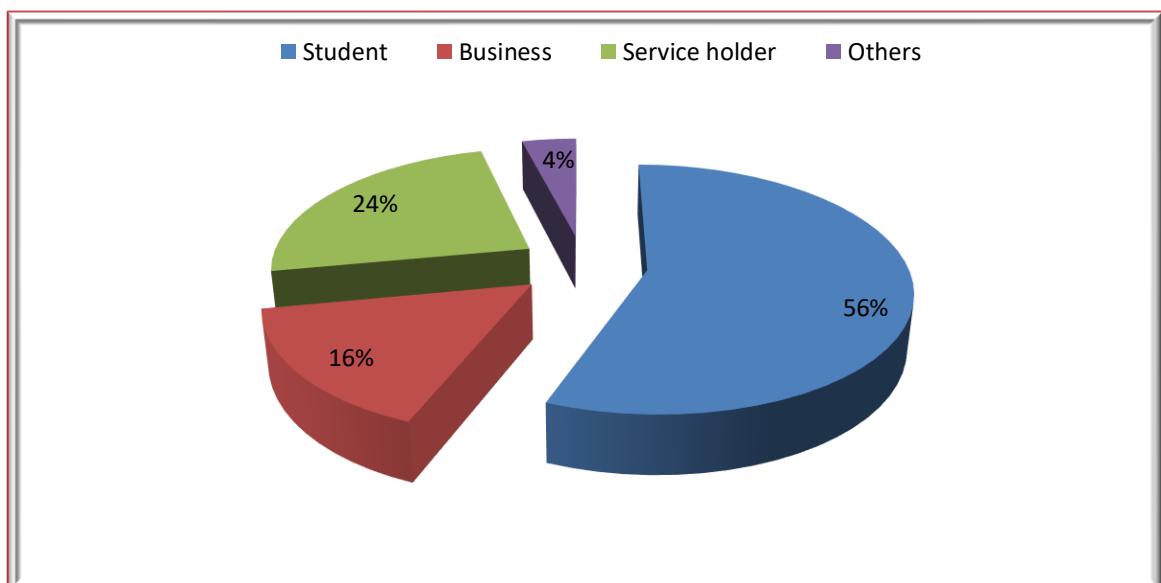
Interpretation: Profession is also very important demographic factors for buying decision of purchasing laptop. There are many people having various types of profession. From the table it is shown that, 56 percent are student, 16 percent are involved with business, 24 percent are involved with service and 4 percent are involved with others profession.

Table 4.1.5

Income distribution of the respondent

	Frequency	Percent	Valid Percent	Cumulative Percent
Less than 10,000	44	21.8	44.0	44.0
10,001-20,000	20	9.9	20.0	64.0
20,001-30,000	16	7.9	16.0	80.0
30,001-above	20	9.9	20.0	100.0
Total	100	49.5	100.0	

Source: Field Survey, 2016.

Chart 4.1.5

Income distribution of the respondent
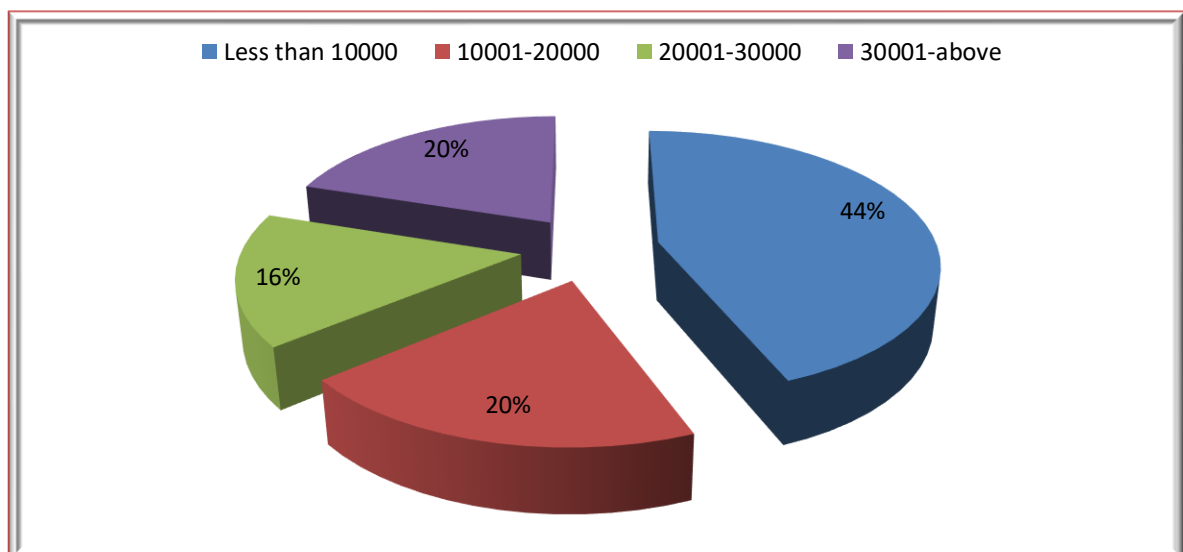
Interpretation: Income of the people is another important demographic factor for purchasing laptop. From the above table and pie chart, it is shows that 44 percent of 100 sample sizes are in less than10,000 income group, 20 percent are in 10,001- 20000, 16 percent are in 20,001-30000 and 20 percent are in 30,000+ income group.

4.2. Brand Usage Profile of Customers

<div align="center">

Table 4.2.1

Brand Usage distribution of the respondent

</div>

	Frequency	Percent	Valid Percent	Cumulative Percent
Lenovo	14	6.9	14.0	14.0
HP	22	10.9	22.0	36.0
Toshiba	14	6.9	14.0	50.0
Acer	10	5.0	10.0	60.0
Asus	4	2.0	4.0	64.0
Dell	22	10.9	22.0	86.0
Other	14	6.9	14.0	100.0
Total	100	49.5	100.0	

Source: Field Survey, 2016.

