



A STUDY OF THE FACTORS INFLUENCING CONSUMER'S
PURCHASE DECISION OF NOTEBOOK COMPUTERS

by

MONTRI RATSAMEEUTHAI

A Thesis Submitted in Partial Fulfillment
of the Requirements for the Degree of

Master of Business Administration

Graduate School of Business
Assumption University
Bangkok Thailand

December 2002

**A STUDY OF THE FACTORS INFLUENCING CONSUMER'S
PURCHASE DECISION OF NOTEBOOK COMPUTERS**

By

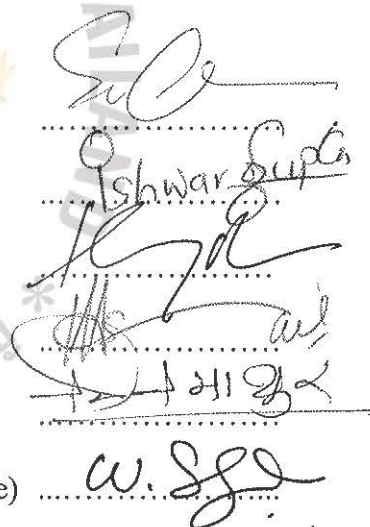
MONTRI RATSAMEEUTHAI

A Thesis submitted in partial fulfillment
of the requirements for the degree of

Master of Business Administration

Examination Committee :

1. Dr. Sirion Chaipoopirutana (Advisor)
2. Dr. Ishwar C. Gupta (Co-advisor)
3. Dr. Thongdee Kijboonchoo (Member)
4. Dr. Ismail Ali Siad (Member)
5. Dr. Navin Mathur (Member)
6. Assoc. Prof. Wirat Sanguanwongwan (MUA Representative)


The block contains five handwritten signatures, each corresponding to a member of the examination committee listed to the left. The signatures are written in black ink on a white background.

Examined on : 20 December 2002

Approved for Graduation on :

Graduate School of Business
Assumption University
Bangkok Thailand
December
2002

ABSTRACT

The increasing demand of computer notebook makes the market highly competitive. Hence, it is necessary for marketers to understand the consumer's influencing factors toward computer notebook. This research study focuses on investigating the differences among factors influencing purchase decisions of consumers of Bangkok toward computer notebook.

The data collection was done by using survey instrument and it involved computer notebook consumers in Bangkok. Four hundred respondents were selected by using purposive and convenience sampling procedure. After gathering information from respondents, the data were processed on SPSS program. Descriptive analysis was used to describe general information by using percentage and frequency analysis. Mann-Whitney U-test for Independent Samples, Kruskal-Wallis H-test for Independent Samples, and Spearman Rho Correlation were used to examine the twenty-two hypotheses. This research study used the Cronbach alpha coefficient to measure reliability and found a high reliability. The results of this research are as follows.

This study found differences in purchase decisions of Bangkok consumers in term of product choice and brand choice toward computer notebook. This study also found a positive relationship about marketing stimuli (including of product factor, price factor, place factor promotion factor) and consumers' purchase decision toward computer notebook. The price factor has the highest correlation. On the other hand, there is relationship between marketing stimuli and consumers purchase decision toward computer notebook.

For product choice of computer notebook, all demographic characteristics which included gender, age levels, education levels, occupations and income levels showed a significant difference in consumers' purchase decisions toward computer notebook.

Except for gender and age levels, all demographic characteristics, which included education levels, occupations, and income levels, showed a significance

difference in consumers' purchase decisions in term of brand choice toward computer notebook. In contrast, there is no difference in consumers' purchase decisions in term of brand choice toward computer notebook when segmented by gender and age levels.

Moreover, it was found that there is a relationship between price conscious and consumers' purchase decisions in term of product choice and brand choices toward computer notebook. There is relationship between technological conscious and consumers' purchase decisions in term of product choice and brand choices toward computer notebook.



ACKNOWLEDGEMENT

This thesis required the cooperation of a number of people and organizations. I would like to take this opportunity to express gratitude to all of those who sacrificed their valuable time in order to provide the information needed for this thesis.

First of all, I would like to express my deepest gratitude to my thesis advisor, Dr. Sirion Chaipoopirutana, for her consistent support, guidance, patience, encouragement and constructive criticisms. I would also like to express my special thanks to my co-advisor, Dr. Ishwar Chandra Gupta and the committee members; Dr. Thongdee Kilbooncho and Dr. Isamail Ali Said, and Assoc. Prof. Wirat Sanguanwongwan for providing many suggestions and helpful comments.

My very special thanks are extended to all my friends who have given me constant encouragement and various assistants throughout my thesis without any hesitation.

Ultimately, it is very important to acknowledge my family for encouragement, support, love, and understanding, which have helped me persist to completion.

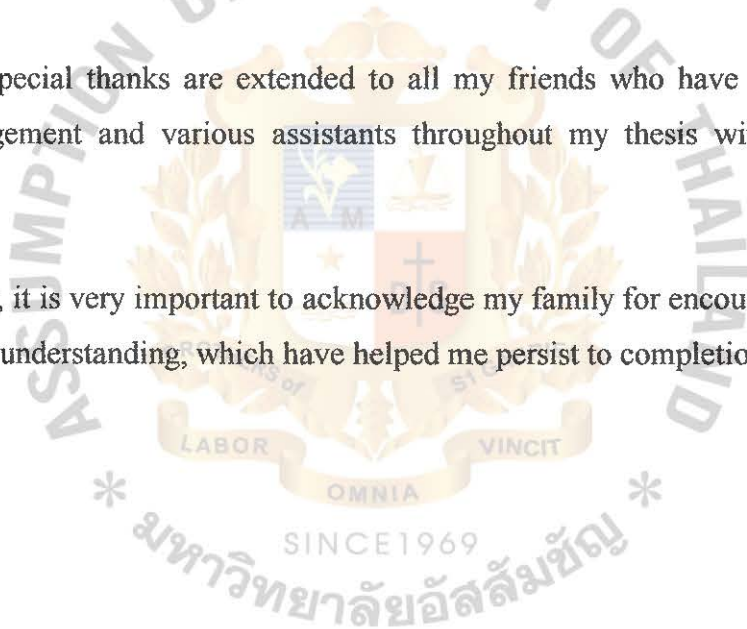


TABLE OF CONTENTS

| | Page |
|-------------------|------|
| Abstract | i |
| Acknowledgment | iii |
| Table of Contents | iv |
| List of Tables | vi |
| List of Figures | ix |

CHAPTER I - GENERALITIES OF THE STUDY

| | |
|---------------------------------|----|
| 1. 1 Introduction of the Study | 1 |
| 1.2 Research Objectives | 11 |
| 1.3 Statement of the Problem | 11 |
| 1.4 Scope of the Research | 11 |
| 1.5 Limitations of the Research | 12 |
| 1.6 Significance of the Study | 12 |
| 1.7 Definition of Terms | 12 |

CHAPTER II - REVIEW OR RELATED LITERATURE AND STUDIES

| | |
|--|----|
| 2.1 Issues Surrounding the Supporting Literature | 16 |
| - Consumer Decision Making | 16 |
| - Consumer decision-making styles | 22 |
| - Marketing Mix | 27 |
| - Demographic Factors | 32 |
| - Lifestyle | 34 |
| 2.2 Previous Empirical Research | 41 |
| 2.3 Application of Relevant Theories | 43 |

CHAPTER III - RESEARCH FRAMEWORKS

| | |
|--|----|
| 3.1 Theoretical Framework | 47 |
| 3.2 Conceptual Framework | 50 |
| 3.3 Research Hypotheses | 51 |
| 3.4 Operation of the Independent and Dependent Variables | 54 |

| | |
|---|-----|
| CHAPTER IV - RESEARCH METHODOLOGY | |
| 4.1 Research Methods Used | 58 |
| 4.2 Respondents and Sampling Procedures | 59 |
| 4.3 Research Instruments/ Questionnaire | 60 |
| 4.4 Collection of Data/ Gathering Procedures | 62 |
| 4.5 Statistical Treatment of Data | 62 |
| CHAPTER V - DATA ANALYSES | |
| 5.1 Descriptive Statistics | 65 |
| 5.2 Tests of the Hypotheses | 72 |
| CHAPTER VI - SUMMARY, CONCLUSIONS AND RECOMMENDATIONS | |
| 6.1 Summary of Findings | 96 |
| 6.2 Conclusions | 100 |
| 6.3 Recommendations | 104 |
| REFERENCES | |
| APPENDICES | |
| Appendix A - English Version Questionnaire | |
| Appendix B - Thai Version Questionnaire | |
| Appendix C - Analysis of Data | |

LIST OF TABLES

| Table | Page |
|--|------|
| 1.1 Asia/Pacific PC Vendor Unit Shipment Estimates for 2000 (Units) | 1 |
| 1.2 The Number of Thailand PC in 2001 | 9 |
| 1.3 The Number and Percentage of Computer within Thai Households | 10 |
| 3.1 Operational Definition of Influencing Variables | 54 |
| 3.2 Operational Definition of Explained Variables | 57 |
| 5.1 Gender | 67 |
| 5.2 Age Levels | 67 |
| 5.3 Occupations | 68 |
| 5.4 Education levels | 68 |
| 5.5 Average Salary Per Month | 69 |
| 5.6 Brand of Computer Notebook | 69 |
| 5.7 Reason for Selecting that Brand | 70 |
| 5.8 Type of Computer Notebook | 71 |
| 5.9 Reason for Selecting that Type | 71 |
| 5.10 Reasonable Price of Computer Notebook | 72 |
| 5.11 The analysis of product choices toward computer notebook when segmented by gender by using Mann-Whitney U-test for Independent Samples. | 73 |
| 5.12 The analysis of product choices toward computer notebook when segmented by age levels by using Kruskal-Wallis H-test for Independent Samples. | 74 |
| 5.13 The analysis of product choices toward computer notebook when segmented by income levels by using Kruskal-Wallis H-test for Independent Samples. | 75 |
| 5.14 The analysis of product choices toward computer notebook when segmented by education levels by using Kruskal-Wallis H-test for Independent Samples. | 76 |
| 5.15 The analysis of product choices toward computer notebook when segmented by occupations by using Kruskal-Wallis | 77 |

| | | |
|------|--|----|
| | H-test for Independent Samples. | |
| 5.16 | The analysis of brand choices toward computer notebook when segmented by gender by using Mann-Whitney U-test for Independent Samples. | 78 |
| 5.17 | The analysis of brand choices toward computer notebook when segmented by age levels by using Kruskal-Wallis H-test for Independent Samples. | 79 |
| 5.18 | The analysis of brand choices toward computer notebook when segmented by income levels by using Kruskal-Wallis H-test for Independent Samples. | 80 |
| 5.19 | The analysis of brand choices toward computer notebook when segmented by education levels by using Kruskal-Wallis H-test for Independent Samples. | 81 |
| 5.20 | The analysis of brand choices toward computer notebook when segmented by occupations by using Kruskal-Wallis H-test for Independent Samples. | 82 |
| 5.21 | The analysis of the relationship between product factor and product choices of computer notebook by using Spearman Rho Correlation Coefficient Test. | 83 |
| 5.22 | The analysis of the relationship between price factor and product choices of notebook computer by using Spearman Rho Correlation Coefficient Test. | 84 |
| 5.23 | The analysis of the relationship between place factor and product choices of notebook computer by using Spearman Rho Correlation Coefficient Test. | 85 |
| 5.24 | The analysis of the relationship between promotion factor and product choices of notebook computer by using Spearman Rho Correlation Coefficient Test. | 86 |
| 5.25 | The analysis of the relationship between product factor and brand choices of computer notebook by using Spearman Rho Correlation Coefficient Test. | 87 |
| 5.26 | The analysis of the relationship between price factor and brand choices of computer notebook by using Spearman Rho Correlation Coefficient Test. | 88 |

| | | |
|------|---|----|
| 5.27 | The analysis of the relationship between place factor and brand choices of computer notebook by using Spearman Rho Correlation Coefficient Test. | 89 |
| 5.28 | The analysis of the relationship between promotion factor and brand choices of computer notebook by using Spearman Rho Correlation Coefficient Test. | 90 |
| 5.29 | The analysis of the relationship between price conscious and product choices of computer notebook by using Spearman Rho Correlation Coefficient Test. | 91 |
| 5.30 | The analysis of the relationship between technological conscious and product choices toward computer notebook by using Spearman Rho Correlation Coefficient Test. | 92 |
| 5.31 | The analysis of the relationship between price conscious and brand choices toward computer notebook by using Spearman Rho Correlation Coefficient | 93 |
| 5.32 | The analysis of the relationship between technological conscious and brand choices toward computer notebook by using Spearman Rho Correlation Coefficient Test. | 94 |
| 6.1 | Summary of Group A Hypotheses Testing Result | 97 |
| 6.2 | Summary of Group B Hypotheses Testing Result | 98 |
| 6.3 | Summary of Group C Hypotheses Testing Result | 98 |
| 6.4 | Summary of Group D Hypotheses Testing Result | 99 |
| 6.5 | Summary of Group E Hypotheses Testing Result | 99 |
| 6.6 | Summary of Group F Hypotheses Testing Result | 99 |

LIST OF FIGURES

| Figure | Page |
|---|------|
| 1.1 Southeast Asia PC shipment units | 3 |
| 1.2 Shipment Units and Growth Rate of Thai PC Market | 4 |
| 1.3 Thailand Average Sales Price of PC in Dollar Currency | 5 |
| 1.4 Thailand Average Sales Price of PC in Baht Currency | 6 |
| 1.5 Desktop and Notebook PC Shipment Units and Growth Rate in Thai PC Market | 7 |
| 1.6 The Growth Rate of Notebook PC within Home Segment in Thailand | 8 |
| 2.1 Five Stages in Consumer Decision Making | 17 |
| 2.2 Steps Between Evaluation of Alternatives and a Purchase Decision | 19 |
| 2.3 A Continuum of Consumer Decision Making | 21 |
| 2.4 Model of Buyer behavior | 23 |
| 2.5 The Four P Components of the Marketing Mix | 27 |
| 2.6 VALS 2 frameworks | 35 |
| 3.1 Conceptual Framework of the Study | 50 |

CHAPTER 1

GENERALITIES TO THE STUDY

1.1 Introduction of the Study

Gartner (2000) stated that the trend of worldwide market for notebook computers may reach 50-million units in 2004. This portable segment of the computer market is strong in all regions (North America, Europe and Asia) and will likely remain so for the next three years at least. Shipments unit of PC vendor in the Asia-Pacific region (Asia-Pacific region including of Australia, Brunei, Burma, Cambodia, China, East Timor, Fiji, Indonesia, Japan, Kazakhstan, Kiribati, North Korea, Kyrgyzstan, Laos, Malaysia, Marshall Islands, Micronesia, Mongolia, Nauru, New Zealand, Papua New Guinea, Philippines, Samoa, Solomon Islands, Singapore, South Korea, Taiwan, Tajikistan, Tonga, Turkmenistan, Tuvalu, Uzbekistan, Vanuatu, Vietnam, and Thailand), excluding Japan, increased sharply, registering 4.6 million units in the year of 2000. The following is a chart of rankings on market share by maker and their market growth in percentage (Table 1.1).

Table 1.1: Asia-Pacific PC Vendor Unit Shipment Estimates for 2000 (Units)

| Company | 2000 Market Share (Percent) | 1999 Market Share (Percent) | Shipment Growth (Percent) |
|--------------------|--------------------------------|--------------------------------|------------------------------|
| Legend | 11.1 | 7.9 | 87.5 |
| IBM (with IBM/LG) | 8.6 | 8.3 | 39.4 |
| Samsung Electronic | 7.4 | 4.8 | 104.7 |
| Compaq | 7.1 | 7.8 | 22.1 |
| Acer | 5.3 | 4.8 | 48.8 |
| Others | 60.5 | 66.4 | 22.8 |
| Total Market | 100.0 | 100.0 | 34.0 |

Note: Table includes desktop PCs and notebook PCs.

Source: Gartner Dataquest (2000)

Shipments surged to some Asia-Pacific countries, such as India, Malaysia, Thailand and Indonesia, where the spread of PCs has been low. Shipments to Taiwan, Hong Kong, Singapore and New Zealand, where PCs are widely used, also increased. And demand in the Philippines, Vietnam, and the others countries are expected to grow in the future.

Understanding consumer is the basis of marketing and more precise analysis has come to be required in the rapidly changing social environment in modern times. Consumer's purchasing decision is one of very important aspects to understand consumer and therefore it will be very beneficial if we can have more insight on that in any field. As indicated by the success of direct selling notebook computer makers (Dell Computer or Gateway), they are emphasizing more on customer service. The key success factor in the PC industry has become more and more on marketing oriented. In addition, the trend of price erosion forces notebook computer vendors to compete in rather product features, customer services or even advertisement than price. Notebook computer vendors are now required to pay more attention to sophisticated product design, easy-to-use interface, adaptation to mobile use, and many other factors besides the basic quality of the products. Such a trend is found in the market in any countries and Thai market is not an exception. It is expected that knowing consumers' preference structure will be crucial for selling notebook computer to the masses in Thai market as well. As happened in the market in the Western countries or Japan, the price will definitely not be the only factor to attract customers in the future Thai notebook computer market. Considering such a rapid change of marketing environment, exploring an exact and deep understanding of consumer behavior seems to increase its importance as Thai consumer become more sophisticated.