<div align="center">

Chart 4.2.1

Brand Usage distribution of the respondent

</div>
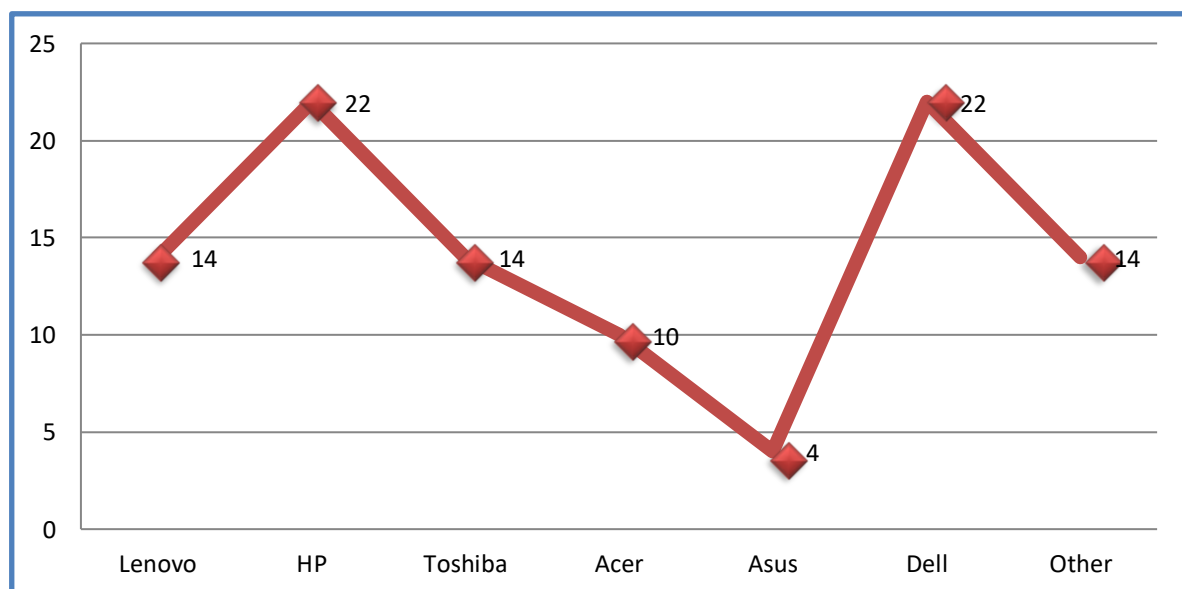
Interpretation: From The above table and chart it is clearly states that among the 100 respondents 14% are using Lenovo, 22% of respondents are using HP, 14% are using Toshiba, 10% are using Acer, 4% are using Asus, 22% are using Dell and 14% are using other brands of laptop.

4.3 Frequency Distribution of Pre-purchase factors

Here pre- purchase factors are the factors that customer consider before buying a particular laptop brand such as-processor, memory, hard disk, color, weight, type of keyboard, battery life, guarantee warrantee conditions, display quality, speakers, internet facility, ease of usage, DVD-CD player etc. The frequency distribution table shows that from the total of 100 respondents what percentage of the respondents are strongly disagree, disagree, agree, strongly agree or neither agree nor disagree towards a particular pre purchase factors. The table also shows the cumulative percentage of the respondents.

Table 4.3.1

Respondent's perception towards Processor speed of laptop

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	4	2.0	4.0	4.0
Neutral	16	7.9	16.0	20.0
Agree	24	11.9	24.0	44.0
Strongly Agree	56	27.7	56.0	100.0
Total	100	49.5	100.0	

Source: Field Survey, 2016.

Interpretation: From the above table, it is shown that 4 % of the respondent from the survey are strongly disagree, 16 % are Neutral, 24 % are agree and 56 % are strongly agree with the processsor speed and type as a pre purchase factor of buying a laptop. None of them are disagree with this factor before buying a laptop.

Table 4.3.2

Respondent's perception towards Memory of laptop

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	4	2.0	4.0	4.0
Disagree	6	3.0	6.0	10.0
Neutral	12	5.9	12.0	22.0
Agree	38	18.8	38.0	60.0
Strongly Agree	40	19.8	40.0	100.0
Total	100	49.5	100.0	

Source: Field Survey, 2016.

Interpretation: From the above table it is shown that 4% of the respondent from the survey are strongly disagree, 4% of the respondent are disagree,12% are Neutral, 38% are agree and 40% are strongly agree with the memory capacity as a pre purchase factor of buying a laptop.

Table 4.3.3

Respondent's perception towards Hard disk capacity

	Frequency	Percent	Valid Percent	Cumulative Percent
Disagree	6	3.0	6.0	6.0
Neutral	8	4.0	8.0	14.0
Agree	24	11.9	24.0	38.0
Strongly Agree	62	30.7	62.0	100.0
Total	100	49.5	100.0	

Source: Field Survey, 2016.

Interpretation: From the above table, it is shown that 0% of the respondent from the survey are strongly disagree, 6% of the respondent are disagree,8% are Neutral, 24% are agree and 62% are strongly agree with the hard disk capacity as a pre purchase factor of buying a laptop.

Table 4.3.4

Respondent's perception towards Guarantee and warranty condition

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	8	4.0	8.0	8.0
Disagree	2	1.0	2.0	10.0
Neutral	12	5.9	12.0	22.0
Agree	22	10.9	22.0	44.0
Strongly Agree	56	27.7	56.0	100.0
Total	100	49.5	100.0	

Source: Field Survey, 2016.

Interpretation: From the above table, it is shown that 8% of the respondent from the survey are strongly disagree, Only 2% of the respondent are disagree,12% are Neutral, 22% are agree and 56% are strongly agree with the Guarantee warranty condition as a pre purchase factor of buying a laptop.

Table 4.3.5

Respondent's perception towards Weight of laptop

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	6	3.0	6.0	6.0
Disagree	18	8.9	18.0	24.0
Neutral	34	16.8	34.0	58.0
Agree	24	11.9	24.0	82.0
Strongly Agree	18	8.9	18.0	100.0
Total	100	49.5	100.0	

Source: Field Survey, 2016.

Interpretation: From the above table, it is shown that 6% of the respondent from the survey are strongly disagree, 18% of the respondent are disagree, 34% are Neutral, 24% are agree and 18% are strongly agree with weight of a laptop as a pre purchase factor of buying a laptop.

Table 4.3.6

Respondent's perception towards Spill resistant keyboard

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	8	4.0	8.0	8.0
Disagree	14	6.9	14.0	22.0
Neutral	16	7.9	16.0	38.0
Agree	42	20.8	42.0	80.0
Strongly Agree	20	9.9	20.0	100.0
Total	100	49.5	100.0	

Source: Field Survey, 2016.

Interpretation: From the above table, it is shown that 8% of the respondent from the survey are strongly disagree, 14% of the respondent are disagree,16% are Neutral, 42% are agree and 20% are strongly agree with the spill resistant keyboard as a pre purchase factor of buying a laptop.

Table 4.3.7

Respondent's perception towards Number of USB ports

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	2	1.0	2.0	2.0
Disagree	8	4.0	8.0	10.0
Neutral	36	17.8	36.0	46.0
Agree	26	12.9	26.0	72.0
Strongly Agree	28	13.9	28.0	100.0
Total	100	49.5	100.0	

Source: Field Survey, 2016.

Interpretation: From the above table, it is shown that only 2% of the respondent from the survey are strongly disagree, 8% of the respondent are disagree,35% are Neutral, 26% are agree and 28% are strongly agree with the number of USB ports as a pre purchase factor of buying a laptop.

Table 4.3.8

Respondent's perception towards Design of laptop

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	2	1.0	2.0	2.0
Disagree	8	4.0	8.0	10.0
Neutral	32	15.8	32.0	42.0
Agree	30	14.9	30.0	72.0
Strongly Agree	28	13.9	28.0	100.0
Total	100	49.5	100.0	

Source: Field Survey, 2016.

Interpretation: From the above table and, it is shown that 2% of the respondent from the survey are strongly disagree, 8% of the respondent are disagree,32% are Neutral, 30% are agree and 28% are strongly agree with the memory capacity as a pre purchase factor of buying a laptop.

Table 4.3.9

Respondent's perception towards Color of laptop

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	2	1.0	2.0	2.0
Disagree	14	6.9	14.0	16.0
Neutral	26	12.9	26.0	42.0
Agree	32	15.8	32.0	74.0
Strongly Agree	26	12.9	26.0	100.0
Total	100	49.5	100.0	

Source: Field Survey, 2016.