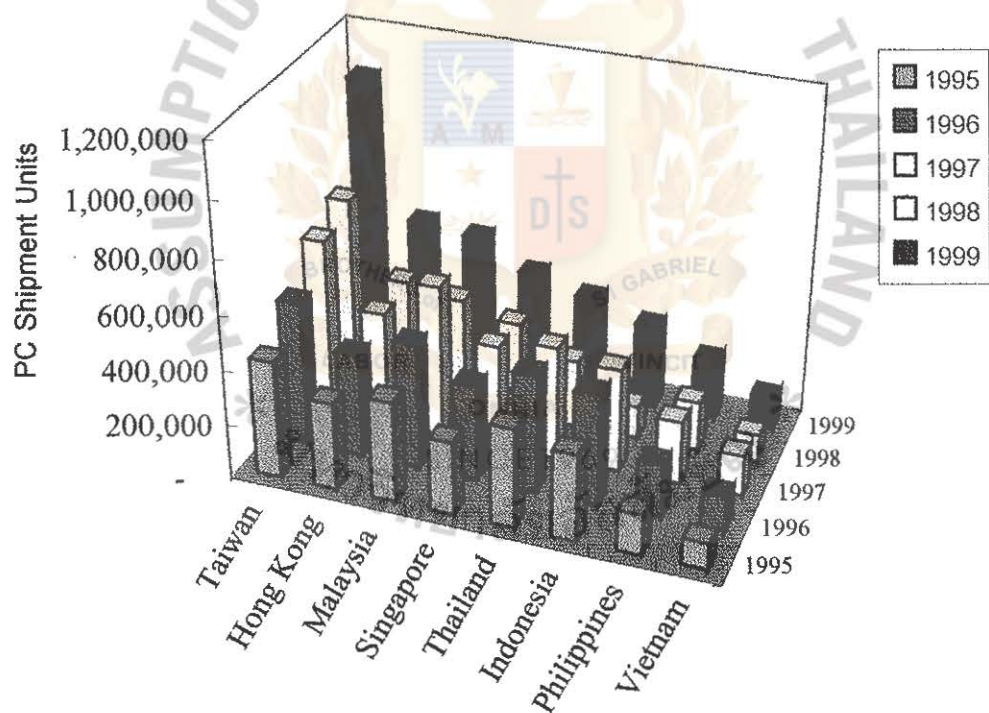
In Thai consumer notebook computer market, international brand notebook computer are dominant products. However, in Thai PC market, international brand PC still remains highly price competitive. Many local shops could offer their original PCs at significantly lower price than major PC vendors. In reality, the lower price of those local shops PCs is not due to their operating efficiency but the use of pirated OS/software. As same as the PC market, Thailand notebook computer market, especially in consumer market, the use of pirated software is still a common practice. Local notebook computer assemblers achieve their price advantage simply by exploiting software vendors but the most

international brand notebook vendors use the license OS/software. Given such a market condition, most international brand notebook vendors licensed copies of software and have to bear the royalty, it is very difficult for them to keep the price of their products at the same level as local competitors even though they achieve lower production or procurement cost.

Thai PC market

Such a change of economic environment became to decelerate Thailand's economic miracle. Thai PC market still continued to rapid expansion throughout the 1995 to 1999 but it seriously suffered from the economic crisis in 1997 (Figure 1.1).

Figure 1.1: Southeast Asia PC shipment units



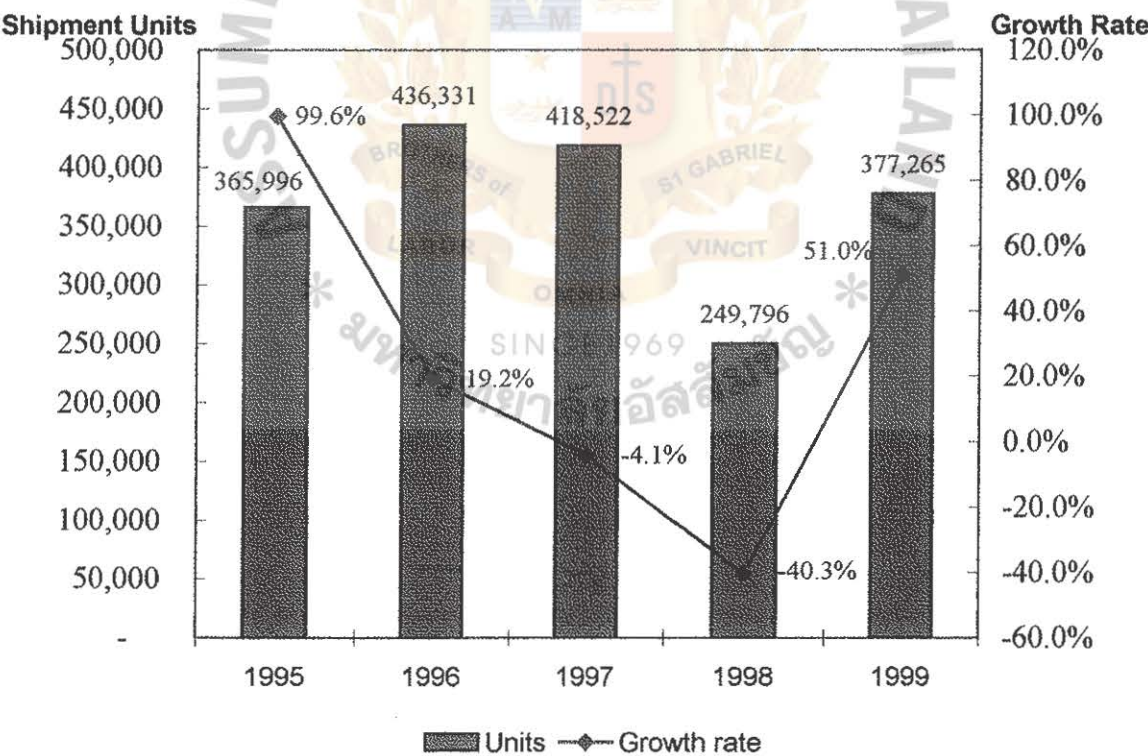
Source: International Data Corporation (IDC), 2000

Charmonman and Wongwatanasin (2000) stated that Thai PC market continued to shrink until 1998. Because of the economic crisis, the growth rate of whole PC market in Thailand fell to negative in 1997 (-4.1%) and 1998 (-40.3%) respectively (Figure 1.2). However, since 1999, Thai economy has been recovering from the depression after the economic crisis. PC markets grew rapidly

in this year due to accelerating economic growth and increasing awareness of the benefits of the Internet. Thailand is expected to see a strong economic growth in the near future, showing sharp rebound after the economic crisis. Recognition of the importance of IT has become a common sense in the late 1990s.

In addition, the use of the Internet is rapidly becoming popular. In 1998, the number of the Internet users in Thailand was estimated some 600,000 and 82.5% of the whole user was of education segment, such as teachers, researchers or students. The Internet user in Thailand will rapidly increase and reach to 12 million in 2006 and the number of users in noneducation segment is expected to account for 74% of the whole Internet user in Thailand. Given these conditions, the growth rate of whole PC market in Thailand was 51 % in 1999. This rapid expansion is expected to continue within and after year 2000. Indeed, the number of shipment units of Thai PC market in 2000 exhibited 525,908 units and the growth rate increased to 90.4% in comparison to 1999.

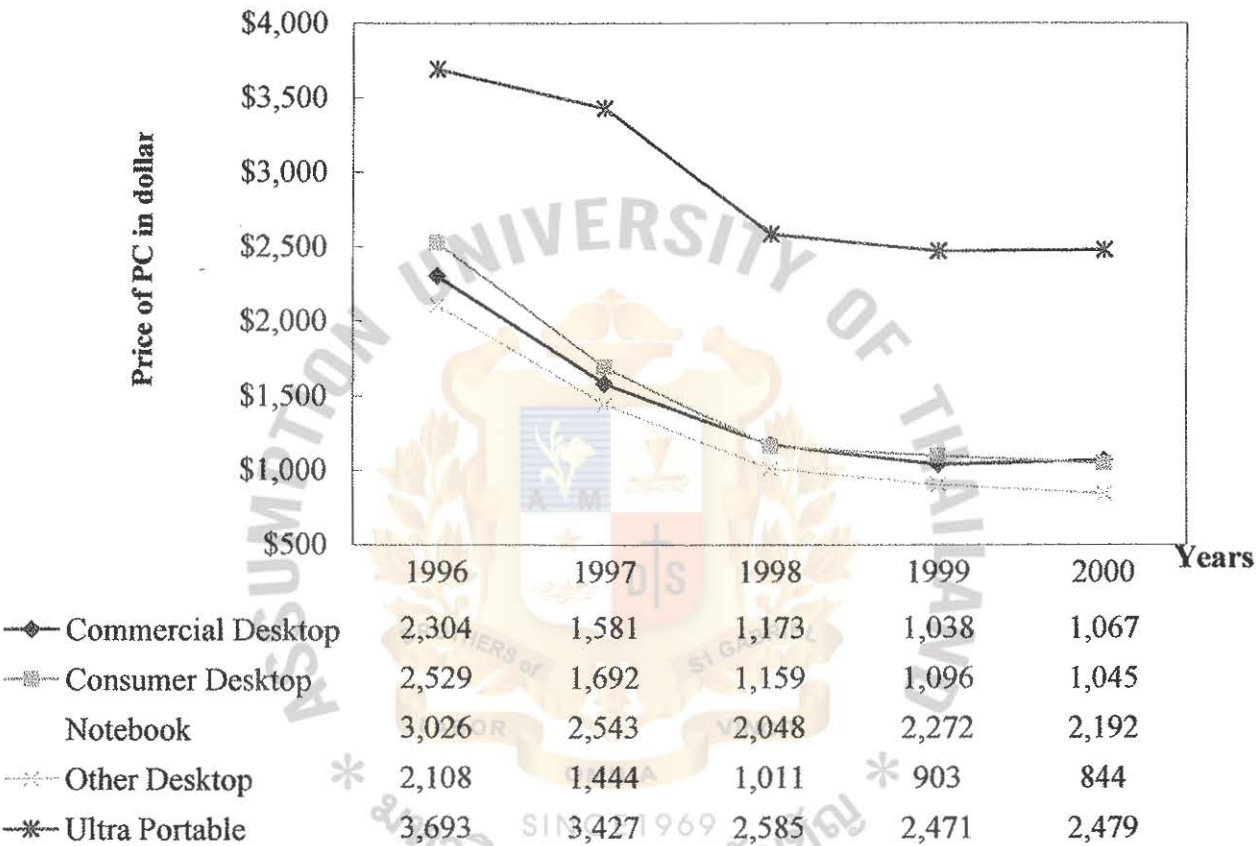
Figure 1.2: Shipment Units and Growth Rate of Thai PC Market



Source: IDC, 2000

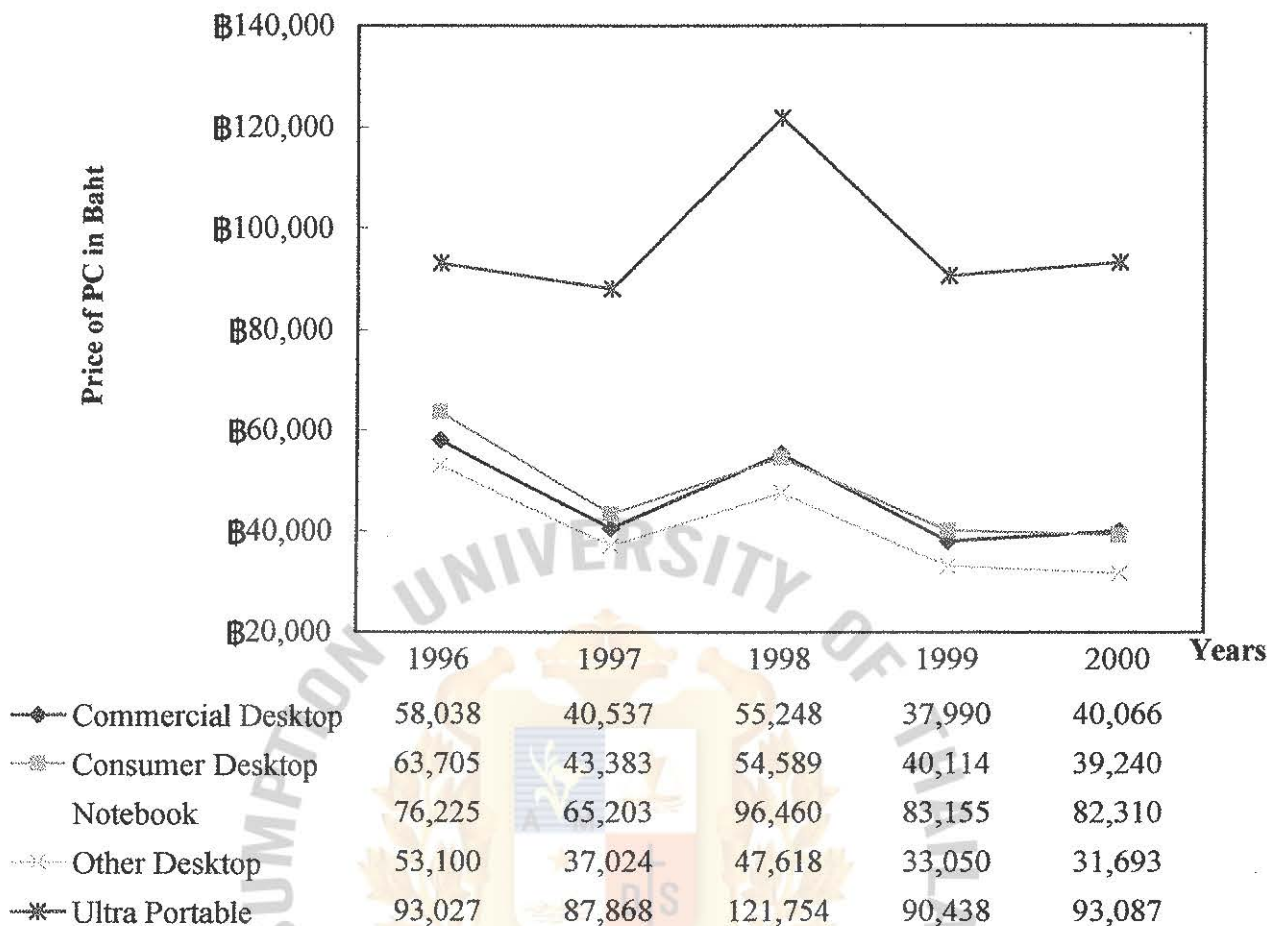
Average sales price of computer notebook fell to 2,192 US\$ in 2000 from 3,026 US\$ in 1996 (Figure 1.3) and for ultra portable fell to 2,479 US\$ in 2000 from 3,693 US\$ in 1996. This trend of price erosion is mainly because of the decline of the price of parts in general and expected to continue as long as the parts industry does not find the technical limit of improving productivity.

Figure 1.3: Thailand Average Sales Price of PC in Dollar Currency



As shown in Figure 1.4, average sales price of computer notebook in baht currency changed along the exchange rate and this figure use the exchange rate on January in every year during 1996 to 2000. The exchange rate on January in the year of 1996 to 2000 were as following: 1 US\$/25.19 baht in 1996, 1 US\$/25.64 baht in 1997, 1 US\$/47.10 baht in 1998, 1 US\$/36.60 baht in 1999, and 1 US\$/37.55 baht in 2000. As the result of economic crisis in 1997, Thai baht began to depreciate and average sales price of computer notebook in baht currency increased to 96,460 baht in 1998. After that average sales price of computer notebook fell to 82,310 baht in 2000 and for ultra portable fell to 93,087 baht in 2000 from 121,754 baht in 1998.

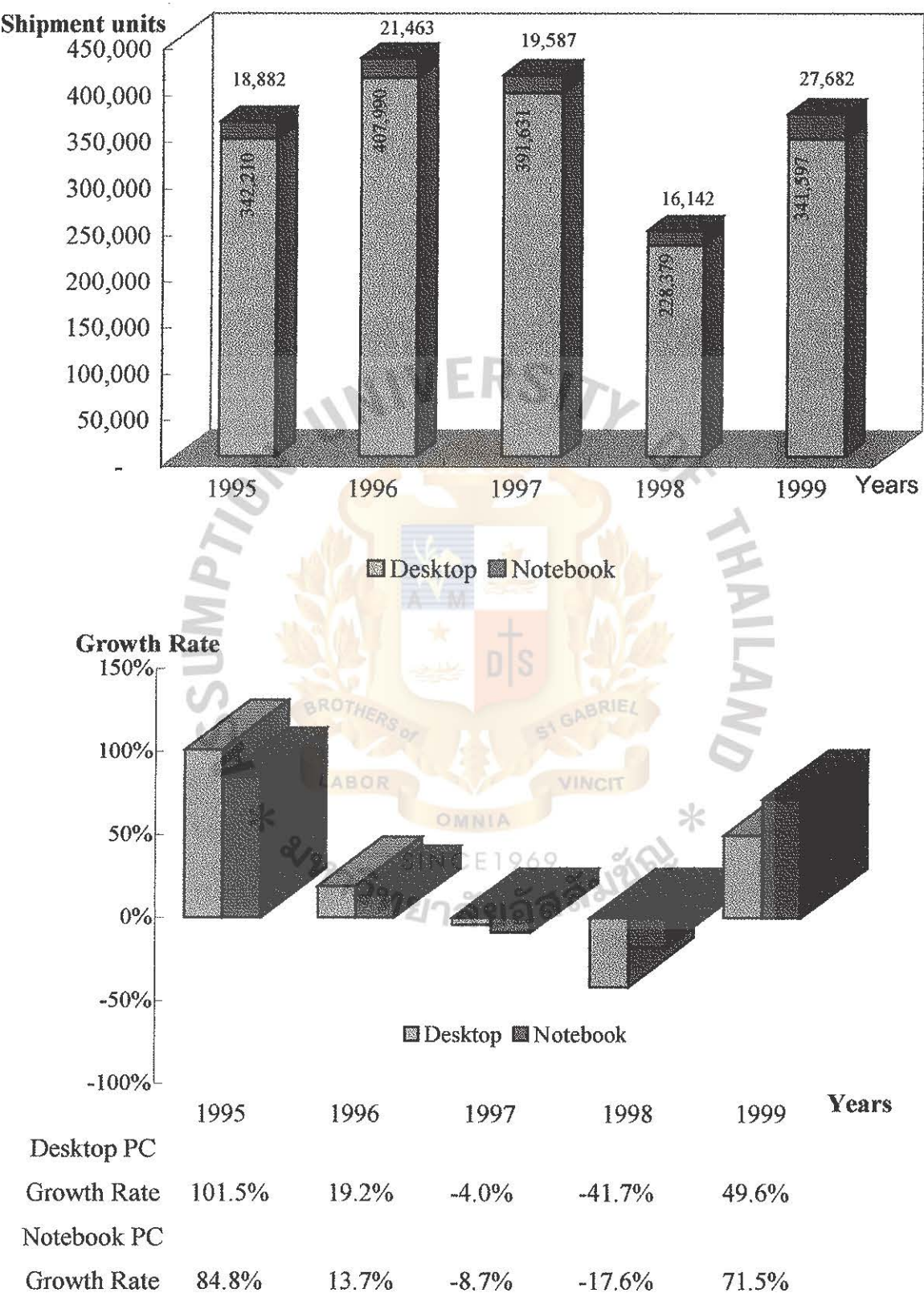
Figure 1.4: Thailand Average Sales Price of PC in Baht Currency



Source: IDC, 2000
IDC's definitions of PC subcategories are presented in definition of terms

As shown in Figure 1.5, desktop PC is the dominant model in Thai PC market. Probably because of its higher price, notebook PC is very uncommon in general. This is quite different from the market situation in the Western countries or especially Japan where notebook PC account for more than half of PCs shipped. However, notebook PC shows a larger growth rate than desktop. This implies the characteristic of the market is getting closer to the Western countries.

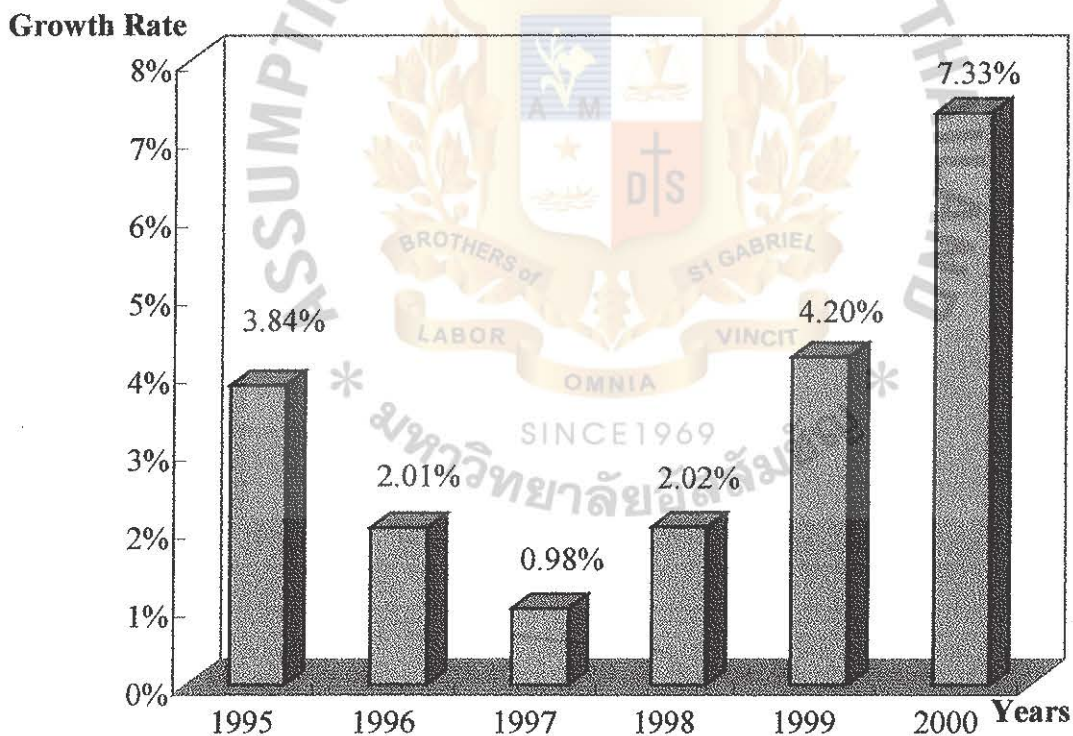
Figure 1.5 Desktop and Notebook PC Shipment Units and Growth Rate in Thai PC Market



Source: IDC, 2000

Throughout 1999, consumer PC market showed a great expansion all over the world. The progresses of IT revolution, diffusion of the Internet use, rapid price erosion, are the main factors of the expansion of consumer PC market. IT in Thailand, home segment is still not really large but began to show increase its share. Considering the trend in the other countries, Home segment in Thailand is also expected to expand more and more in the future (Figure 1.6). The factors accelerating world wide trend of the expansion of consumer PC market is more or less observed in Thailand as well. It is quite reasonable to predict that Thai PC market will follow the track of the PC markets in the US, Japan or other developed countries. Although desktop PC is still dominant in home segment, demand for notebook PC seems to be expanding.

Figure 1.6: The Growth Rate of Notebook PC within Home Segment in Thailand



Source: IDC, 2000

As shown in Table 1.2, there are five households in a hundred of Thai households, which is the owner of personal computer, including both of desktop personal computer and notebook computers. In Bangkok area, there are about twenty households from a hundred of Thai households, which own the computer (desktop and notebook computer) and there is about 24 units of personal computer within 100 households.

Table 1.2: The Number of Thailand PC in 2001.

| Area | Number of households which own PC within 100 Thai households | Number of PC within 100 Thai households | Number of PC within 100 Thai people |
|--------------------------------------|--|---|-------------------------------------|
| Whole country | 5.04 | 5.75 | 1.48 |
| Bangkok | 19.77 | 23.34 | 5.98 |
| Middle region (Excluding Bangkok) | 5.07 | 5.53 | 1.42 |
| North region | 2.77 | 2.99 | 0.84 |
| Southeast region | 1.98 | 2.31 | 0.57 |
| South region | 2.16 | 2.34 | 0.59 |

Note: Table includes desktop PCs and notebook PCs.

Source: National Statistical Office (2001)

The number of personal computer within Thai households is about 927,875 units for the whole country and there is about 461,758 units for the number of personal computer within Thai households for Bangkok (Figure 1.3). Considering the number and percentage of computer in Bangkok, it is the highest when compare with the other region.

Table 1.3: The Number and Percentage of Computer within Thai Households

| Area | PC within Thai Households | | Number of PC within 100 Thai households | Number of PC within 100 Thai people |
|--------------------------------------|---------------------------|------------|---|-------------------------------------|
| | Number | Percentage | | |
| Whole country | 927,875 | 100 | 5.75 | 1.48 |
| Bangkok | 461,758 | 49.8 | 23.34 | 5.98 |
| Middle region (Excluding Bangkok) | 201,301 | 21.7 | 5.53 | 1.42 |
| North region | 94,873 | 10.2 | 2.99 | 0.84 |
| Southeast region | 120,324 | 13 | 2.31 | 0.57 |
| South region | 49,619 | 5.3 | 2.34 | 0.59 |

Note: Table includes desktop PCs and notebook PCs.

Source: National Statistical Office (2001)

According to all of information, which shows that computer notebook is one of the fast growing markets in Thailand and the number of computer notebook users also increase. The different models and specification of computer notebook are developed and also improved with new technology in order to provide customers satisfaction. The new innovation is another key to motivate people in purchasing decision.

Therefore, in this research, the researcher intends to study consumer's purchasing decision towards computer notebook because the researcher would like to know what factors influencing consumer's purchasing decision for computer notebook. This market is becoming more intense since it is the target of many manufacturers and vendors to set up innovative marketing strategy in order to attract potential customers. The marketers have to know what their customer want and find ways to serve them. This is so that the manufacturers would know the important factors leading to the success serving and fulfilling of consumer's need in Thai's computer notebook market. By understanding customer of computer notebook market, this research aims to describe and find out factors that influencing to consumers' purchasing decision.

1.2 Research Objectives

The study focuses on the relationship between the factors influencing buyer's purchase decision. For a study of the factors influencing consumer's purchase decision toward computer notebook in Bangkok metropolis area, there are six main objectives as follows:

1. To find the difference in buyer's purchase decision toward product choices and brand choices of computer notebook in Bangkok metropolis area when segmented by demographic factors.
2. To study the relationship between marketing stimuli factors and buyer's purchase decision toward product choices and brand choices of computer notebook in Bangkok metropolis area.
3. To study the relationship between decision-making style and buyer's purchase decision toward product choices and brand choices of computer notebook in Bangkok metropolis area.

1.3 Statement of the Problem

At present, the increasing demand of computer notebook makes the market highly competitive. Thus, the manufacturers attempt to use various marketing strategies in order to stimulate its sales. Hence, it is necessary for marketers to understand the consumer's behavior and the reason for which consumers buy their products. This research study focuses on investigating the difference among consumer's purchase decision of computer notebook within Bangkok metropolis area. Moreover, this research also investigates the relationship between essential factors and consumption behavior in computer notebook industry. According to the research objective to study the factors influencing consumer's purchase decision of computer notebook in Bangkok metropolis area, the following question was formulated:

“What is the influence of various factors affecting consumer for their purchase decision of Computer Notebook?”

1.4 Scope of the Research

This research is to find out the factors that influencing consumer's purchase decision of computer notebook in Bangkok area and to examine demographic factors, decision making style, and marketing stimuli – product,

price, place, and promotion – affecting purchase decision in term of product choice and brand choice on computer notebook. This research is conducted by survey method using questionnaire to collect the information related to consumer's buying decision of computer notebook. The population of the study is the consumers who purchased computer notebook or laptop computer.

1.5 Limitations of the Research

The researcher intends to study the factor influencing on buying decision of computer notebook. The area of this research study is limited only the area in Bangkok. The population of the research is the consumers who purchased computer notebook or laptop computer of every brands or vendors in Thailand. The research is a study at a single point in time by focusing on the respondents who purchased computer notebook between the years of 2000 to 2002. According to Kotler's model of buyer behavior, the purchase decision including of product choice, brand choice, dealer choice, purchase timing, and purchase amount. The researcher omits the dealer choice, purchase timing, and purchase amount and focus on product choice and brand choice, which is the factor that directly benefit to the manufacturers in computer notebook industry.

1.6 Significance of the Study

The result of this research will be beneficial for marketers who are in computer notebook business in order to understand buyers better. The result of this research will provide information about the factors influencing in consumer's purchase decision toward computer notebook in Bangkok metropolis area. Therefore, this research will help marketers who are in computer notebook industry understand consumer characteristics more in order to adapt marketing strategies and tactics to serve consumers more effectively. Certainly, in today's highly competitive marketplace, a better understanding of consumer behavior helps marketers gain a competitive advantage and establish good relationships with customer.

1.7 Definition of Terms

Consumer : People who purchase computer notebook or laptop computer in Bangkok metropolis area.

| | |
|------------------------------|--|
| Consumer's purchase decision | : The consumer decides what product or brand to buy. (Skinner, 1994) |
| Product choices | : Consumers purchase decision in choosing which product to buy in order to satisfy a need. (Kotler, 1997) |
| Brand choices | : Group of brands that customer see as being possibly suitable to satisfy the identified need. (Chernev, 1989) |
| Product | : Anything that can be offered to a market to satisfy a want or need. (Kotler, 2000) In this thesis, the researcher defined product as computer notebook by focusing on quality, design, features, brand name, sizes, services, and warranties of product. |
| Price | : The amount of money one must pay to obtain the right to use the product. (Hawkins, et al. 2001) In this thesis, the researcher focus on discount. |
| Place | : Set of interdependent organizations involved in the process of making a product or service available for use or consumption. (Kotler, 2000) In this thesis, the researcher focus on channels, assortments, locations, and transport. |
| Promotion | : All the activities the company undertakes to communicate and promote its products to the target market. (Kotler, 2000) In this thesis, the researcher focus on sales promotion, advertising, and sales force. |
| Desknote computer | : A notebook computer which designed for power-free use and it is not equipped with an internal battery and uses the desktop version of processor. (Lemon, 2002) |
| Personal Computer (PC) | : A single user machine that is microprocessor based, capable of supporting attached peripherals and can be programmed in a high-level language. |

(Cotton, 2000)

Commercial Desktop PC : Desktop products marketed to but not necessarily sold to the commercial audience. Although many of these products may be purchased for uses outside of the commercial environment, they are marketed to commercial users highlighting specific functionality. (Cotton, 2000)

Consumer Desktop PC : Desktop products marketed to but not necessarily sold to the consumer audience. Although many of these products may be purchased for uses outside of the home in such segments as small business or education, they are marketed to consumers highlighting specific functionality. (Cotton, 2000)

Other Desktop PCs : Other desktops is a classification that incorporates all desktop products that can not be classified distinctly as a commercial desktop or consumer desktop. The majority of these products are not marketed towards any specific purchaser but are shipped to both consumer and commercial end users. (Andersen, 1999)

Notebook Computers : A two or three spindle notebook designs that include an internal hard disk and an internal floppy diskette drive, CD-ROM or DVD-ROM drive. (Andersen, 1999)

Ultra Portable notebook : A one spindle notebook design that includes an internal hard disk, but no other internal fixed media (floppy diskette drive, CD-ROM, DVD-ROM, etc.). Other fixed media must be attached by cable externally. (Cotton, 2000)

Units : According to International Data Corporation or IDC (2000), a personal computer unit is one complete personal computer system. There are multiple combinations of the key components that are necessary to qualify as a complete system. At

the most basic, a PC unit must include a motherboard, chassis, and some form of storage or memory or drives or video.

Average Sales Price (ASP) : According to International Data Corporation or IDC (2000), average sales price is the average end-user (street) price paid for a typical system configured with chassis, motherboard, memory, storage, video display, and any other components that are part of an "average" configuration for the specific model, vendor, channel, or segment.

Shipments : According to International Data Corporation or IDC (2000), shipments is defined as the net total of all PC units leaving a vendor's facility for delivery to a sales channel, distributor, or end customer.



CHAPTER 2

REVIEW OF RELATED LITERATURE AND STUDIES

In this part, all of relevant theories are included, which are related to the independent variables and dependent variables of this study. In section 2.1, the researcher will relate the theories and models necessary to develop the conceptual framework of the research. The researcher focused on demographic factors, marketing stimuli and decision making style related to consumer's purchase decision toward computer notebook. Therefore, the researcher will focus on the marketing stimuli which are exclusively controllable factors affecting consumer's purchase decision. Hence, marketing mix theory, demographic factors, and decision making style are used in this research. In section 2.2, the empirical researches, this part of the study related with the previous empirical researches study. Finally, section 2.3 related to the application of relevant theories about computer notebook.

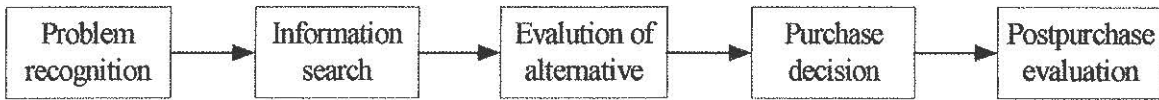
2.1 Issues Surrounding the Supporting Literature

Consumer Decision Making

Skinner (1994) stated that before businesses can develop marketing strategies to satisfy consumers, they must understand how consumers make purchasing decisions. Consumer behavior refers to the actions and decision processes of people who purchase goods and services for personal consumption. Consumer decision making is the process people go through to decide what products to buy is shaped by many factors, such as internal motivations, social pressures, and marketing activities.

Consumer decision-making generally consists of five stages: problem recognition, information search, evaluation of alternatives, purchase decision, and postpurchase evaluation (see Figure 2.1). The actual act of purchasing is only one step in the consumer decision-making process. Purchases are important, of course, but the process is initiated several steps prior to the actual purchase. The model in Figure 2.1 implies that consumers pass sequentially through all five stages in buying a product. But this is not the case: Consumers may skip or reverse some stages.

Figure 2.1 Five Stages in Consumer Decision Making



Source: Steven J. Skinner. (1994). Marketing. (2nd ed). Massachusetts: Houghton Mifflin. p. 219.

1. Problem Recognition

Skinner (1994) mentioned that the consumer decision-making process begins when a buyer recognizes a problem or an unsatisfied need or desire. Kotler (2000) stated that the need could be triggered by internal or external stimuli. In the former case, one of the person's normal needs -hunger, thirst; sex- rises to a threshold level and becomes a drive. In the case, a need is aroused by an external stimulus. Since consumers may not always recognize that they have a problem or a need, business uses products, advertising, packaging, and sales personnel to help trigger consumer awareness of needs and desires. Problem recognition is a Critical stage in the consumer decision-making process because a consumer will not move to the next stage of the process information search- unless he or she recognizes a problem, a need, or a desire.

2. Information Search

Betty and Smith (1987) stated that after recognizing a problem or need; the consumer seeks out information on how to satisfy it. An information search can focus on product features, prices, and availability of brands, seller characteristics, warranties, and other factors. Consumers usually begin the search process with an internal search into their memory. Usually, a person had some previous experience satisfying a particular need and has stored information in his or her mind for dealing with that need. Skinner (1994) quoted that in this case; a decision can be made with little or no additional information search. However, if more information is needed, consumers engage in an external search. In this case, additional information is obtained from a variety of external sources. One source of information is communication with other people or called personal sources, including friends, family, and associates. Although it is difficult to gauge which of these sources are actually used, they are considered a powerful influence on buying decisions.

Marketing sources of information include advertising, salespeople, dealers, and product packages. Buyers can also obtain information from public sources such as independent product rating and newspaper articles. Finally, examining the product or actually using the product may provide additional information.

After the information is processed, it should yield a group of brands from which the buyer can choose. This group of brands is sometimes called the buyer's evoked set. The consumer must then evaluate each of the alternatives in the evoked set.