Interpretation: From the above table, it is shown that only 2% of the respondent from the survey are strongly disagree, 14% of the respondent are disagree,26% are Neutral, 32% are agree and 26% are strongly agree with the various color of a laptop as a pre purchase factor of buying a particular laptop.

Table 4.3.10

Respondent's perception towards Battery life of laptop

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	6	3.0	6.0	6.0
Disagree	4	2.0	4.0	10.0
Neutral	6	3.0	6.0	16.0
Agree	24	11.9	24.0	40.0
Strongly Agree	60	29.7	60.0	100.0
Total	100	49.5	100.0	

Source: Field Survey, 2016.

Interpretation: From the above table, it is shown that 6% of the respondent from the survey are strongly disagree, only 4% of the respondent are disagree,6% are Neutral, 24% are agree and 60% are strongly agree with the battery life of laptop as a pre purchase factor of buying a laptop.

Table 4.3.11

Respondent's perception towards Display resolution quality

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	6	3.0	6.0	6.0
Disagree	2	1.0	2.0	8.0
Neutral	20	9.9	20.0	28.0
Agree	30	14.9	30.0	58.0
Strongly Agree	42	20.8	42.0	100.0
Total	100	49.5	100.0	

Source: Field Survey, 2016.

Interpretation: From the above table, it is shown that 6% of the respondent   from the survey are strongly disagree, 2% of the respondent are disagree,20% are Neutral, 30% are agree and 42% are strongly agree with the Display resolution quality as a pre purchase factor of buying a laptop.

Table 4.3.12

Respondent's perception towards Speakers of laptop

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	4	2.0	4.0	4.0
Disagree	6	3.0	6.0	10.0
Neutral	30	14.9	30.0	40.0
Agree	34	16.8	34.0	74.0
Strongly Agree	26	12.9	26.0	100.0
Total	100	49.5	100.0	

Source: Field Survey, 2016.

Interpretation: From the above table, it is shown that 4% of the respondent from the survey are strongly disagree, 6% of the respondent are disagree,30% are Neutral, 34% are agree and 26% are strongly agree with the Speakers as a pre purchase factor of buying a laptop.

Table 4.3.13

Respondent's perception towards Modem/internet facility

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	8	4.0	8.0	8.0
Disagree	4	2.0	4.0	12.0
Neutral	6	3.0	6.0	18.0
Agree	24	11.9	24.0	42.0
Strongly Agree	58	28.7	58.0	100.0
Total	100	49.5	100.0	

Source: Field Survey, 2016.

Interpretation: From the above table, it is shown that 8% of the respondent from the survey are strongly disagree, 4% of the respondent are disagree,6% are Neutral, 24% are agree and 58% are strongly agree with the Modem/internet facility   as a pre purchase factor of buying a laptop.

Table 4.3.14

Respondents perception towards Ease of Usage

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	4	2.0	4.0	4.0
Disagree	4	2.0	4.0	8.0
Neutral	20	9.9	20.0	28.0
Agree	32	15.8	32.0	60.0
Strongly Agree	40	19.8	40.0	100.0
Total	100	49.5	100.0	

Source: Field Survey, 2016.

Interpretation: From the above table, it is shown that 4% of the respondent from the survey are strongly disagree, 4% of the respondent are disagree,20% are Neutral, 32% are agree and 40% are strongly agree with the Ease of Usage as a pre purchase factor of buying a laptop.

Table 4.3.15

Respondent's perception towards DVD&CD player

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	4	2.0	4.0	4.0
Disagree	4	2.0	4.0	8.0
Neutral	30	14.9	30.0	38.0
Agree	38	18.8	38.0	76.0
Strongly Agree	24	11.9	24.0	100.0
Total	100	49.5	100.0	

Source: Field Survey, 2016.

Interpretation: From the above table, it is shown that 5% of the respondent from the survey are strongly disagree, 4% of the respondent are disagree,33% are Neutral, 31% are agree and 27% are strongly agree with the DVD&CD player as a pre purchase factor of buying a laptop.

4.4 Frequency Distribution of Decision making factors

Table 4.4.1

Respondent's perception towards Price of laptop

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	10	5.0	10.0	10.0
Disagree	4	2.0	4.0	14.0
Neutral	22	10.9	22.0	36.0
Agree	32	15.8	32.0	68.0
Strongly Agree	32	15.8	32.0	100.0
Total	100	49.5	100.0	

Source: Field Survey, 2016.

Chart 4.4.1

Respondent's perception towards Price of laptop
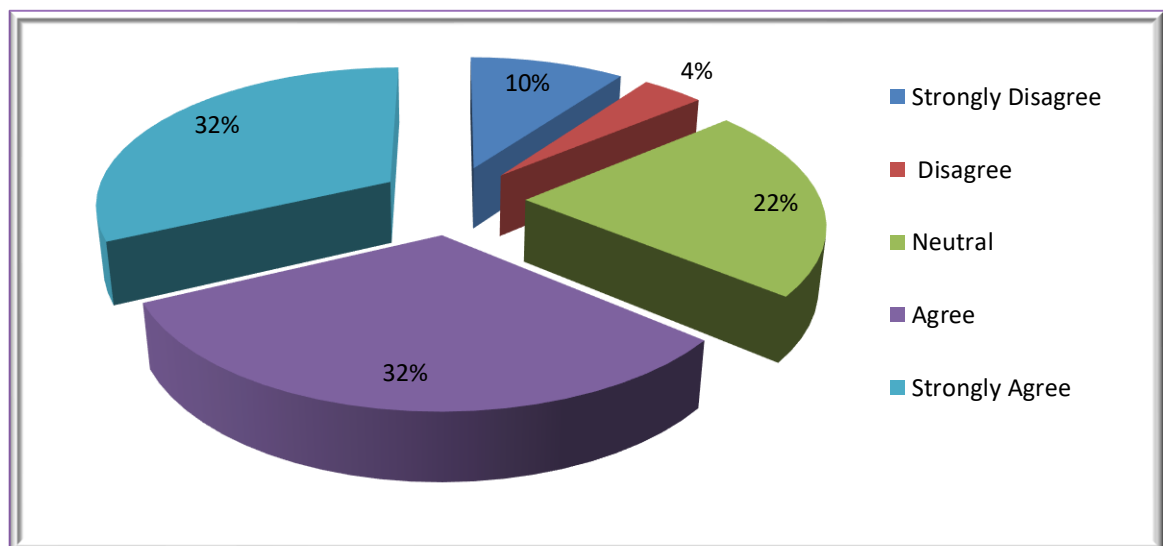
Interpretation: From the above table and pie chart, it is shown that 10% of the respondent from the survey are strongly disagree, 4% of the respondent are disagree, 22% are Neutral, 32% are agree and 32% are strongly agree with the Price as a decision making factor of purchasing a particular laptop brand.

Table 4.4.2

Respondent's perception towards Quality of laptop

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	2	1.0	2.0	2.0
Disagree	4	2.0	4.0	6.0
Neutral	10	5.0	10.0	16.0
Agree	24	11.9	24.0	40.0
Strongly Agree	60	29.7	60.0	100.0
Total	100	49.5	100.0	

Source: Field Survey, 2016.