3. Evaluation of Alternatives

Wells and Prensky (1996) mentioned that after searching for alternatives, the consumer must take the time to evaluate each one and choose that which will best satisfy his or her needs. To evaluate the products in the evoked set, the consumer develops a set of criteria against which he or she can compare the features of each product. These criteria include the features that the buyer desires, as well as those are not desired. The consumer assigns a level of importance to each criterion; some features and characteristics are valued more than others. Some consumers try to simplify the evaluation process by developing some procedure for evaluating the different alternatives. For instance, some consumers may weigh price very heavily or make the evaluation on the basis of a recognized brand name. Other consumers may make the evaluation process fairly complex by collecting information from several brands and comparing them on different features such as price, quality ratings, guarantees, and so on. That is, individuals must decide what standards are important to them in choosing a particular product. Sheppard, Hartwick and Warshaw (1988) stated that this process could be desired through attitude modeling as follows:

1. The consumer has information about a number of brands.
2. The consumer perceived that some of the brands could satisfy a recognized problem or need.
3. Each brand has product attributed such as color, price, quality, and so on.
4. Some of these attributes are important to the consumer, who perceives that different brands vary in the extent to which they possess these attributes.
5. The consumer prefers the brand that offers the desired amounts of the important attributes.
6. The consumer intends to purchase the preferred brand.

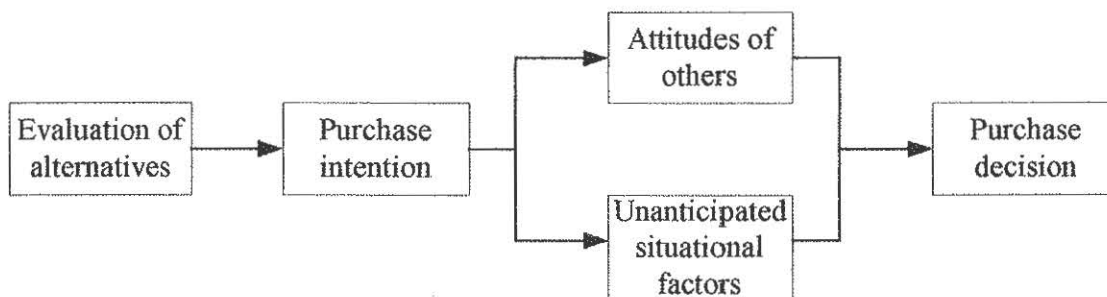
Sales personnel can play an important role at this stage by helping consumers evaluate alternatives and moving them closer to a purchasing decision. Wells and Prensky (1996) mentioned that consumers compare prices, brand names, and capabilities, among other criteria, before choosing a product like a computer.

4. Purchase Decision

Skinner (1994) stated that the consumer decides what product or brand to buy in the purchase decision stage. The consumer also decides where to buy the product in this stage because the choice of seller may influence the final product selection. The sale terms, if they are negotiable, are determined during the purchase decision stage. Other issues of concern to the consumer, such as price, delivery, warranty, maintenance, installation, and credit arrangement are discussed and agreed on this stage. Wells and Prensky (1996) stated that the actual purchase also takes place during this stage. Purchase is the heart of consumer behavior; it involves the exchange of something of value to the individual for, a product that will satisfy his or her need. However, the consumer may terminate the buying process prior to the purchase if one or more of the terms are unacceptable.

Kotler (2000) mentioned that the consumer forms preferences among the brands in the choice set in the evaluation stage the consumers might also form an intention to buy the most preferred brand. However, Sheth, Mittal, and Newman. (1999) stated that two factors could intervene between the purchase intention and the purchase decision (Figure 2.2).

Figure 2.2 Steps Between Evaluation of Alternatives and a Purchase Decision



Source: Philip Kotler (2000) Marketing Management (10th ed.) New Jersey: Prentice-Hall. p. 182.

The first factor is the attitudes of others. The extent to which another person's attitude reduces one's preferred alternative depends on two things: (1) the intensity of the other person's negative attitude toward the consumer's preferred alternative and (2) the consumer's motivation to comply with the other person's wishes. The more intense the other person's negativism and the closer the other person is to the consumer, the more the consumer will adjust his or her purchase intention.

The second factor is unanticipated situational factors that may erupt to change the purchase intention. Some one might lose the job; some other purchase might become more urgent. Preferences and even purchase intentions are not completely reliable predictors of purchase behavior. In executing a purchase intention, the consumer may make up to five purchase sub decisions: a brand decision, vender decision, quantity decision, timing decision, and payment-method decision.

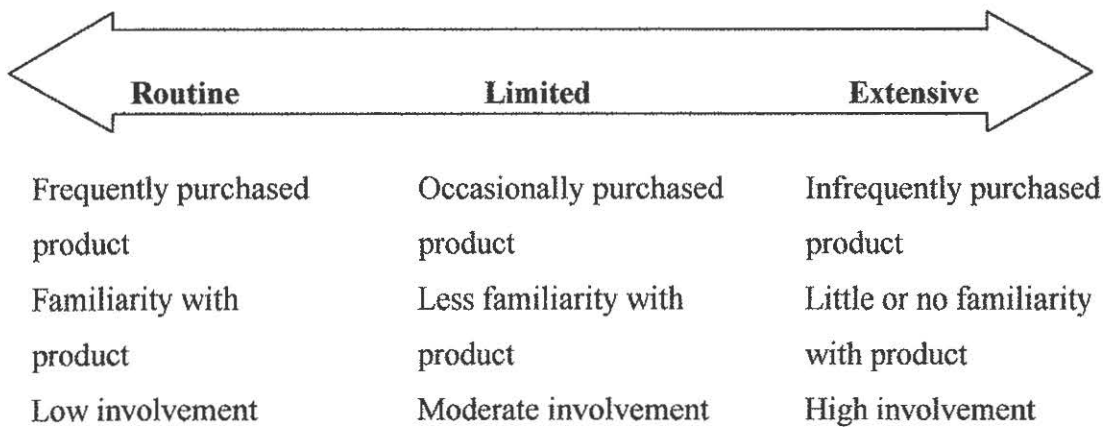
5. Post purchase Evaluation

Howard and Sheth (1969) stated that after making a purchase, the buyer evaluates the product to determine if it satisfies the need for which it was purchased. Generally, this involves comparing expectations to actual product performance. The outcome of this evaluation is satisfaction or dissatisfaction. Consumer satisfaction or dissatisfaction influences future purchase decisions. If the consumer is satisfied with its products, they will consider purchasing the product again. On the other hand, dissatisfied customers not only do not return, but they also tell others about the problems they encountered.

Type of Consumer Decision Making

Consumers make many purchasing decisions to satisfy their current and future needs and desires. The extent to which they follow the five-step decision process can vary from one decision to another. Howard and Sheth (1969) stated that consumer decision-making could be represented by a continuum with routine decision-making and extensive decision-making at the extremes and limited decision-making in the middle (see Figure 2.3).

Figure 2.3 A Continuum of Consumer Decision Making



Source: Steven J. Skinner. (1994) Marketing. (2nd ed.) Massachusetts: Houghton Mifflin. p. 224.

Routine decision-making is used for frequently purchased, low-cost items that do not require much thought. For instance, most consumers don't spend much time evaluating the alternatives when purchasing products such as pens, sugar, salt, and socks. The most routine decision is called an impulse purchase, in which there is no decision-making process prior to the purchase. Consumers make spur of the moment purchases based on instinct or impulse, and the product evaluation takes place after purchase. Skinner (1994) stated that the degree of involvement influences the extent to which consumers engage in decision-making. Involvement refers to the degree of perceived relevance and personal interest a buyer has in a product or brand in a particular situation. When involvement is low, consumers are much more likely to engage in routine decision-making. Low-involvement buyers spend much less time and effort deciding what product or brand to purchase. Buyers may skip some of the stages in the consumer decision-making process or simplify the process dramatically. Limited decision-making is used for products that are purchased only occasionally or when a buyer needs to acquire information about an unfamiliar brand in a familiar product category. This type of decision-making requires a moderate amount of time to search for information and evaluate the alternatives.

Extensive decision-making is used when a consumer purchases an unfamiliar expensive product or an infrequently bought item. This type of decision-making is the most complex of the consumer decision-making behaviors. A buyer uses a large number of criteria to evaluate alternative brands and spends a great deal of time

seeking information and deciding on the purchase. Consumers do not have the time or resources to frequently engage in extensive decision-making. Most consumers probably use extensive decision making when buying a home or an automobile. Extensive decision-making is generally used in the purchase of high involvement items. The type of decision-making, used varies from person to person and from product to product. For instance, people might use extensive decision making the first time they buy a certain product, and then use limited decision making for subsequent purchase of that product.

Consumer decision-making styles

Sproles and Kendall (1986) stated that consumer decision-making style can be defined "as a mental orientation characterizing a consumer's approach to making choices and view this construct as "basic consumer personality", analogous to the concept of personality in psychology. Research on this construct can be categorized into three main approaches.' the consumer typology approach (Darden and Ashton, 1974; Moschis 1976); the psychographics/lifestyle approach (Lastovicka, 1982; Wells, 1975); and the consumer characteristics approach (Sproles, 1985; Sproles and Kendall, 1986; Sproles and Sproles, 1990). The unifying theme among these three approaches is the tenet that all consumers engage in shopping with certain fundamental decision-making modes or styles including rational shopping, consciousness regarding brand, price and quality among others.

Among these three approaches, however, the consumer characteristics approach seems to be the most powerful and explanatory since it focuses on the mental orientation of consumers in making decisions. As such, this approach deals with cognitive and affective orientations of consumers in their process of decision making. It assumes that decision-making styles can be determined by identifying general orientations towards shopping and buying. It is useful to marketers since it provides a quantitative instrument for classifying heterogeneous decision-making styles among consumers into discrete categories of orientation. Such knowledge is also useful in terms of identifying segments or clusters of consumers sharing similar orientations to shopping.

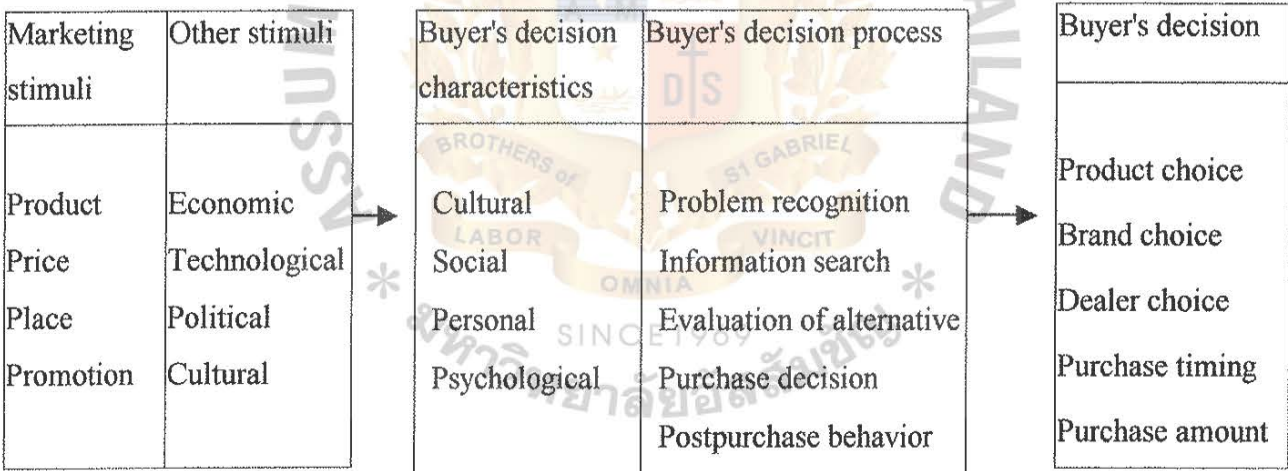
Sproles and Kendall (1986) developed a more parsimonious version of the early original instrument, calling it the consumer style inventory. To develop the CSI, factor analysis with varimax rotation identified eight mental characteristics of

consumer decision-making. (1) Perfectionism or high-quality consciousness; (2) Brand consciousness; (3) novelty-fashion consciousness; (4) Recreational/Hedonistic shopping consciousness; (5) price and "value for money" shopping consciousness; (6) impulsiveness; (7) confusion over choice of brands, stores and consumer information; and (8) habitual, brand loyal orientation towards consumption.

Model of Consumer Behavior

Kotler (2000) quoted that the starting point for understanding buyer behavior is the stimulus-response model shown in Figure 2.4. Marketing and environmental stimuli enter the buyer's consciousness. The buyer's characteristics and decision process lead to certain purchase decisions. The marketer's task is to understand what happens in the buyer's consciousness between the arrival of outside stimuli and the buyer's purchase decisions.

Figure 2.4 Model of Buyer behavior



Source: Philip Kotler. (2000). Marketing. -Management. (10th ed.) New Jersey : Prentice-Hall. p. 161.

Kotler and Armstrong (1987) stated that on the left, marketing stimuli consist of the four Ps - product, price, place, and promotion. Other stimuli include major forces and events in the buyer's environment -economic, technological, political, and cultural. All these stimuli enter the buyer's black box, where they are turned into a set of observable buyer response shown on the right -product choice, brand choice, dealer

choice, purchase timing, and purchase amount. The marketer must understand how the stimuli are changed into responses inside the consumer's black box. The black has two parts. First, the buyer's characteristics which including of cultural, social, personal, and psychological factors influence how he or she perceives and reacts to the stimuli. Second, the buyer's decision process consists of need recognition, information search, and evaluation of alternative, purchase decision, and post-purchase behavior. Then, they are turned into a set of observable purchase decision or buyer's responses: product choice., brand choice, dealer choice, purchase timing, and purchase amount. Nevertheless, not all of these decisions are applicable to every situation. These observable purchase decisions or buyer's responses will be described as following:

Product choice

Kotler (1997) stated that among the consumer's most fundamental decision, product choice is the first decision-making came to consumer mind. Product choice involves with consumers purchase decision in choosing which product to buy in order to satisfy a need. Mandell I. and Rosenbenj J. (1981) mentioned that product is the element of the marketing mix that represents the basic offering being made to consumers. Encel, Blackwell and Miniard (1993) mentioned that in product choice, consumers would consider which product can be served for their needs and choose what product to buy. Alternatives are evaluated according to some set of comparison factors or decision criteria driving from experience, values and expectations. Thus, consumer applies a variety of criteria in evaluating purchase alternatives, which will vary in importance or influence in shaping alternative evaluation and selection. The criteria are generally grounded in the attributes and benefit buyer seeks from the products they buy and the stores they shop in. Walter and Bergiel (1989) suggest that consumers like to simplify, their extensive and limited problem- solving situations into routine behavior by learning to reduce the number of products under consideration. Assael (1993) stated that past product experience is important for consumer decision making. Past experience with products or brands may involve known satisfaction or it may involve known dissatisfaction.

Brand choice

Assael (1993) said that following the buyer's purchase decision, consumers have a group of brands that they see as being possibly suitable to satisfy the identified need. This group of brands is evaluated and therefore a brand choice is selected. Consumer often makes choices among brands that share identical features. The consumers from preferences among brand in the choice set called brand choice. Limiting the brand choice to purchasing decision allows easy information processing and simplifies the task of choosing. Mandell I. and Rosenberg, J. (1981) mentioned that if the buying guidelines in a given area are inadequate, unfamiliar, or vague, consumers might have few leading brand names to guide them. Walter and Bergiel (1989) stated that in some cases, where a consumer has little familiarity with the product under consideration, their decision might involve comparing different brands. More often, by this point the consumer has established the criteria for making, a choice among several specific brands.

Dealer choice

Mandel I. and Rosenberge J. (1981) mentioned that dealer choice has an important influence on purchase decision. The location, physical design, personnel, and available services such as better store hours are all influential. Certain kinds of consumers will naturally gravitate toward certain kinds of stores. Store decoration is often designed to create specific feelings in customer that can have an important reinforcing effect on purchasing such as higher quality of consumption. Furthermore, store layout can influence consumer reactions and buying behavior.

Purchase timing

Assael (1993) mentioned that purchase timing relates to consumers purchase decision in choosing when to buy a product or service-regular price or on sales. Buyers generally have a set of process that is acceptable to pay for a considered purchase, rather than a single price. Walter and Bergiel (1989) said that sales promotion tools are mostly used to crate a stronger and quicker response from consumers. Lehmann and Winer (1991) mentioned that the amount of time available for the purchase has a substantial impact on the consumer decision process. Peter and Olson (1996) stated that time obviously have a great effect on consumer behavior. Assael (1993) mentioned that time of day is an important situation variable that can be

used as a means of segmenting products such as people tend to buy beer for drinking in the evening after they finish their work.

Purchase amount

Barry and Hazel (1993) mentioned that purchase amount involves with consumers purchase decision in what quantities to purchase. Purchase decisions often begin with trial purchases of limited quantities or making a trial purchase in a smaller quantity than usual. Lehmann and Winer (1991) stated that in the case of large durable goods, a brief trial is not an option and the consumers must move directly from evaluation to long-term commitment. Price can also be the indicator of the level of quantity. Higher prices level lead to lower quantity.