Chart 4.4.2

Respondent's perception towards Quality of laptop

Interpretation: From the above table and pie chart, it is shown that 2% of the respondent from the survey are strongly disagree, 4% of the respondent are disagree,10% are Neutral,24% are agree and 60% are strongly agree with the Quality as a decision making factor of purchasing a particular laptop brand.

Table 4.4.3

Respondent's perception towards Advertisement of laptop

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	6	3.0	6.0	6.0
Disagree	6	3.0	6.0	12.0
Neutral	36	17.8	36.0	48.0
Agree	40	19.8	40.0	88.0
Strongly Agree	12	5.9	12.0	100.0
Total	100	49.5	100.0	

Source: Field Survey, 2016.

Chart 4.4.3

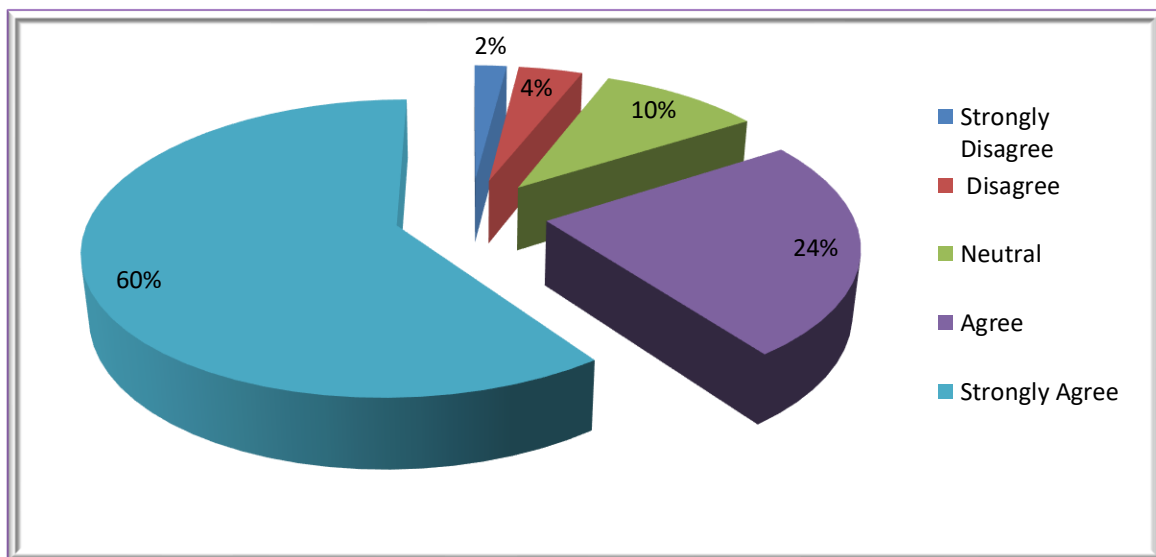**Respondent's perception towards Advertisement of laptop**

Interpretation: From the above table and pie chart, it is shown that 6% of the respondent from the survey are strongly disagree, 6% of the respondent are disagree,6% are Neutral, 36% are agree and 40% are strongly agree with the Advertisement as a decision making factor of purchasing a particular laptop brand.

Table 4.4.4

Respondent's perception towards Availability of laptop

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	6	3.0	6.0	6.0
Disagree	4	2.0	4.0	10.0
Neutral	16	7.9	16.0	26.0
Agree	44	21.8	44.0	70.0
Strongly Agree	30	14.9	30.0	100.0
Total	100	49.5	100.0	

Source: Field Survey, 2016.

Chart 4.4.4

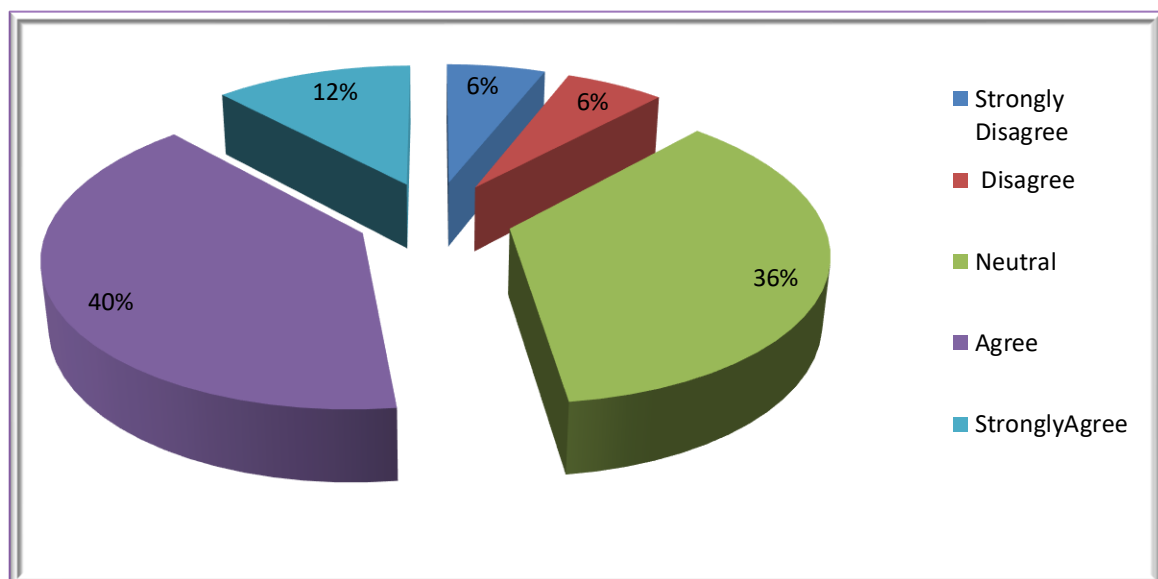**Respondent's perception towards Availability of laptop**

Interpretation: From the above table and pie chart, it is shown that 6% of the respondent from the survey are strongly disagree, 4% of the respondent are disagree,16% are Neutral, 44% are agree and 30% are strongly agree with the Availability as a decision making factor of purchasing a particular laptop brand.

Table 4.4.5

Respondent's perception towards Brand image of laptop

	Frequency	Percent	Valid Percent	Cumulative Percent
Disagree	2	1.0	2.0	2.0
Neutral	16	7.9	16.0	18.0
Agree	30	14.9	30.0	48.0
Strongly Agree	52	25.7	52.0	100.0
Total	100	49.5	100.0	

Source: Field Survey, 2016.

Chart 4.4.5

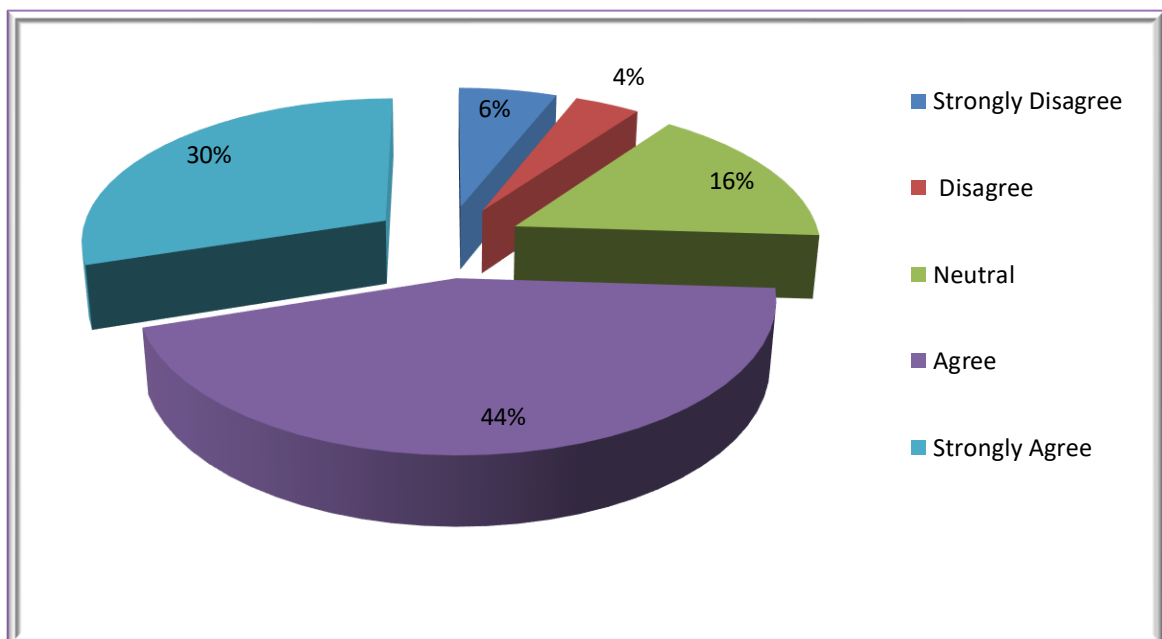**Respondent's perception towards Brand image of laptop**

Interpretation: From the above table and pie chart, it is shown that 0% of the respondent from the survey are strongly disagree, 2% of the respondent are disagree,16% are Neutral, 30% are agree and 52% are strongly agree with the Brand image as a decision making factor of purchasing a particular laptop brand.

Table 4.4.6

Respondent's perception towards After sale service of laptop

	Frequency	Percent	Valid Percent	Cumulative Percent
Disagree	2	1.0	2.0	2.0
Neutral	12	5.9	12.0	14.0
Agree	22	10.9	22.0	36.0
Strongly Agree	64	31.7	64.0	100.0
Total	100	49.5	100.0	

Source: Field Survey, 2016.

Chart 4.4.6

Respondent's perception towards After sale service of laptop

Interpretation: From the above table and pie chart, it is shown that 0% of the respondent from the survey are strongly disagree, 2% of the respondent are disagree,12% are Neutral, 22% are agree and 64% are strongly agree with the After sale service as a decision making factor of purchasing a particular laptop brand.

Table 4.4.7

Respondent's perception towards Discount offer of laptop

	Frequency	Percent	Valid Percent	Cumulative Percent
Disagree	20	9.9	20.0	20.0
Neutral	28	13.9	28.0	48.0
Agree	34	16.8	34.0	82.0
Strongly Agree	18	8.9	18.0	100.0
Total	100	49.5	100.0	

Source: Field Survey, 2016.

Chart 4.4.7

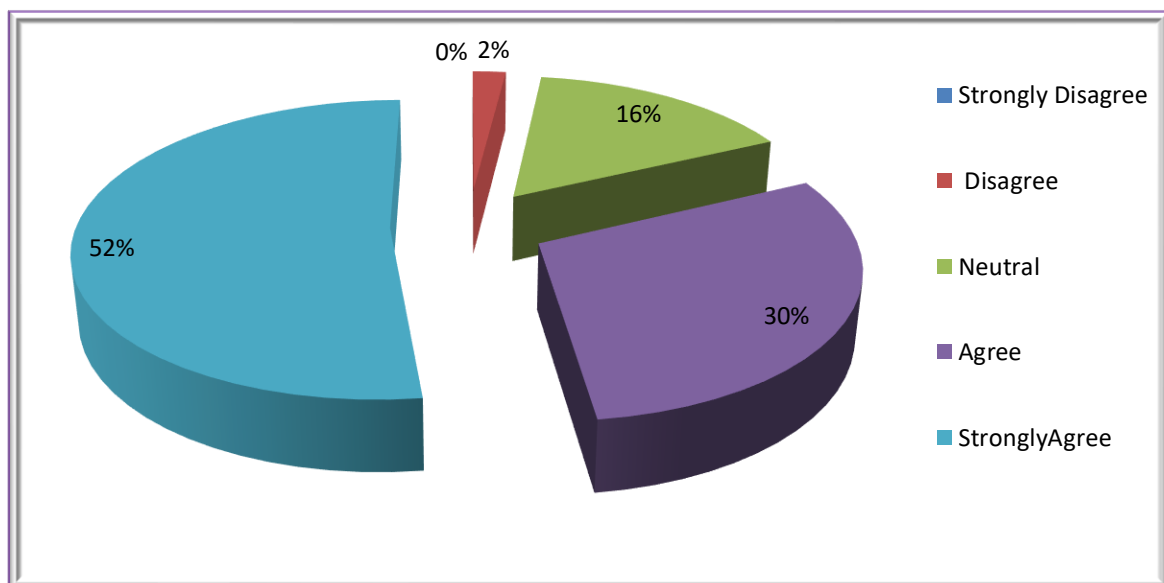**Respondent's perception towards Discount offer of laptop**

Interpretation: From the above table and pie chart, it is shown that 0% of the respondent from the survey are strongly disagree, 20% of the respondent are disagree,28% are Neutral, 34% are agree and 18% are strongly agree with the Discount offer as a decision making factor of purchasing a particular laptop brand.

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Table 4.4.8

Respondent's perception towards Availability of spare parts of laptop

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	2	1.0	2.0	2.0
Disagree	6	3.0	6.0	8.0
Neutral	14	6.9	14.0	22.0
Agree	34	16.8	34.0	56.0
Strongly Agree	44	21.8	44.0	100.0
Total	100	49.5	100.0	

Source: Field Survey, 2016.