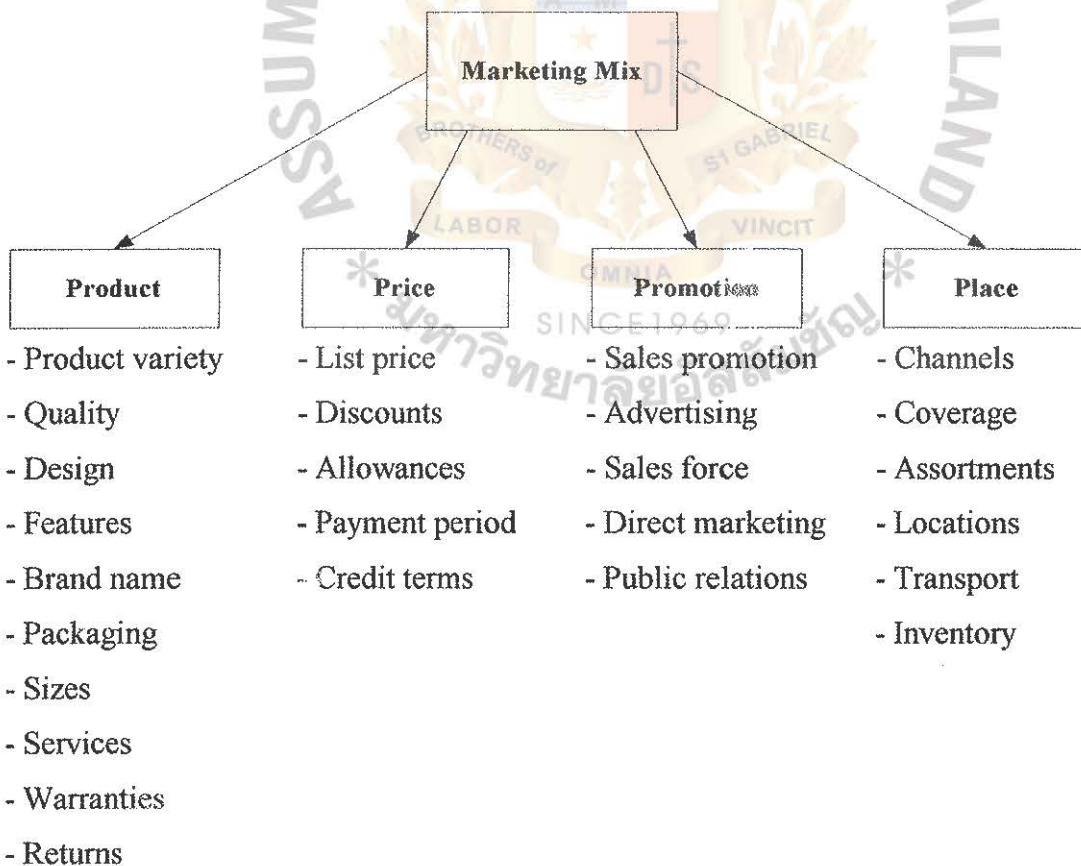
Assael (1993) explained a simple model of consumer behavior. Consumers are exposed to various marketing stimuli, that is, purchase-related-communications designed to influence consumers. These stimuli can be product itself or communications from marketers to consumers in the form of advertising in-store stimuli, sales messages, or price. Marketing stimuli can also be word-of-mouth communications from friends, relatives and acquaintances about products. Such communications generally exert more influence on consumers than marketing strategies because they are regarded as more trustworthy.

The consumer will react to these stimuli based on three sets of variables. First is the consumer's psychological set, or general state of mind toward an object. The consumer's psychological set will determine positive or negative reactions toward a brand. The second sets of the factor that affect purchasing decisions are the consumer's personal characteristics: demographics, life style, and personality. Third are environmental factors, which include broad influences such as the culture and the consumer's social class. They also include more specific face-to-face influences such as the family and reference groups.

Marketing Mix

Zikmund (1996) stated that a market is a group of potential customers for a particular product. These customers are willing and able to spend money or exchange other resources to obtain the product. Marketing is the process of planning and executing the conception pricing, promotion and distribution of ideas, goods and services to create and exchange value, and satisfy individual and organizational objectives. Graeff (1995) stated that the fundamental goal of marketing is to create and maintain exchanges by promoting products and services that satisfy the needs of consumers. Kotler (2000) mentioned that marketing mix is the set of marketing, tools that the firm uses to pursue its marketing objectives in the target market. Hawkins, Best and Coney (2001) defined marketing mix as the products, price, communications, distribution, and services provided to the target market. It is the combination of these elements that meets customer needs and provides customer value. The particular marketing, variables under each P are shown in Figure 2.5.

Figure 2.5 The Four P Components of the Marketing Mix



Source: Philip Kotler. (2000). Marketing management. (10th ed). New Jersey: Prentice-Hall. p.15.

Zikmund and Amico (1996) mentioned that the marketing mix may have many facts, but its elements can be placed in four basis categories: product, place (distribution), promotion and price. These are commonly referred to as the four Ps of marketing or -since they can be influenced by managers- as the controllable variables of marketing. Because virtually every possible marketing activity can be placed in one of these categories, the four Ps constitute a framework that can be used to develop plans for marketing efforts. Preparing a marketing strategy requires considering each major mix area and marketing decisions about the development of sub strategies within each area.

Product

Kotler (2000) defined product as anything that can be offered to a market to satisfy a want or need. Hawkins, et al. (2001) stated that the product is anything a consumer acquires or might acquire to meet a perceived need. Consumers are generally buying need satisfaction, not physical product attributes. Mandell I. And Rosenberg J. (1981) imply that product is the element of the marketing mix that represents the basic offering being made to consumers. Walters and Bergiel (1989) stated that it is a bundle of physical goods, services, ideas, and symbolic attributes designed to enhance consumer want satisfaction. Willaim and Slama (1995) suggested that consumer's criteria are generally grounded in the attributes and benefit buyer seeks from the products they buy. Kotler and Armstrong (1997) also mentioned each product item offered to customers can be viewed on three levels and each level adds more customer value. The most basic level is the core product. Core product means core benefits that customers seek when they buy a product. Thus, when designing products the marketers must first define the core benefits of the product will be provided to consumers. The second level is actual product. Actual product may have as many as five characteristics: a quality level, features, design, a brand name, and packing. For the last one is augmented product. It offered additional consumer service and benefits such as after sales service, warranty, delivery, credit and etc. All of these become as important part of the total product. Gross et. al (1987) imply that consumer evaluates the product by deciding if acquiring the attributes of product will enable them to accomplish their intended life activities. Consumers make a purchase when believe that an item's attributes suit their needs better than the attributes of other products. Schaffner, Schroder R., and Earle D. Mary (1998) suggested that to be

successful, products must meet the needs of the target better than the competition does. The product benefit identified by consumers as important to them in buying and using the product. Kincaid (1985) mentioned that the need might be real in that it must be fulfilled for purpose of survival, or it may be learned, such as the "need", for tasty food, gratification, and ego fulfillment. Assael (1993) stated that product represents the product features, the package, the brand name, and post-sales service support.

Zikmund and Amico (1996) quoted that the term product refers to what the, business or non-profit organization offers to its prospective customers or clients. The offering may be a tangible good, a service, or an intangible idea. The product that customer receives in the exchange process is the result of a number of product strategy decisions. Developing and planning a product involve making sure that it has the characteristics and features customers want. Selecting a brand name, designing, a package, developing appropriate warranties and service plans, and other product decisions are also activities involved in developing the "right" product.

Price

Hawkins, et al. (2001) stated that price is the amount of money one must pay to obtain the right to use the product. Zikmund and Amico (1996) quoted that the amount of money or some goods or services, given in exchange for something is its price. In other words, price is what is exchanged for the product. Kotler and Armstrong (1997) study that effect of price on consumer behavior and their purchasing decision has been a favorite topic in a number of researches. Price is the amount of money charged for a product or service. It means that the sum of the values that consumers exchange for the benefits of having or using the product or service. Joseph P, et. al (1991) imply that price is typically one of the most important factors influencing demand for a good or service. Hawkins, Best and Coney (1995) stated that price must pay to obtain the right to use the product or service. Economists often assume that lower price for the same product will result in more sales than higher prices. However, price sometimes serves as a signal of quality. Product priced too low might be perceived as having low quality. William et al. (1991) and Akshay and Kent (1989) mentioned that price has a positive effect on perceived quality, but a negative effect on value and the to buy. When setting the prices, the marketers have to consider consumer perceptions on price and how these perceptions affect consumers' buying

decision. Kotler (2000) stated that price has operated as the major determinant of buyer choice. This is still the case with commodity-type products. Zikmund and Amico (1996) mentioned that marketers must determine the best price for their products. To do so, they must ascertain a product's value, or what is of worth to consumers. Once the value of a product is established, the marketer knows what price to charge. However, because consumer's evaluations of a product's worth change over time, price is subject to rapid change. Hawkins, et al. (2001) said that according to economists, prices are always "on trial." Pricing strategies and decisions require establishing appropriate prices and carefully monitoring the competitive marketplace. Economists often assume that lower prices for the same product will result in more sales than higher prices. However, price sometimes serves as a signal of quality. A product priced "too low" might be perceived as having low quality. Krishna (1994) mentioned that buyers' purchase behavior could be influenced not only by the current price of a product, but also by what prices they expect in the future. Pelsmacker, Geuens and Bergh (2001) quoted that price is the only marketing instrument that does not cost anything, but provides the resources to spend on production and marketing activity. The list price is the 'official' price of the product. But, discounts and incentives of all kinds can be used to make the product more attractive. Krishna (1994) imply that price expectations for different brands may have important implications for how consumers react to price promotions, since the likelihood of their buying a brand may be a function not only of expectations of future prices for that brand, but also of future prices of competing brands.

Distribution

Hawkins, et al. (2001) stated that distribution, having the product available where target customers can buy it, is essential to success. Zikmund and Amico (1996) stated that determining how goods get to the customer, how quickly, and in what condition involves places, or distribution, strategy. Pelsmacker, et.al (2001) stated that distribution or marketing channels involve transporting the product, keeping an inventory, selecting wholesalers and retailers, deciding on which types of outlet the product will be distributed in, and the assortment of products to be offered in the various outlets. Zikmund and Amico (1996) said that every organization, however, does not have the resources or ability to manage all the activities required in the distribution process. Thus, organizations may concentrate on activities in which they

have a unique advantage. Wholesalers, retailers, and various other specialists developed to allow for such specialization and to make the distribution process more efficient.

Promotion

Walters and Bergiel (1989) stated that promotion is any form of information, persuading, or reminding potential customers about the firm or its products and services. Graeff (1995) stated that promotional strategies can have varying objectives, from informing and creating interest in a new product, to creating and maintaining positive brand attitudes and purchase intentions, to persuading consumers to behave in a desired way. Hawkins, et al. (2001) stated that marketing communications include advertising, the sales force, public relations, packaging and any other signal that the firm provides about itself and its products. Graeff (1995) mentioned that designing effective promotional strategies is basically a communication problem. In fact, at its most fundamental level, market is communication. Consumers communicate their goals, wants, needs and desires through their responses to several of marketing research. Marketers communicate information about their products through various forms of promotion. The goals of marketing communication are to stimulate interest in the brand, create positive brand attitudes, show how a product can satisfy consumers' wants, needs, and desires better than competing products, and persuade consumer to behave in desired ways. Zikmund and Amico (1996) stated that marketers need to communicate with consumers. Promotion is the means by which marketers "talk to" existing customers and potential buyers. Promotion may convey a message about the organization, a product, or some other element of the marketing mix, such as the new low price being offered during a sale period. Advertising, personal selling, publicity, and sales promotion are all forms of promotion. Used in combination, they are referred to as the promotion mix. While each offers unique benefits, all are forms of communication that inform, remind, or persuade.

Kotler (2000) stated that advertising is any paid form of non-personal presentation and promotion of ideas, goods, or services by an identified sponsor. Pelsmacker, et al. (2001) defined advertising as non- personal mass communication using mass media (such as TV, radio, newspapers, magazines, billboards, etc.) the content of which is determined and paid by a Clearly identified sender (the company). Kotler (2000) mentioned that Sales promotion is a variety of short-term incentives to

encourage trial or purchase of a product or service. Pelsmacker, et al. (2001) defined sales promotion as sales-stimulating campaigns, such as price cuts, coupons, free samples, contests, trade shows, etc. Pelsmacker, et al. (2001) quoted that personal selling is the oral presentation and/or demonstration of one or more salespersons aimed at selling the product or services of a company. It is a personal contact between a company representative and a prospect or client. Kotler (2000) mentioned that public relation and publicity is a variety of programs designed to promote or protect a company's image or its individual products. Pelsmacker, et al. (2001) stated that press releases and conferences, some of the major public relation tools, should generate publicity. Publicity is impersonal mass communication in mass media, but a company does not pay it and journalists write the content.

Demographic Factors

Kotler (1997) mentioned that a buyer's decisions are influenced by demographic factors, which are internal factors including gender, age, income, education level, and family size. Kardes (1999) stated that buying patterns and spending habits vary dramatically as a function of many different demographic variables. Kotler (2000) stated that the market is divided into groups on the basis of variables such as age, family size, gender, income, occupation, education, religion, race, generation, nationality, social class. Demographic variables are the most popular bases for distinguishing customer groups. One reason is that consumer wants, preferences, and usage rates are often associated with demographic variables. Another is that demographic variables are easier to measure. Skinner (1994) stated that demographic factor is a personal characteristic that is the factors influence consumer-buying decision and divide the consumer population into subcultures.

Gender

Sheth, Mittal and Newman (1999) stated that gender is a group of trait that divides customers into two groups males and female. This group trait remains constant through a person's life, and it influences customer values and preferences. Concerning food, gender differences exist in health-oriented perceptions of foods and beverages. Successful marketers use their knowledge about male-female preferences to meet the needs of both groups of customers.

Age

Sheth, et al. (1999) stated that age refers to the length of time elapsed since a person's birth. Age is a powerful determinant of consumer behavior. A person's age affects his or her interests, tastes, purchasing ability, political preferences, and investment behavior. Flynn (1995) mentioned that among the factors that may influence subjective age, demographics are important because they have intuitive appeal, are easily measured, and are used in many social science theories.

Income

Hawkins, et al. (1992) stated that the amount of money or its equivalent one received during a period in exchange for labor or services is called individual income. Income plays an important role for many products and services. For example, even the consumption of such "stable" items as margarine, detergents, and shampoo is affected by income level. Changes in disposable income (income after taxes) can be directly linked to changes in market demand for many durable products and nonessential services. The increased buying power will directly affect purchases of an assortment of durable and unendurable products. Peter and Olson (1996) mentioned that people at different income levels tend to have different values, behaviors, and life styles.

Education level

Hawkins Best and Coney (1992) mentioned that education has a strong influence on one's tastes and preferences. As education levels increase, they can expect to see many changes in preference to occur in the demand for beverages, automobiles, media, and home computers. Marketers will have to recognize the education level of target markets to effectively reach and communicate with them. Skinner (1994) stated that education also influences how decisions are made. Educated consumers seek more information and demand better-quality product.

Occupation

Hawkins, et al. (2001) stated that differences in consumption between occupational classes have been found for products such as beer, soft drinks, detergents, dog food, shampoo, and paper towels. Occupational class also influences media preferences, hobbies, and shopping patterns. Skinner (1994) stated that

occupation could affect the type of clothing a person buys, transportation choice, food purchases, and the need for timesaving products.

Lifestyle

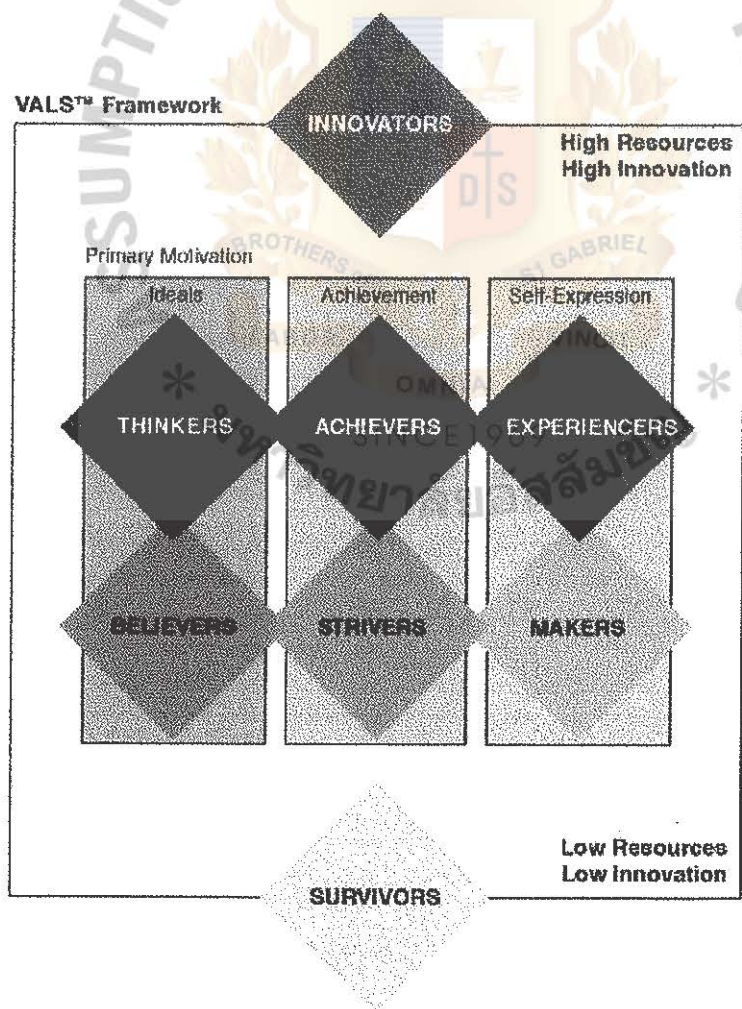
Kotler (2000) stated that lifestyle is the person's pattern of living in the world as expressed in activities, interests, and opinions. Lifestyle portrays the whole person interacting with his or her environment. Sheth, Mittal, and Newman (1999) proposed that along with what we think of what and ourselves we value, psychographics describes us in terms of lifestyles, or the way we live. The different lifestyles lead to the different customer behaviors as well.

Values and Lifestyles (VALS 2)

The second version of VALS, VALS 2, groups U.S. customers into eight groups (see Figure 2.6). This grouping is based on two dimensions: self-orientation and resources. VALS is a research and consulting tool that helps businesses worldwide develop and execute more effective strategies. The system identifies current and future opportunities by segmenting the consumer marketplace on the basis of the personality traits that drive consumer behavior. VALS applies in all phases of the marketing process, from new-product development and entry-stage targeting to communications strategy and advertising. The basic of VALS is that people express their personalities through their behaviors. VALS specifically defines consumer segments on the basis of those personality traits that affect behavior in the marketplace. Rather than looking at what people do and segregating people with like activities, VALS uses psychology to segment people according to their distinct personality traits. The personality traits are the motivation-the cause. Buying behavior becomes the effect-the observable, external behavior prompted by an internal driver. VALS reflects a real-world pattern that explains the relationship between personality traits and consumer behavior. VALS uses psychology to analyze the dynamics underlying consumer preferences and choices. VALS not only distinguishes differences in motivation, it also captures the psychological and material constraints on consumer behavior. VALS is based on current personality research into specific components of social behavior. VALS asserts that people express their personalities through their behaviors. People with different personalities engage in different behaviors or exhibit similar behaviors for different reasons.