Chart 4.4.8

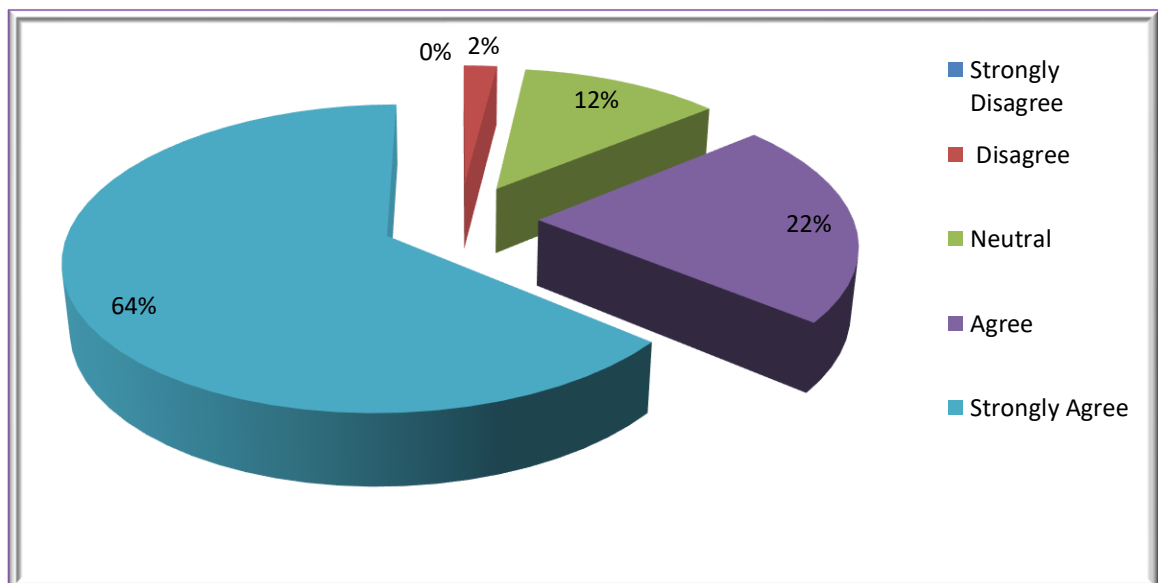**Respondent's perception towards Availability of spare parts of laptop**
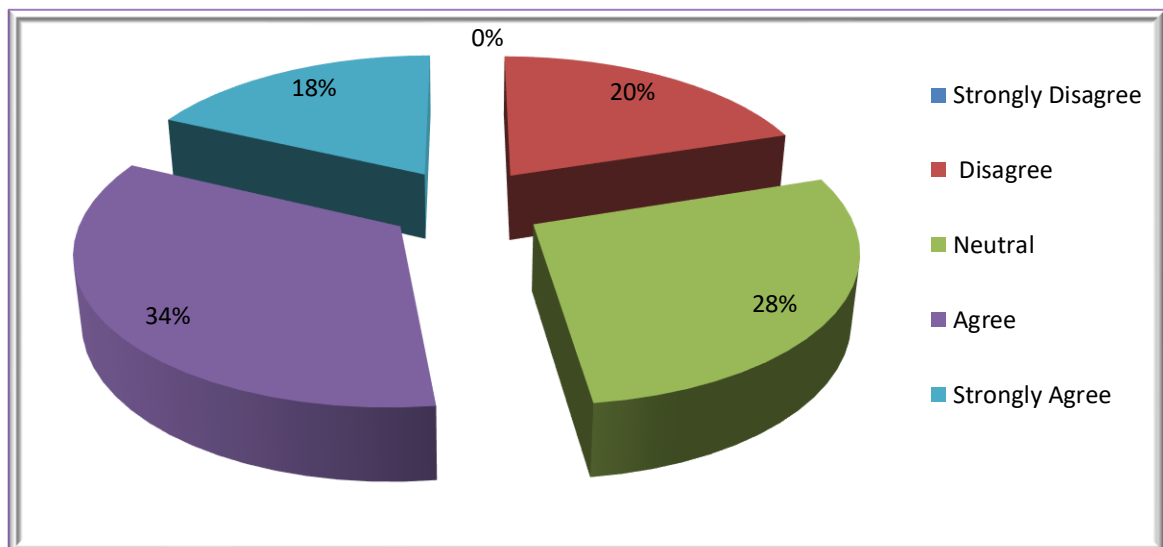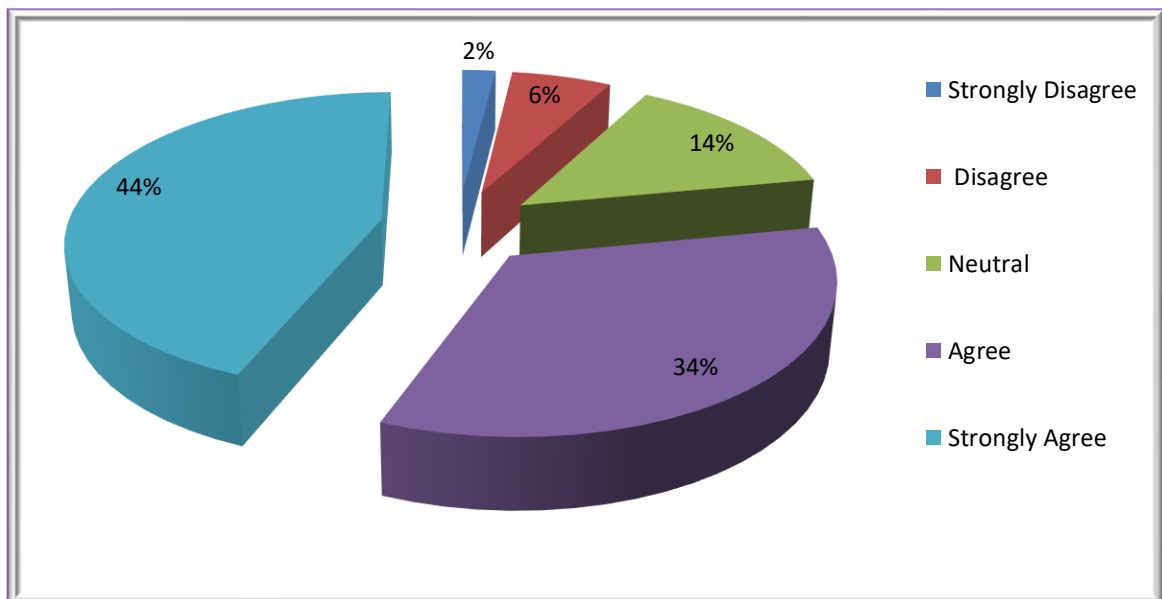

Interpretation: From the above table and pie chart, it is shown that 2% of the respondent from the survey are strongly disagree, 6% of the respondent are disagree,14% are Neutral, 34% are agree and 44% are strongly agree with the Availability of spare parts as a decision making factor of purchasing a particular laptop brand.

4.5 Reliability Analysis

Table 4.5.1

Reliability Statistics

Name of test	Value
Cronbach's Alpha	.849
Kaiser-Meyer-Olkin Measure of Sampling Adequacy(KMO and Bartlett's Test	.624

Interpretation: The coefficient alpha or Cronbach alpha , is the average of all possible split-half coefficients resulting from different ways of splitting the scale items. This coefficient varies from 0 to 1, and a value of 0.6 or less generally indicates unsatisfactory internal consistency reliability. Here the value is 0.849 that means it indicates that pre-purchase factors and decision making factors have satisfactory internal consistency. The Kaiser-Meyer-Olkin measure of sampling Adequacy for the various product and features measured is 0.624., which indicates the scale is appropriate and helps in extracting the factor. The ideal measure for this test (KMO>0.50) and here in this case KMO is 0.624 indicates the variables are measuring a common factors.

4.6 Factor Analysis

The Features Influencing Consumers' Laptop Purchase Decision Respondents, who participated in this survey, were given list of various features related with laptop and then they were asked to show how important these features for them while purchasing a laptop.