According to SRI, people are motivated by one of three powerful self-orientations: principle, status, and action. Principle-oriented consumers are guided in their choices by abstract, idealized criteria, rather than by feelings, events, or desire for approval and opinions of others. Status-oriented consumers look for products and services that demonstrate the consumers' success to their peers. Action-oriented consumers are guided by a desire for social or physical activity, variety, and risk taking. A person's tendency to consume goods and services extends beyond age, income, and education. Energy, self-confidence, intellectualism, novelty seeking, innovativeness, impulsiveness, leadership, and vanity play a critical role. These personality traits in conjunction with key demographics determine an individual's resources. Different levels of resources enhance or constrain a person's expression of his or her primary motivation.

Figure 2.6 VALS 2 Framework



Source: SRI International

Innovators (formerly Actualizers)

Innovators are successful, sophisticated, take-charge people with high self-esteem. Because they have such abundant resources, they exhibit all three primary motivations in varying degrees. They are change leaders and are the most receptive to new ideas and technologies. Innovators are very active consumers, and their purchases reflect cultivated tastes for upscale, niche products and services. Image is important to Innovators, not as evidence of status or power but as an expression of their taste, independence, and personality. Innovators are among the established and emerging leaders in business and government, yet they continue to seek challenges. Their lives are characterized by variety. Their possessions and recreation reflect a cultivated taste for the finer things in life.

Thinkers (formerly Fulfilleds)

Thinkers are motivated by ideals. They are mature, satisfied, comfortable, and reflective people who value order, knowledge, and responsibility. They tend to be well educated and actively seek out information in the decision-making process. They are well-informed about world and national events and are alert to opportunities to broaden their knowledge. Thinkers have a moderate respect for the status quo institutions of authority and social decorum, but are open to consider new ideas. Although their incomes allow them many choices, Thinkers are conservative, practical consumers; they look for durability, functionality, and value in the products they buy.

Achievers

Motivated by the desire for achievement, Achievers have goal-oriented lifestyles and a deep commitment to career and family. Their social lives reflect this focus and are structured around family, their place of worship, and work. Achievers live conventional lives, are politically conservative, and respect authority and the status quo. They value consensus, predictability, and stability over risk, intimacy, and self-discovery. With many wants and needs, Achievers are active in the consumer marketplace. Image is important to Achievers; they favor established, prestige products and services that demonstrate success to their peers. Because of their busy lives, they are often interested in a variety of time-saving devices.

Experiencers

Experiencers are motivated by self-expression. As young, enthusiastic, and impulsive consumers, Experiencers quickly become enthusiastic about new possibilities but are equally quick to cool. They seek variety and excitement, savoring the new, the offbeat, and the risky. Their energy finds an outlet in exercise, sports, outdoor recreation, and social activities. Experiencers are avid consumers and spend a comparatively high proportion of their income on fashion, entertainment, and socializing. Their purchases reflect the emphasis they place on looking good and having "cool" stuff.

Believers

Like Thinkers, Believers are motivated by ideals. They are conservative, conventional people with concrete beliefs based on traditional, established codes: family, religion, community, and the nation. Many Believers express moral codes that are deeply rooted and literally interpreted. They follow established routines, organized in large part around home, family, community, and social or religious organizations to which they belong. As consumers, Believers are predictable; they choose familiar products and established brands. They favor American products and are generally loyal customers.

Strivers

Strivers are trendy and fun loving. Because they are motivated by achievement, Strivers are concerned about the opinions and approval of others. Money defines success for Strivers, who don't have enough of it to meet their desires. They favor stylish products that emulate the purchases of people with greater material wealth. Many see themselves as having a job rather than a career, and a lack of skills and focus often prevents them from moving ahead. Strivers are active consumers because shopping is both a social activity and an opportunity to demonstrate to peers their ability to buy. As consumers, they are as impulsive as their financial circumstance will allow.

Makers

Like Experiencers, Makers are motivated by self-expression. They express themselves and experience the world by working on it-building a house, raising children, fixing a car, or canning vegetables-and have enough skill and energy to carry out their projects successfully. Makers are practical people who have constructive skills and value self-sufficiency. They live within a traditional context of family, practical work, and physical recreation and have little interest in what lies outside that context. Makers are suspicious of new ideas and large institutions such as big business. They are respectful of government authority and organized labor, but resentful of government intrusion on individual rights. They are unimpressed by material possessions other than those with a practical or functional purpose. Because they prefer value to luxury, they buy basic products.

Survivors (formerly Strugglers)

Survivors live narrowly focused lives. With few resources with which to cope, they often believe that the world is changing too quickly. They are comfortable with the familiar and are primarily concerned with safety and security. Because they must focus on meeting needs rather than fulfilling desires, Survivors do not show a strong primary motivation. Survivors are cautious consumers. They represent a very modest market for most products and services. They are loyal to favorite brands, especially if they can purchase them at a discount.

Lifestyle Components

Antonides (1998) proposed that lifestyle comprises behavior, knowledge and attitudes- both what consumers do and what they feel. Lifestyle is a complex variable composed of many different elements. For this reason, we cannot provide a lifestyle categorization a priori, but we have to investigate this empirically in each product domain. Lifestyle categorizations are typically not the same across product domain but they are stable to some extent. However, time again lifestyle categorizations and the sizes of lifestyle segments found in earlier research have to be verified.

Values and Norms

Antonides (1998) proposed that values and norms are quite general; they constitute a general base for behavior. Instrumental values such as honesty, accuracy

arid friendliness concerns the quality of daily behavior. In addition, terminal values exist such as happiness, salvation, equality and security. Terminal values indicate people in terms of targets. Norms are beliefs about what is permitted and what is not. Values and norms are rather stable; they are almost like personality characteristics. If values change, they usually do so very slowly. The most important cultural changes in recent years concern the role of the government, emancipation regarding marriage and sexuality, health and the environment.

Interests

Antonides (1998) proposed that compared with values, interests concern more concrete domains and areas of activities such as politics, sports, culture, hobbies, traveling, and social contacts. The interests are reflected in all kinds of subjects and columns in magazines. Interests imply preferences regarding the consumption of time. Also paid work in many cases is a field of interests. Interests are determinants of lifestyle because they indicate preferred consumer activities, both in acting and in reading. Consumers interested in a particular area of activities are more involved in these activities, they read more and they talk more about with others. Media are often segmented with regard to fields of interest such as politics, sports, hobbies, traveling, and music.

Opinions

Antonides (1998) proposed that opinions are more specific than interests. They relate to phenomena, issues, persons, products, firms, government, politicians, countries, shops, newspapers and magazines. In contrast with values, opinions relate to objects, i.e., people have an opinion about something, for example about abortions, the euro, The Sun newspaper, or whatever. Opinions are more variable than values. A message in the newspaper, a talk with a friend or an article in a magazine may change one's opinion. Opinion usually fits a field of interest in the sense that opinions within a field of interest are structured more, are better founded on information and sometimes also are more extreme. Advertising capitalizes on consumer opinions regarding commercial objects (products and services).

Behavior

Antonides (1998) imply that lifestyle is partly characterized by a behavior pattern. Lifestyle can be measured concretely on the basis of one's activities. How do consumers use their time? What types of recreation and sports do they practice? How much time do they spend on mass media, on shopping and going out, on maintenance of the house, the garden and the car, on traveling and of visiting friends and relatives? Activities have an objective and perceived reality. Differences between men and women manifest themselves clearly in research on the use, for example regarding the time spent on household duties and paid labor, on media usage and leisure in general.

Psychographics as AIO Profiles

The appeal of psychographics in marketing from the outset has been their quantifiability-like demography, psychographics which were based on quantitative measures. To measure psychographics (i.e., value, self-concept, and lifestyles), researchers present a series of statements about possible activities, interests, and opinions. Respondents indicate their agreement with these statements. The samples of these statements are price consciousness, and technologically consciousness.

Lifestyle and the Consumption Process

Hawkins, Best, and Coney (2001) proposed that our lifestyle is basically how we live. It is how we enact our self-concept. It is determined by our past experiences, innate characteristics, and current situation. It influences all aspects of our consumption behavior. One's lifestyle is a function of inherent individual characteristics that been shaped and formed through social interaction as one evolves through the life cycle. Thus, culture, values, demographics, subculture, social class, reference groups, family, motives, emotions and personality influence lifestyle.

2.2 Previous Empirical Research

Thai Farmers Research Center Co., Ltd. (1997) undertook a public opinion survey on the topic of computer consumption behavior of consumer in Bangkok area. The information was obtained from a sampling of 500 respondents. Approximately, 60.2 percent of computer buyer for the respondents is male and 39.8 percent of the buyer is female. The research found that most of consumers purchase their computer base on the capability first and considering the price for the next. Most of consumer (90.1 percent) tends to buy computer at the retail store or vendor store within Pantip Department Store and the rest for the super store. The study also found that the students and government agents are the buyer who has high purchasing power. Hence, the suppliers tried to gain these customer groups by increasing the competition in this market.

National Statistical Office conducted survey on the topic of the 2001 survey of information technology in Thailand. The researcher collected the information about the usage of information technology/communication equipment, Internet usage rating at home and outside. This research also studied the important characteristic of Internet user's population, economic, and society. The research found that the Bangkok's usage rate of computer and internet is increasing and most of them located in Bangkok area. National Statistical Office plan to conducted the research on this topic every two years and using the collected information as the indication index toward the development of Thailand's information technology.

Jumpei (2001) studied purchase intention formation structure of Thai at-home personal computer users: An application of structural equation modeling. The study found that there were three stages within Thai at-home PC user's purchase intention formation process, that is, cognitive, affective and behavioral. These stages formed sequence, of dependent relationships (cognitive -> affective -> behavioral). There were three attitude objectors (notebook, brand-name desktop, white box desktop) and attitude formation structure was somewhat different among these product forms. The research results suggested introducing the other independent factor ('Price' factor). Moreover, at least concerning PC purchase of Thai people, subjective norm factor should not be used in the purchase intention formation model.

Srewaromya (1986) studied the market share of U.S. PC hardware and software vendors. At that time, the market share of the U.S. PC vendors was over 80% but there were some clear indicator of its future shrinking. Researcher thoroughly examined the PC market situation at that time and past marketing strategies of the U.S. PC vendors. Researcher found that the U.S. vendors' market share was sharply declining especially in the low end of the market. American vendors failed to meet price requirement of most cutters and localize enough their product. Researcher predicted that the U.S. vendors failing to revise their existence price policies are to be heading for a further downturn in Thai PC market. Indeed, that is exactly the situation currently found. Another predict, that is, marketing would become more important than price or capability of the machine is not yet really realized but in the Western countries or Japan, price and capabilities cannot be an enough differentiation factor anymore. In Thai market, similar trend will probably be observed in the future.

Phomnart (2000) conducted survey on the PC purchasers at Panthip Plaza the largest computer related shopping mall in Bangkok. The research objective was to explore the factors contributing to customer expectation and satisfaction about PC to be purchased. The researcher asked the respondents whether or not they were satisfied with the PC they bought at Panthip Plaza in regards to the factors. Based on the survey results, the research found that PC purchaser at Panthip Plaza were, in general, satisfied with only some quarters of the given influential elements, that is, capability, appearance, durability and price of PC.

2.3 Application of Relevant Theories

Notebook Computer

Ranch (2001) stated that several factors are influencing strong notebook sales. Processing speed of notebooks rivals that of desktop PCs and is sufficient to get most jobs done. For now, the processing speeds had reached to 1 GHz. Thin and light portables are gaining popularity and could make up as much as 70% of the market in 2005, up from around 20% today. Thin and light notebooks bring increased mobility and freedom and are popular among business users. But among both business and consumer users alike the current preferences are for full-featured notebooks that effectively replace desktop PCs. The conflicting demand of smaller and lighter versus more features and bigger screens will shape the portable market over the next five years. The advantage of the notebook computer is that it serves as a full desktop replacement. The display of a notebook computer is often actually better than all but the best desktop monitors. Notebooks now routinely have the same amount of RAM and hard drive capacity as an equivalent desktop computer. They normally have built-in CD drives, modems, and PC Card expansion slots most often used for a network adaptor. The difference between a notebook and a desktop is the pointing device. You can attach a mouse to a notebook, but you may find that it becomes tiresome to attach and detach it for every transport. There is no denying that the mouse is still the most practical pointing device for most users. Most people, however, quickly become accustomed to any of the various built-in pointing device types on notebook computers and after a few days no longer notice they are not using a mouse. Slawsby (2000) mentioned that the evolution of technology in the entire smart handheld market is beginning to enable devices to bend to the usage, needs, and wishes of their users instead of the traditional paradigm of the user bending to the interface and device requirements, and this is increasing acceptance among users. Notebooks also have advanced rechargeable batteries. Because of the combination of size restraints and the amount of current needed for the various components, however, notebooks tend to last between two and four hours between charges. At four to eight pounds most users with significant foot travel ahead will pause to consider before taking a notebook computer out the door. While notebook computers tend to cost up to twice the price of an equivalent desktop, there are budget makes available. Generally, budget notebooks make some or all of the following sacrifices: less ruggedness and/or poorer

construction, heavier weight, very poor battery capacity, little or no power management, a less readable display. There are many potential users for whom none of these negatives is a show-stopper. Unlike desktop computers, notebooks are moved around. Very few notebooks will make it through even three years without a serious component failure. In general, the safest way is to buy a notebook made by a consumer-oriented manufacturer from an established, friendly, retailer in your area; and, if at all possible, the warranty should be extended to at least three years.

Desktop and Notebook Merge into a Desknote

New notebook aims to combine the best of two worlds, trading portability for performance. Lemon (2002) said that it looks like a notebook, it runs like a notebook and you carry it around like a notebook. But at a typical price of around \$1,000. It is known as a Desknote, the brainchild of a Taipei company called Elitegroup Computer Systems, which is betting that users will buy into its philosophy of a portable computer at a desktop price. The company said that the Desknote line of portable computers could reshape the way that users and vendors think about notebook PCs, and preliminary research from IDC suggests it might be right. The Desknote looks like a notebook PC, but there is a difference: it is not designed for power-free use and it is not equipped with an internal battery and uses the desktop version of processors from Intel and Advanced Micro Devices. The absence of an internal battery should not be much of a drawback for most users. Weighing in at nearly six pounds, the Desknote is likely to spend most of its time on a desk rather than on the road. For users that need battery power, Elite group offers external battery packs and car chargers as optional accessories. Despite the lack of a battery, the Desknote is the combination of high-end components and low price that it is very well to take sales from other notebooks that primarily function as desktop replacements. The high-end notebooks do not come cheap. Notebook components, like the mobile version of the Pentium 4, come at a high price when compared to the desktop. For example, the 2-GHz Mobile Pentium 4 costs about \$600, which is more than three times for the \$190 price of the 2-GHz desktop chip. No surprise that most of the high-end notebooks carry a heavyweight price about \$2,500. Intel introduced the 2-GHz Mobile Pentium 4 on June 24 while the desktop version has been around since August 27, 2001. The

Desknote offers an alternative for those who don't feel like waiting a year to get the same level of performance as a desktop and do not want to pay extra for the privilege. By using desktop versions of chips like the Pentium 4 and other components, Elite group is able to match the specifications of high-end notebooks at a discount such as a 2-GHz Pentium 4-based on Desknote will costs around \$1,200, or less, depending on the exact configuration. With specifications and prices like that, it's no wonder that users in Asia are starting to turn to the Desknote. During the first half of 2002, Desknote sales in Asia, excluding Japan, reached 43,000 units, with sales primarily in China, the Philippines and Taiwan. So far, the Desknote represents a small percentage of the 1.49 million notebooks sold in Asia during the same period, according to IDC, but these numbers should be enough to make major notebook vendors take notice, especially if Desknote sales continue to increase and the large price gap remains between notebook components and their desktop counterparts.

Heated Discussion

Consumers may think they're getting more power in their portable PC, but desktop CPUs aren't designed to go mobile. Krazit (2002) said that notebooks with desktop processors may offer high performance, but the added processing power means nothing if the desktop chip overheats the laptop and causes it to malfunction. Problems with such a machine might cause PC vendors to rethink how they design and market such machines. Many vendors such as Dell Computer, Hewlett-Packard, and Gateway, have also released notebooks powered by desktop processors, offering the power of a desktop computer with the portability of a laptop. However, Intel, Advanced Micro Devices, and Transmeta make processors designed specifically for notebook computers for a reason. Mobile chips are designed to reduce their processing speed for applications that don't require the full strength of the chip, preventing excessive heat by lowering overall power consumption. But they still operate at their advertised clock speed when crunching large applications. Intel's SpeedStep technology is an example of this, lowering power consumption even between keystrokes, and increasing in extra power when needed, slows down the processor when the laptop is running on battery power, while another technology makes the system use less power when in sleep mode. Krewell (2002) said that desktop processors run at higher voltages than mobile ones, and therefore need to dissipate more heat than mobile processors. This is not a big problem in a desktop

chassis with space for elaborate heatsinks and cooling fans. But a notebook computer does not have this extra space; the machine retains so more heat. Notebook chips are designed to operate at lower wattages to avoid crossing the heat that forces the machine to shut down, but desktop chip developers are not as concerned with that constraint. This was the problem encountered by some Desknote users, who found their notebooks shutting off in the middle of processing graphics presentations or playing graphics-intensive games, or running much slower than advertised processor speeds during normal use. This is a fundamental problem with using desktop processors in notebooks. A vendor can design around these problems by adding heat shields or using an advanced heatsink, but those remedies add price and weight to notebooks.