Exploratory factor analysis (EFA)

To identify the factors affecting pre-purchase buying behavior and decision making an exploratory factor analysis was carried out. Principle components method was used to extract the factors. Varimax rotation method was used with factors extraction with Eigen value over 1. The factors, their respective items with the numbers and their corresponding factor loading are given below.

Table 4.6.1

Communalities

	Initial	Extraction
Processor speed	1.000	.672
Memory	1.000	.726
Hard disk capacity	1.000	.486
Guarantee warranty	1.000	.836
Weight	1.000	.798
Spill resistant keyboard	1.000	.797
Number of USB ports	1.000	.536
Design	1.000	.670
Color	1.000	.595
Battery life	1.000	.658
Display resolution quality	1.000	.803
Speakers	1.000	.661
Modem internet facility	1.000	.810
Ease of Usage	1.000	.695
DVD CD player	1.000	.813
Price	1.000	.670
Quality	1.000	.953
Advertisement	1.000	.777
Availability	1.000	.735
Brand image	1.000	.806
After sale service	1.000	.669
Discount offer	1.000	.853
Availability of spare parts	1.000	.749
Brand choice of laptop	1.000	.953
Extraction Method: Principal Component Analysis.		

Interpretation: The table of commonalities indicates that Discount offer, guarantee-warranty condition, Weight of laptop, modem facility, brand image having highest extraction in terms of correlation. None of the variable got less than 0.5 weightage

Table 4.6.2

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	6.398	26.658	26.658	6.398	26.658	26.658	3.962	16.508	16.508
2	2.581	10.753	37.411	2.581	10.753	37.411	2.560	10.667	27.175
3	1.866	7.774	45.185	1.866	7.774	45.185	2.263	9.427	36.602
4	1.562	6.510	51.695	1.562	6.510	51.695	2.191	9.127	45.729
5	1.505	6.270	57.965	1.505	6.270	57.965	1.891	7.880	53.609
6	1.406	5.858	63.823	1.406	5.858	63.823	1.861	7.754	61.363
7	1.276	5.318	69.141	1.276	5.318	69.141	1.682	7.007	68.370
8	1.128	4.698	73.839	1.128	4.698	73.839	1.313	5.469	73.839
9	.919	3.830	77.669						
10	.841	3.504	81.173						
11	.779	3.245	84.418						
12	.669	2.789	87.207						
13	.630	2.626	89.833						
14	.543	2.262	92.095						
15	.361	1.504	93.599						
16	.325	1.355	94.953						
17	.277	1.155	96.108						
18	.219	.911	97.020						
19	.211	.878	97.898						
20	.176	.733	98.632						
21	.153	.638	99.269						
22	.108	.450	99.719						
23	.067	.281	100.000						
24	1.899 E-17	7.914E-17	100.000						
Extraction Method: Principal Component Analysis.									

Interpretation: It is apparent from the above table that 8 components cover 70% of the data under Principle Component Analysis method and cover substantial variation. Again if we extend the limit then, the statistics reveal 13 components cover almost 80% of the data.

Table 4.6.3

Rotated Component Matrix

	Component							
	1	2	3	4	5	6	7	8
Processor speed	.682	.221	.282	-.033	-.143	.228	-.068	.015
Memory	.129	.053	.702	.191	.133	.358	-.176	-.018
Hard disk capacity	.391	.075	.178	.477	-.140	.155	-.157	.033
Guarantee warranty	.785	.166	.028	.386	.145	-.043	-.090	.111
Weight	.066	-.285	.010	-.019	-.059	-.083	.015	.837
Spill resistant keyboard	.554	.169	.154	-.056	.286	.279	.232	.471
Number of USB ports	.173	-.026	.003	.265	-.019	.656	.013	.064
Design	.724	-.168	-.065	-.102	-.114	.240	.094	-.153
Color	.115	-.241	.103	-.001	-.050	.682	.164	-.140
Battery life	.651	.084	.247	.293	.083	-.001	-.033	.269
Display resolution quality	.540	.123	.399	.371	-.040	-.403	.177	-.058
Speakers	-.003	-.236	.171	.721	-.076	.143	.150	-.089
Modem internet facility	.683	.139	.305	.182	.387	.217	-.020	-.035
Ease of Usage	.403	.172	.279	.423	.281	.403	.060	.035
DVD CD player	.458	-.100	.167	.067	.268	-.002	.555	-.425
Price	.241	.469	.087	-.170	.195	.332	.439	.121
Quality	.092	.942	.145	.039	-.007	-.133	-.031	-.130
Advertisement	-.166	.045	.231	-.112	.763	-.215	.229	.015
Availability	.168	-.033	-.044	.111	.801	.107	-.190	-.052
Brand image	.239	.316	-.138	.705	.317	.072	.165	.027
After sale service	.208	.173	.701	.310	-.046	-.078	-.010	-.010
Discount offer	-.140	-.035	-.004	.186	-.108	.106	.878	.068
Availability of spare parts	.171	.120	.745	-.223	.145	.002	.275	.065
Brand choice of laptop	.092	.942	.145	.039	-.007	-.133	-.031	-.130
Extraction Method: Principal Component Analysis.								
Rotation Method: Varimax with Kaiser Normalization.								

Interpretation: Eight factors are clearly emerging from the above table. As rotated component matrix reveals that Guarantee warranty (.785), Design (.724),Modem facility (683),Processor Speed and type (.682), Battery life (.651) Keyboard (.554), Display (.540), Dvd-cd player (458) have higher correlation. So we clubbed those eight variables and considered as a important factor of purchasing a particular laptop brand.

CHAPTER-5

FINDINGS, RECOMMENDATIONS AND CONCLUSION

5.1 Findings

o From the demographic profile of the survey it has been found that among the respondents who were possessing laptops were male is 58%, female is 42%, From the age group there were less than 25 years is 50%, 25-34 years is 36%, 35-44 years is 10%,45-above years is only 4%. From the education level there were S.S.C is only 2%, H.S.C. is 6%, Bachelor is 54%, Masters and above is 38%. From the profession group, student is 56%, business person is 16%, service holder is 24%, From the income group there were less than 10000 is 44%,10000-20001 is 20%, 20001-30000 is 20%and 3000 –above is 20%.So it clear that majority of the respondent are male, their age is less than 25 years and they are Bachelor student.

o A majority of respondents who were possessing laptops their brand name were Dell(22%) and HP (22%) where the other brand Lenovo is 14%,Toshiba is 14%, Acer is 10%, Asus is only 4% used by respondents.

o In this study, it has been found that there are eight factors which highly influence Consumer's laptop pre-purchase decisions. These factors can be stated as follows: Processor speed (56%), Memory capacity (40%), Hard Disk capacity (62%), Guarantee Warranty (56%), Battery life (60%), Display resolution quality (42%), Modem/internet facility (58%), and Ease of usage (40%). On the other hand Weight (34%), Color (32%), USB ports (36%), Keyboard (42%), Design (32%), Speaker (34%), DVD and CD player (38%) are less important.

o From the various decisions making factors it has been found that Price (32%), Quality (60%), Brand image (52%), After sale service (64%), and Availability of spare parts (44%) are highly important in purchase decision. In contrary, Advertisement (40%), Availability (44%), Discount offers (34%) are less important.

o It has been also found that, the value of coefficient alpha or cronbach alpha was .849 of all pre-purchase factors and decision making factors. This value indicate that the test is highly reliable and the value of KMO and Bartlett's test was .624 which indicates the scale is appropriate.