CHAPTER 3

RESEARCH FRAMEWORK

This chapter focuses on the framework of the research. The researcher will relate the theories, which are drawn from the literature review to develop the conceptual framework of the research. This chapter consists of four sections, which are theoretical framework, conceptual framework, research hypotheses and operationalization of related variables. Theoretical framework is a model that explores the relationship of variables in a logical and prescribed fashion. Conceptual framework is the researcher's own model by adapting from Kotler's buyer behavior model that explains the independent and dependent variables. Research Hypotheses were the statements specifying the relationship of variables that will be tested in this research. The last part, operationalization of variable was the examples translated into action of all variables and its sub-variables.

3.1 Theoretical Framework

After reviewing many literatures of authors and theorists from several sources, the researcher has drawn the theoretical framework to represent a conception related to research's study. The researcher related the theories of marketing, stimuli, demographic factors, decision making style, and consumer's purchase decisions in order to develop the conceptual framework. The independent variables of this research were marketing mix factors, demographic factors and decision making style of consumers in Bangkok metropolis area. The dependent variables of this research were consumer's buying decision focused on product choice and brand choice.

Product choice Vs Product

Sproles and Kendall (1986) mentioned that the fields of psychology and economics both suggest that the consumer sees a product as having several attributes. Furthermore, many product attributes can be identified; but consumers usually base their evaluations on half of dozen or less.

Kotler (1997) stated that product choice involves with consumers' purchase decision in choosing which product to buy in order to satisfy a need. Product has to solve the problem and give the worth benefit to customers. Brand name of product has

influential on product choice as well. A brand that is known by most customers in the marketplace or a brand with a high degree of brand acceptability tends to be the selected brand over the others. Reputation is therefore the primary elements of perceived quality and value in the product. The customer support service is the other one that the customer will look for when they decide to buy the product because they can reduce risk when the user faces with the problem. Thus, the customer will desire to buy the product having the customer support service rather than the ones that have not.

Product choice Vs Price

Typically, consumers have a clear idea of the price range they are willing to pay. Greenleaf and Lehmann (1995) mention the lower price can increase the subject's evaluation of a product. Lastovicka (1982) mentioned that in consumers' buying decision, price is a strong indicator of quality in people's minds especially when consumers lack of other data. Price covers mainly the perceptual value and benefits of products or services relative to monetary price paid by customers. This is a measurement of customers' value perception in receiving the products or services when compare to what they pay. Price refers to the cost of acquiring the products or services in the eyes of the customers. The consumers' past experience may be consistent with a positive price-quality relationship, or one where higher prices result from firms spending more to supply quality. Wells (1975) mentioned that consumers may believe that higher prices are the result of others willingness to pay more for a better quality. Hence, customer may choose the brand that set the high price. Likewise, Walter and Bergiel (1989) said that some consumer buy product or service by majors considering prices since consumer uses the price of product as an indicator of social status. Encel, Blackwell and Miniard (1993) stated that given the belief that price and product quality is positively related, it is natural that consumers would use price as an indicator of product quality. Assael (1993) stated that consumers compare items on cost and on utility they expect to derive from the items features. However, Barry and Hazel (1993) argues that it is very common for people with limited information to base the decision on price simply because they lack the necessary understand to make a judgment based on other features of the product.

Product choice Vs Distribution

Barry and Hazel (1993) stated that consumers can be persuaded to select certain products by the logic of external information when it is received. Consumers may not always recognize sound and logical information when it is received, but they do react to perceived logic. If the logic is sound it can cause a re-evaluation of consumer internal needs and motivation. Logical external information may be discarded by a consumer when choosing product if it is not compatible with the consumer's own logic. On a given product choice, the consumer may receive a great deal of information some sought and some unsought. The fact is filtered through the individual's thought process, and that which is incompatible is either not used or not given the weight of other data. In this research, distribution refers to the number of acquiring store that can available to customer. The more acquiring store, the more convenience to customer.

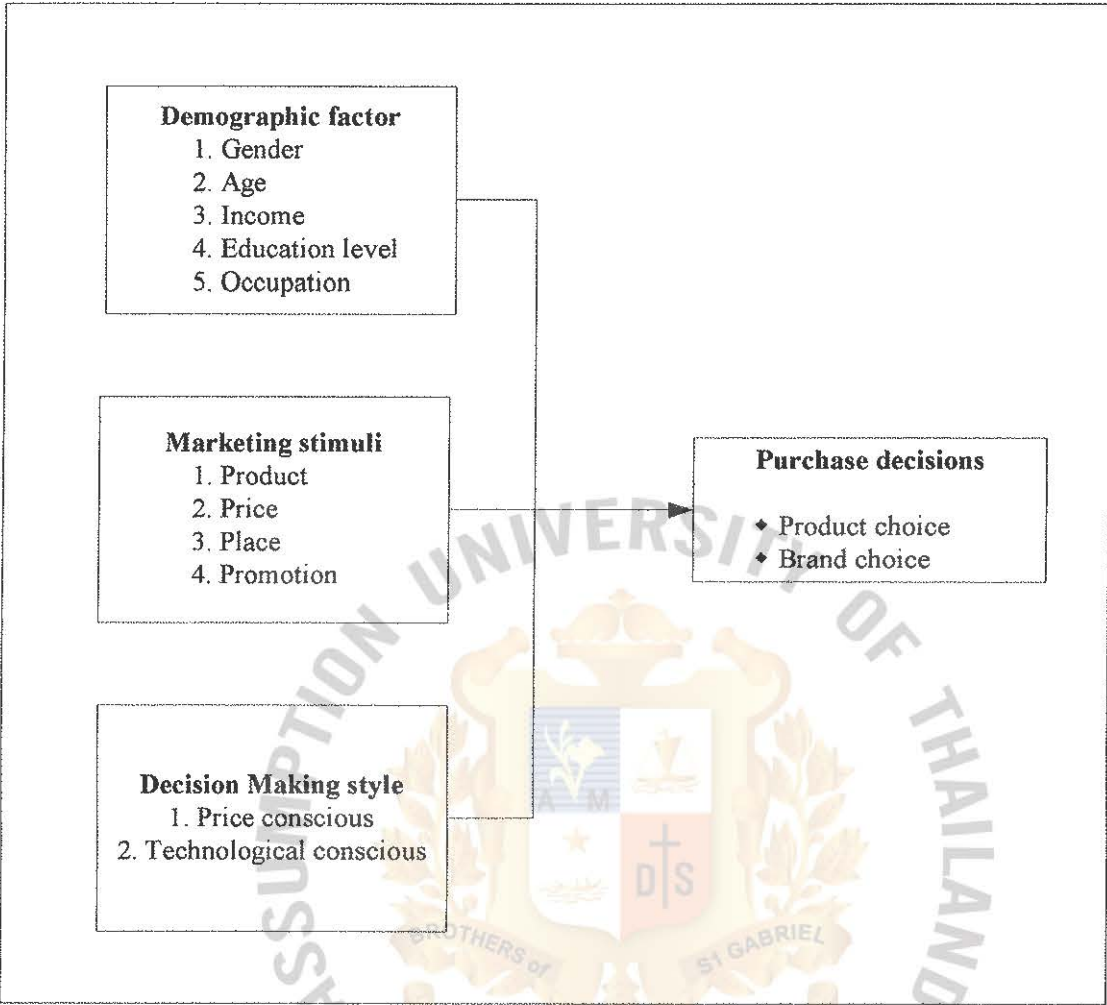
Product choice Vs Promotion

Kotler (1997) stated that promotion is another one factor influencing on the consumer purchase decision because the consumers receive highest information exposure about a product from commercial source and the most effective exposures come from personal sources. Assael (1993) showed that if potential clients learn about a product from the media, their buying decision time will be greatly reduced. Kotler (1997) propose a model of consumer behavior which state that brand image, sales promotion, product attributes, product benefits, availability, and attitude towards product are criteria that the consumer use in the evaluation of alternatives. Lehmann and Winer (1991) mentioned that as seen in marketing stimuli, sales promotion is used between producers and consumers to stimulate demand. Walter and Bergiel (1989) mentions that sales promotion tools are mostly used to create a stronger and quicker response in purchase timing of buyers purchase decision.

3.2 Conceptual Framework

The conceptual framework explicated the relationship between influencing factors and consumer's buying decision based on previous empirical researches provided evidence. The models are used as representations of theoretical systems that the researcher will test, examine and generally analyze. The conceptual framework of this study is presented in Figure 3.1.

Figure 3. 1 Conceptual Framework of the Study



There are many factors affecting consumer's buying decision. Here, the framework is built to understand factor influencing in the buyer's purchase decision for computer notebook adapted from Kotler's buyer behavior model. In the model, there is a relationship between consumer's purchase decision and marketing stimuli. Personal characteristics or demographic factors also influence a buyer's decision.

In the framework, marketing stimuli including product, price, distribution, and promotion as external factor and demographic factors including gender, age, education level, occupation, and income as internal factor of consumer related with consumer's buying decision for product choice and brand choice. Moreover, this research also finds the difference among consumer's buying decision in term of product choice, and brand choice toward decision making style of computer notebook user in Bangkok metropolis area. The main process that is the consumer's purchase decision is dependent variables or the variable to be explained. Demographic factors,

decision making style, and marketing stimuli are independent variables or the variables that influence the dependent variable.

3.3 Research Hypotheses

After the identification of the proper Variables, the network of association among the variables needs to be elaborated so that relevant hypothesis can be developed and subsequently tested.

Group A: Demographic factors VS Product choices

H1_o : There is no difference in product choices toward computer notebook when segmented by gender.

H1_a : There is difference in product choices toward computer notebook when segmented by gender.

H2_o : There is no difference in product choices toward computer notebook when segmented by age levels.

H2_a : There is difference in product choices toward computer notebook when segmented by age levels.

H3_o : There is no difference in product choices toward computer notebook when segmented by income levels.

H3_a : There is difference in product choices toward computer notebook when segmented by income levels.

H4_o : There is no difference in product choices toward computer notebook when segmented by education levels.

H4_a : There is difference in product choices toward computer notebook when segmented by education levels.

H5_o : There is no difference in product choices toward computer notebook when segmented by occupations.

H5_a : There is difference in product choices toward computer notebook when segmented by occupations.

Group B: Demographic factors VS Brand choices

H6_o : There is no difference in brand choices computer notebook when segmented by gender.

H6_a : There is difference in brand choices toward computer notebook when segmented by gender.

H7_o : There is no difference in brand choices toward computer notebook when segmented by age levels.

H7_a : There is difference in brand choices toward computer notebook when segmented by age levels.

H8_o : There is no difference in brand choices toward computer notebook when segmented by income levels.

H8_a : There is difference in brand choices toward computer notebook when segmented by income levels.

H9_o : There is no difference in brand choices toward computer notebook when segmented by education levels.

H9_a : There is difference in brand choices toward computer notebook when segmented by education levels.

H10_o : There is no difference in brand choices toward computer notebook when segmented by occupations.

H10_a : There is difference in brand choices toward computer notebook when segmented by occupations.

Group C: Marketing stimuli factors VS Product choices

H11_o : There is no relationship between product factor and product choices toward computer notebook.

H11_a : There is relationship between product factor and product choices toward computer notebook.

H12_o : There is no relationship between price factor and product choices toward computer notebook.

H12_a : There is relationship between price factor and product choices toward computer notebook.

H13_o : There is no relationship between place factor and product choices toward computer notebook..

H13_a : There is relationship between place factor and product choices toward computer notebook.

H14_o : There is no relationship between promotion factor and product choices toward computer notebook.

H14_a : There is relationship between promotion factor and product choices toward computer notebook.

Group D: Marketing stimuli factors VS Brand choices

H15_o : There is no relationship between product factor and brand choices toward computer notebook.

H15_a : There is relationship between product factor and brand choices toward computer notebook.

H16_o : There is no relationship between price factor and brand choices toward computer notebook.

H16_a : There is relationship between price factor and brand choices toward computer notebook.

H17_o : There is no relationship between place factor and brand choices toward computer notebook.

H17_a : There is relationship between place factor and brand choices toward computer notebook.

H18_o : There is no relationship between promotion factor and brand choices toward computer notebook.

H18_a : There is relationship between promotion factor and brand choices toward computer notebook.

Group E: Decision Making Style VS Product choices

H19_o : There is no relationship between price conscious and product choices toward computer notebook.

H19_a : There is relationship between price conscious and product choices toward computer notebook.

H20_o : There is no relationship between technological conscious and product choices toward computer notebook.

H20_a : There is relationship between technological conscious and product choices toward computer notebook.

Group F: Decision Making Style VS Brand choices

H21_o : There is no relationship between price conscious and brand choices toward computer notebook.

H21_a: There is relationship between price conscious and brand choices toward computer notebook.

H22_o: There is no relationship between technological conscious and brand choices toward computer notebook.

H22_a: There is relationship between technological conscious and brand choices toward computer notebook.

3.4 Operationalization of The Independent and Dependent Variables

A concept is a generalized idea about a class of objects, attributes occurrences, or processes. A concept must be made operational in order to be measured. An operational definition gives meaning of a concept by specifying the activities or operations necessary to measure it. The operational definition specifies what must be done to measure the concept under investigation. Operational definitions help the researcher specify the rules for assigning numbers. The values assigned in the measuring process can be manipulated according to certain mathematical rules. Once the variables of interest have been identified and defined conceptually, a specific type of scale must be selected. This study applies three types of scale: nominal, ordinal and interval scales. The appropriate statistical procedure must be selected to analyze each scale. Details of variable measurement are as follows:

Table 3.1 Operational Definition of Influencing Variables

| Concept | Conceptual Definition | Operational Components | Level of Measurement | Question Number |
|-------------------|---|---|----------------------|---|
| Marketing Stimuli | | | | Part II |
| Product | Anything that can be offered to a market to satisfy a want or need. | <ul style="list-style-type: none">- Brand name- Portability- Warranties- Services- Technology development- Weight- Design- Quality- Specification | Interval scale | <ul style="list-style-type: none">12345, 126789, 10, 11, 13, 14 |

| Concept | Conceptual Definition | Operational Components | Level of Measurement | Question Number |
|---|---|--|---------------------------------|--|
| Marketing Stimuli <i>Price</i> | The amount of money one must pay to get the right in using the product. | - Market price - Reasonable price | Interval scale Ordinal scale | Part II 15, 16, 17 Part I 5 |
| Marketing Stimuli <i>Distribution</i> | The process of making a product available for use or consumption by the consumer. | - Convenient location - Well known shop - Variety product - Delivery service - Good Inventory Management | Interval scale | Part II 18 19 20 21 22 |
| Marketing Stimuli <i>Promotion</i> | Any form of informing, persuading, or reminding potential customers about products and services. | - Advertising - Sales promotion - Personal selling | Interval scale | Part II 24 25 26 |
| Demographic factors <i>Gender</i> | Classification of sex. | - Male or female | Nominal scale | Part IV 1 |
| Demographic factors <i>Age</i> | The length of time that a person has lived. | - Duration of life specific to one person. | Ordinal scale | Part IV 2 |
| Demographic factors <i>Income</i> | The amount of money received over a certain period as payment for work or as interest on investments. | - Individual average income per month | Ordinal scale | Part IV 5 |

| Concept | Conceptual Definition | Operational Components | Level of Measurement | Question Number |
|--|---|---|----------------------|-------------------------------|
| Demographic factors <i>Education level</i> | The knowledge or skill level one obtained or developed by a learning process through formal instruction at a school or college. | - One's highest education level | Ordinal scale | Part IV 4 |
| Demographic factors <i>Occupation</i> | An activity that serves as one's regular source of livelihood. | - The career of the person | Nominal scale | Part IV 3 |
| Decision making level <i>Price conscious</i> | Aware of sum of money bought, which is sold or bought. | - The buyer that their purchasing base on price | Interval scale | Part III 1, 2,3, 4 |
| Decision making level <i>Technological conscious</i> | Aware of latest technology at a particular time. | - The buyer that their purchasing base on the latest technology or new things | Interval scale | Part III 5, 6, 7, 8 |

Table 3.2 Operational Definition of Explained Variables

| Concept | Conceptual Definition | Operational Components | Level of Measurement | Question Number |
|--------------------------|--|--|----------------------|-----------------------|
| Purchase decision | | | | |
| <i>Product choice</i> | The buyer purchase decision base on type, characteristic and component of computer notebook. | <ul style="list-style-type: none">- Notebook Computer- Ultra Portable- Desknote Computer | Nominal scale | Part I 3, 4 |
| <i>Brand choice</i> | The buyer purchase decision base on their set of brand name in mind | <ul style="list-style-type: none">- Brand name of computer notebook | Nominal scale | Part I 1, 2 |



CHAPTER 4

RESEARCH METHODOLOGY

The purpose of this chapter is to describe the research methodology employed in this research including data collection technique, method, sampling design, and determining the sample size. Zikmund (1997) stated that research methodology is defined as a part of the body of the report that explains the research design, sampling procedures, and other technical procedures used for collecting the data. The research methodology was aimed to explain the process of conducting the research which include research method used, respondents and sampling procedures, research instruments or questionnaires, collection of data or gathering procedures and statistical treatment of data.

4.1 Research Methods: Sample Survey

Zikmund (2000) stated that questionnaire is used to gather information from a sample of people. Survey provides quick, inexpensive, efficient, and accurate means of assessing information about a population. Sekaran (1992) mentioned that survey could be done in many ways. This research conducted to clarify and define the nature of a problem.

The researcher uses questionnaires for finding and obtained the information from the respondents. This research uses a survey technique in order to collect primary data from a sample of computer notebook. The researcher asks the screening question to select the target. The researcher asks the following questions: "Have you ever buy a computer notebook before?" "Do you buy your latest computer notebook during 2000-2002?" and "Do you live in Bangkok?" to select the target respondents. However, there is no sampling frame in this research survey as the researcher is not able to find a list of all people who purchase computer notebook and live in Bangkok.

4.2 Respondents and Sampling Procedures

Target Population

Zikmund (1991) mentioned that the target population is a specific complete group relevant to the research project. The target population of this research is the person who purchased notebook computer during year 2000-2002 and lives in Bangkok area.