5.2 Recommendations

Based on the resultant outcome of the study, the following recommendations and suggestions have been highlighted:

o From the study it has been found that majority of the respondents are male. Manufacturers may diversify the types of laptop brands with different ranges of corresponding prices as well as to enable different ages, different professions of customers not only male but also female who vary in their monthly incomes to select the suitable laptops according to their financial situations.

o In this research, it has been found that the features of laptop, price, after sale services, guarantee and warrantee conditions and battery life, display quality; all these factors influence consumers' laptop purchase decisions. In order to improve the market share, companies may provide better featured laptops, battery life, display quality, prompt after sale service, easily availability of laptops.

o Manufacturers of different laptop brands need to improve the durability and quality of the brand, they may consider the price of selling it so as to make it affordable to all persons. It is recommended that companies may also concentrate more on developing quality and affordable laptop and spend more time on enhancing their products to offer it at lower prices which can be done by employing cost reduction measures

o In order to retain the market share, marketers may find out their loopholes, especially they may work on quality aspect and services aspect on their branding. The marketers may also plan and make strategies in order to tap the consumers from all segments.

o This study also recommends companies to invest in technology through R&D and create differentiation at utmost level. This research has been limited to laptop/notebook sector and the factors influencing consumers' purchase decisions in Dinajpur and Rangpur area, since sectoral differences play a vital role, it is also recommended to replicate this study in more distinct sectors.

5.3 Conclusion

Each and every product, Buyer behaviour is most important thing, because it will lead to the success and failures of that product. The objective of the research was to find out the underlying pre-purchase factors and decision making factors which were highly influence the consumers in case purchasing a particular laptop brands. It has been seen from the previous discussion that there are lots of variables customers consider before choosing a particular brand of laptop. Some of the factors influence customers' decision greatly while others have comparatively low impact on the purchase decision. At the time of survey, it was observed that various types of facilities are expected by the customers. But this research work does not deal with the customer expectation. Rather it has tried to focus on the issues that the customers judge in the existing market scenario. The research has identified that many factors are deemed as selection criteria of laptop. Not necessarily all the variables influence a person in the same way and same extent. In case of choosing laptop brands, mostly considered factors by customers include processor speed, memory capacity, hard disk capacity, weight, color, display, battery life, price, quality, brand image, after sale service, availability of spare parts etc.

5.4 Scope for further research

More research is needed to leverage the findings and provide better and more in-depth implications for both theory and practice. To specify, this study focused on some selected laptop brands and some selected influencing factors in purchasing a laptop. The research measured its subjects' perceptions of different factors affecting their choice of a laptop model at a given point in time. In the future with the use of a longitudinal study it might be possible to get a broader and deeper picture of the phenomenon under scrutiny. Future studies delving deeper into vast set of consumer demographics and vast set of influencing factors that would yield more useful information to the marketing field to better understand the customer base. In future the sample would be more than 100 size so that the more customer insight can be gained through research into the profile of a consumer and that profile can predict the purchase of one brand over another the better the ability of the vendor's to customize and tailor a message and experience for a use.

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APPENDICES

Appendix- A

Questionnaire

Factors Influencing Consumer's Buying Decision of Purchasing Laptop: A Study on Dinajpur & Rangpur City, Bangladesh.

Dear Honorable Respondent,
I am the student of MBA semester III; Department of Marketing; Faculty of Post Graduate Studies, Hajee Mohammad Danesh Science and Technology University (HSTU), Dinajpur. I want to conduct a research study on "Factors Influencing Consumer's Buying Decision of Purchasing Laptop". That's why I am expecting your participation in this research. You will be asked to fill out short questionnaire.

Various demographic factors on the choice of laptop brands

Name:
Address:
1. In which gender group you are?

☐ Male   ☐ Female

2. In which age group you fall?

☐ Less than 25   ☐ 25-34   ☐ 35-44   ☐ 45 and above

3. What is your level of education?

☐ S.S.C.   ☐ H.S.C.   ☐ Bachelor   ☐ Masters and above

4. **What is your profession?**

☐ Student   ☐ Business   ☐ Service holder   ☐ Others

5. What is your income (Tk.)?

☐ Less than 10000   ☐ 10001-20000   ☐ 20001-30000   ☐ 30001 and above

6. Do you have laptop?

☐ Yes   ☐ No

7. Which brand do you have?

☐ Lenovo   ☐ HP   ☐ Toshiba   ☐ Acer   ☐ Asus   ☐ Dell   ☐ Other

8. Which type of features/attributes would you prefer most before purchasing a laptop?

To do this you have to indicate how strongly you agree or disagree with each statement by using a likert scale of 1 to 5 where 1 =strongly disagree(SD), 2=disagree(D), 3=Neutral(N), 4=agree(A), 5=strongly agree(SA). (Please choose one response for each statement)

Pre-Purchase Attributes	Strongly disagree (SD)	Disagree(D)	Neutral(N)	Agree(A)	Strongly agree (SA)
1. Processor speed and type	1	2	3	4	5
2. Memory	1	2	3	4	5
3. Hard disk capacity	1	2	3	4	5
4. Guarantee and warranty conditions	1	2	3	4	5
5. Weight of laptop	1	2	3	4	5
6. Spill resistant keyboard	1	2	3	4	5
7. Number of USB ports	1	2	3	4	5
8. Design of laptop	1	2	3	4	5
9. Color of laptop	1	2	3	4	5
10. Battery Life	1	2	3	4	5
11. Display Resolution quality	1	2	3	4	5
12. Speakers/Amplifiers	1	2	3	4	5
13. Modem/internet facility	1	2	3	4	5
14. Ease of usage	1	2	3	4	5
15. DVD-CD player	1	2	3	4	5

9. Which considerable factors influence your buying decision the most?

To do this you have to indicate how strongly you agree or disagree with each statement by using a likert scale of 1 to 5 where 1 =strongly disagree(SD), 2=disagree(D), 3=Neutral(N), 4=agree(A), 5=strongly agree(SA). (Please choose one response for each statement)

Considerable factor in buying decision	Strongly disagree(SD)	Disagree(D)	Neutral(N)	Agree(A)	Strongly agree (SA)
1. Price/costing	1	2	3	4	5
2. Quality	1	2	3	4	5
3. Advertisement	1	2	3	4	5
4. Availability	1	2	3	4	5
5. Brand image	1	2	3	4	5
6. After Sales Service	1	2	3	4	5
7. Discount offer	1	2	3	4	5
8. Availability of Spare Parts	1	2	3	4	5

Thanks for participating in our survey.

Appendix-B

Classification of laptops

Traditional Laptop: A MacBook by
Apple.

A hybrid tablet, powered
by Android OS: Asus Transformer Pad.

Variant of a subnotebook: Sony VAIO P
series

Desktop replacement: Alienware gaming
laptop

Typical netbook: A
Samsung Chromebook

A rugged laptop: Panasonic Toughbook