Determining Sample Size

In order to determine the sample size, the researcher references the sample size from previous study as follows:

- Jumpei (2001) researched purchase intention formation structure of Thai at-home personal computer users. The research studies the relationship between purchase intention of Thai at-home personal computer users with personal factors (personal beliefs/evaluations about possible outcomes of the behavior) and social cognitive factors (beliefs about references' opinions/attitudes and motivation). The research found that there is relationship between purchase intention of Thai at-home personal computer users with personal factors and social cognitive factors. The study used 350 respondents.
- Kitti (2002) researched factors influencing consumer's purchasing decision toward notebook computer. The research studies the relationship between consumer's purchasing decision toward notebook computer with product factor, price, distribution factors and demographic factors (which include of gender, age, education levels, income levels, and occupation). The research found that there is relationship between product, price, distribution factor and consumer's purchasing decision toward notebook computer and there is relationship between demographic factors and consumer's purchasing decision toward notebook computer, too. The study used 300 respondents and applied Pearson Correlation coefficient in analyzing the data.
- Wanida (2002) researched factors influencing consumer's purchasing decision and consumer behavior toward handheld and notebook computer. The research studies the relationship between consumer's purchasing decision and consumer behavior toward notebook computer with demographic factors (which include of gender, education levels, income levels, and occupation). As

the result of the research, there is relationship between demographic factors and consumer's purchasing decision toward notebook computer and there is relationship between demographic factors and consumer behavior toward notebook computer. The study used 200 respondents and applied Pearson Correlation coefficient, Spearman Rho Correlation coefficient in analyzing the data.

In this research, the study focuses on the relationship of the demographic factors, marketing stimuli factors, decision-making style toward buyer's purchase decision in term of product choices and brand choices. The researcher study the will use 400 respondents for collecting the primary data via questionnaire for this study.

Sampling Procedure

"Non-Probability Sampling" is used in this research because the population being chosen is unknown. The researcher used purposive and convenience sampling procedure for selecting the respondents. The researcher selects a sample to serve a specific purpose because the researcher wish to study consumer's purchasing decision toward computer notebook of consumers in Bangkok metropolis area. Therefore, the researcher selected the respondents by using screening question to ensure that the respondents are the target population or the person who purchased notebook computer and lives in Bangkok area. In Bangkok area, the researcher selected four of well known IT superstores, which located in different districts (Pantip Plaza in Prawath, Seri Center in Rathtawee, IT Mall (Fortune Town) in Dindang, and Grand IT Mall in Bangkae) and distribute the questionnaire to 100 respondents in each IT superstore. Therefore, the total number of respondents is equal to 400 samples.

4.3 Research Instruments/Questionnaires

This research used questionnaire to gather the information from the respondents. The formation of questionnaire was conducted based on the theoretical framework and previous study. Questionnaire consists of four parts. All questions responded to the statement of problems and hypotheses. The questionnaire is attached in Appendix A while the outline of each part is shown below:

Part 1: The product choices and brand choices of consumer toward notebook computer. This part contains 5 questions. Multiple choices were used in this part. It

also consists of a set of computer notebooks brand and types of computer notebook that explains and gives the directions to the respondents to answer the questionnaire properly.

Part 2: The marketing stimuli that influence consumer's purchase decision of notebook computer in Bangkok Metropolis section. This section consists of 26 questions for rating the importance of each question on the five-point scale, ranging from one (not at all important) to five (very important).

Part 3: Decision making style of consumer who purchase notebook computer. This section contains eight questions for finding the consumer's decision making style who make a buying decision on the five point scale, ranging from one (Strongly disagree) to five (Strongly agree).

Part 4: The personal data section requests the information about the respondents' demographic data and asks respondents to provide indication of gender, age, education level, occupation, and income. Multiple choices are used in this part.

Before distributing the questionnaires, the researcher had to translate all questions into the Thai language for respondents' ease of understanding. An individual who is well versed in linguistics for both the English/Thai translation of the questionnaires and was rechecked by an expert in order to ensure minimal interpretation error did the translation separately.

The researcher pre-tested the data collection tool by distributing 30 copies of the questionnaires to the randomly selected respondents for testing. Mistakes were corrected and adjusted in terms of sequencing, wording, and structuring; so that communication between the researcher and the respondents is not biased.

Pre Testing

The objective of pretest study was to examine the reliability of the instrument. For the sample size, Vanichabancha (2001) mentioned that pretest should be at least 25 respondents. Therefore, this research distributed 30 copies of questionnaire for respondents. After launching the questionnaire, there were some questions that ambiguous in meaning and misunderstanding so the researcher reviewed and developed all those questions. The data were coded and processed by SPSS program to find the reliability by using the Cronback's Coefficient Alpha test. The result shown an alpha coefficient value is equal to 0.8498 for all items, 0.6482 in the

marketing stimuli factor, and 0.6650 in the decision making style. Sekaran (1992) support that researcher have accepted reliability estimate of 0.60 as sufficient for basis research. Churchill (1979) indicated that a reliability estimate of 0.80 or more is acceptable. From the result of reliability in the pretest study were more than 0.80, which is considered reliable to use in this research.

4.4 Collection of Data/Gathering Procedures.

In this research, primary data were collected by using self-administered or close-formed questionnaires in Bangkok Metropolis area. This approach is the most flexible method of data collection, easy to provide information and be interpreted. Self-administered questionnaire can be used to present questions and record answers in quantitative field research surveys. Self-administered questionnaire is a less expensive and less time consuming method in collect information from the large number of individuals simultaneously.

Secondary data were collected from several sources such as marketing and consumer behavior textbooks, magazines, newspaper articles, other previous research and regional publications. Library sources of marketing data include and array of publicly circulated materials such as government documents, research reports and foreign journals. In addition, the major information was obtained from National Statistical Office of Thailand.

This research is a survey technique and the questionnaires will be distributed to the respondents at IT superstores around Bangkok area. The way of distributing the questionnaires to respondents will be face-to-face communication because it is a two-way communication, between respondents and researchers. This approach is useful for the researchers in that they can ask the respondents to fill up the questionnaire, which is handed to them. The face-to-face method will reduce the error of the communication between the researchers and the respondents. So the researcher can describe the unclear question to the respondents immediately. The researcher will distribute the questionnaire during November 2002.

4.5 Statistical Treatment of Data

Once the necessary data are collected, the data are analyzed and summarized in a readable and easily interpretable form. The Statistical Package for Social Science (SPSS) is utilized to summarize the data where needed. After collecting the data form,

of 400 questionnaires, the data are coded into the symbolic form that is used in SPSS software. The researcher uses SPSS software for windows for data processing. The form of data presentation from these procedures would also be presented in an easily interpretable format.

Descriptive statistics consists of the frequency and percentage in order to describe each variable that is associated with respondent data such as personal data. Statistical treatment of data applied in the analysis includes of Mann-Whitney U-test for Independent Samples, Kruskal-Wallis H-test for independent samples, Spearman Rho Correlation Coefficient.

Mann-Whitney U-test for Independent Samples

The researcher apply Mann-Whitney U-test for independent samples to analyze the difference in consumer's purchase decision in term of brand choices and product choices toward notebook computer in Bangkok's consumers and to analyze the difference in consumer's purchase decision toward notebook computer when segmented by gender.

Kruskal-Wallis H test for Independent Samples

The researcher apply Kruskal-Wallis H-test for independent samples to analyze the difference in consumer's purchase decision in term of brand choices and product choices toward notebook computer in Bangkok's consumers and to analyze the difference in consumer's purchase decision toward notebook computer when segmented by age levels, income levels, education levels and occupation.

Spearman Pho Correlation Coefficient

Zikmund (2000) stated that the correlation coefficient ranges from +1.0 to -1.0. If the value of r is 1.0, there is a perfect positive linear (straight- line) relationship. If the value of r is -1.0, a perfect negative linear relationship or a perfect inverse relationship is indicated. No correlation is indicated if $r = 0$. A correlation coefficient indicates both the magnitude of the linear relationship and the direction of the relationship. Spearman Rho Correlation coefficient is used to find the relationship between decision making style (which consist of price consciousness, and technological consciousness), marketing stimuli (which consist of product, price, place and promotion) with consumer's purchase decision of computer notebook.

All of the hypotheses were tested at the 0.05 and 0.01 level of statistical significance. The following items summarize the analytic methods used in this study:

1. Mann-Whitney U-test for Independent Samples: For hypotheses 1, and 6
2. Kruskal-Wallis H-test for Independent Samples: For hypotheses 2-5 and 7-10
3. Spearman Rho Correlation Coefficient: For hypotheses 11 - 22



CHAPTER 5

DATA ANALYSES

This chapter examines the analysis of data collected based on the sample size 400 samples. The data interpreted by using SPSS Program. The analysis is derived from all responses including consumer's purchase decision towards computer notebook, marketing mix, decision-making style, and demographically factors. In additional, there are 22 hypotheses included in this study. The data analyses part can be divided into two major sections, descriptive statistics and tests of the hypotheses.

5.1 Descriptive Statistics

Zikmund (1991) mentioned that descriptive analysis refers to the transformation of the raw data into a form that will make them easy to understand and interpret. Describing responses or observations is typically the first form of analysis, which is commonly done by calculating averages, frequency distributions and percentage distributions.

In this research descriptive statistics is divided into two parts, respondent characteristics and purchase decision making of product choices & brand choices analysis. For the first part, respondent characteristics include all personal information, which are also demographic factors such as gender, age, education levels, occupations, and salary per month. For the second part, it comprises of summary of purchase decision making of product choices & brand choices analysis of respondents toward notebook computer. For example, type of computer notebook, brand selection of computer notebook, reason for selecting that type and brand of computer notebook, and reasonable price of computer notebook for the respondents.

The last part of the analysis involves hypothesis testing of this research. For group A (hypotheses one to five), Mann-Whitney U-test for independent samples to analyze the difference in consumer's purchase decision in term of product choices toward notebook computer when segmented by gender (hypotheses one) and Kruskal-Wallis H-test for independent samples to analyze the difference in consumer's purchase decision in term of product choices toward notebook computer when segmented by age levels, income levels, education levels and occupation (hypotheses two to five). For group B (hypotheses six to ten), Mann-Whitney U-test for

independent samples to analyze the difference in consumer's purchase decision in term of brand choices toward notebook computer when segmented by gender (hypotheses six) and Kruskal-Wallis H-test for independent samples to analyze the difference in consumer's purchase decision in term of brand choices toward notebook computer when segmented by age levels, income levels, education levels and occupation (hypotheses seven to ten). In group C (hypotheses eleven to fourteen), Spearman Rho Correlation coefficient is used to find the relationship between marketing stimuli (which consist of product, price, place and promotion) with consumer's purchase decision in term of product choices of computer notebook.

In group D (hypothesis fifteen to eighteen), Spearman Rho Correlation coefficient is used to find the relationship between marketing stimuli (which consist of product, price, place and promotion) with consumer's purchase decision in term of brand choices of computer notebook. In group E (hypothesis nineteen to twenty), Spearman Rho Correlation coefficient is used to find the relationship between decision making style (which consist of price consciousness, and fashion consciousness) with consumer's purchase decision in term of product choices of computer notebook. In group F (hypothesis twenty-one to twenty-two), Spearman Rho Correlation coefficient is used to find the relationship between decision making style (which consist of price consciousness, and technological consciousness) with consumer's purchase decision in term of brand choices of computer notebook.

Respondent Characteristics

Table 5.1 Gender

| Gender | | Frequency | Percent | Valid Percent | Cumulative Percent |
|--------|--------|-----------|---------|---------------|--------------------|
| Valid | Male | 244 | 61.0 | 61.0 | 61.0 |
| | Female | 156 | 39.0 | 39.0 | 100.0 |
| | Total | 400 | 100.0 | 100.0 | |

Table 5.1 shows the gender of the respondents of this research. It is composed of 244 male respondents and 156 female respondents or 61% and 39%, respectively.

Table 5.2 Age Levels

| Age | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|------------------------|-----------|---------|---------------|--------------------|
| Valid | Less than 21 years old | 112 | 28.0 | 28.0 | 28.0 |
| | 21 - 30 years old | 212 | 53.0 | 53.0 | 81.0 |
| | 31 - 40 years old | 64 | 16.0 | 16.0 | 97.0 |
| | More than 40 years old | 12 | 3.0 | 3.0 | 100.0 |
| | Total | 400 | 100.0 | 100.0 | |

As illustrated in Table 5.2, the majority of the respondents' age range lied between 21-30 years old and counted for 212 respondents (53%). Additionally, 112 (28%), and 64 (16%) of the respondents are between less than 21 years old, and 31-40 years old, respectively. Finally, the rest of the twelve respondents (3%) is more than 40 years old.

Table 5.3 Occupations

| | | Occupation | | | |
|-------|--|------------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Student | 206 | 51.5 | 51.5 | 51.5 |
| | Civil service employee/State enterprise employee | 55 | 13.8 | 13.8 | 65.3 |
| | Private sector employee | 87 | 21.8 | 21.8 | 87.0 |
| | Self-Employed | 34 | 8.5 | 8.5 | 95.5 |
| | Others | 18 | 4.5 | 4.5 | 100.0 |
| | Total | 400 | 100.0 | 100.0 | |

Regarding occupations, Table 5.3 shows that 206 (51.5%) of the total respondents are student whereas 87 respondents (21.8%), 55 respondents (13.8%), 34 respondents (8.5%), 18 respondents (4.5%) represent the respondents who are private sector employee, civil service employee/state enterprise employee, self-employed, and others, respectively.

Table 5.4 Education levels

| | | Highest education level | | | |
|-------|----------------------------------|-------------------------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | High school or less | 42 | 10.5 | 10.5 | 10.5 |
| | Diploma/Occupational certificate | 44 | 11.0 | 11.0 | 21.5 |
| | Bachelor's degree | 210 | 52.5 | 52.5 | 74.0 |
| | Master's degree or higher | 104 | 26.0 | 26.0 | 100.0 |
| | Total | 400 | 100.0 | 100.0 | |

Table 5.4 reports that the majority of the total respondents' education levels are Bachelor's degree which counting for 210 respondents (52.5%) from total respondents. There are 104 respondents (26%) who hold Master's degree or higher. Finally, there are only 44 respondents (11%) who have graduated with Diploma/Occupational certificate and 42 respondents (10.5%) of the respondents have graduated from High school.

Table 5.5 Average Salary Per Month

| Average salary per month | | | | | |
|--------------------------|-----------------------|-----------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | 10,000 Baht or less | 16 | 4.0 | 4.0 | 4.0 |
| | 10,001 - 15,000 Baht | 125 | 31.3 | 31.3 | 35.3 |
| | 15,001 - 20,000 Baht | 167 | 41.8 | 41.8 | 77.0 |
| | 20,001 - 25,000 Baht | 80 | 20.0 | 20.0 | 97.0 |
| | More than 25,000 Baht | 12 | 3.0 | 3.0 | 100.0 |
| | Total | 400 | 100.0 | 100.0 | |

Table 5.5 indicates that the largest group, 167 (41.8%), of the respondents' average monthly income range is 15,001-20,000 baht, followed by 125 (31.3%) of the respondents who have an average monthly income range of 10,001-15,000 baht, 80 (20%) of the respondents have the average monthly income range of 20,001-25,000 baht, 16 (4%) of the respondents have the average monthly income range of 10,000 baht or less. Finally, respondents who have the average monthly income of more than 25,000 baht counted for 12 respondents (3%).

Purchase Decision Making of Product choice & Brand choices

Table 5.6 Brand of Computer Notebook

Which is the computer notebook's brand that influencing your purchasing decision for your latest computer notebook?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|---------|-----------|---------|---------------|--------------------|
| Valid | Fujitsu | 47 | 11.8 | 11.8 | 11.8 |
| | Toshiba | 82 | 20.5 | 20.5 | 32.3 |
| | IBM | 58 | 14.5 | 14.5 | 46.8 |
| | Dell | 14 | 3.5 | 3.5 | 50.3 |
| | Compaq | 71 | 17.8 | 17.8 | 68.0 |
| | Asustek | 34 | 8.5 | 8.5 | 76.5 |
| | Belta | 10 | 2.5 | 2.5 | 79.0 |
| | ECS | 26 | 6.5 | 6.5 | 85.5 |
| | Acer | 18 | 4.5 | 4.5 | 90.0 |
| | Liberta | 8 | 2.0 | 2.0 | 92.0 |
| | Sony | 6 | 1.5 | 1.5 | 93.5 |
| | NEC | 17 | 4.3 | 4.3 | 97.8 |
| | Other | 9 | 2.3 | 2.3 | 100.0 |
| | Total | 400 | 100.0 | 100.0 | |

From Table 5.6 shows that the major brand of computer notebook that influencing the respondents' purchase decision for their latest computer notebook

which is Toshiba and counted for 82 respondents (20.5%) from the total respondents. The others brand of computer notebook are Compaq counted for 71 respondents (17.8%), IBM counted for 58 respondents (14.5%), Fujitsu counted for 47 respondents (11.8%), Asustek counted for 34 respondents (8.5%), ECS counted for 26 respondents (6.5%), Acer counted for 18 respondents (4.5%), NEC counted for 17 respondents (4.3%), Dell counted for 14 respondents (3.5%), Belta counted for 10 respondents (2.5%), Other brands counted for 9 respondents (2.3%), and Liberta counted for 8 respondents (2%), respectively. Finally, there are 6 respondents (1.5%) who selected a brand of Sony.

Table 5.7 Reason for Selecting that Brand

| The most important reason for choosing the brand of computer notebook that influencing your purchasing in question 1 above? | | | | | |
|---|---------------------------------------|-----------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Well known brand | 177 | 44.3 | 44.3 | 44.3 |
| | Internationally produced brand | 31 | 7.8 | 7.8 | 52.0 |
| | Cheaper than other brands | 57 | 14.3 | 14.3 | 66.3 |
| | Advertising | 19 | 4.8 | 4.8 | 71.0 |
| | Belief in product and service quality | 104 | 26.0 | 26.0 | 97.0 |
| | Other | 12 | 3.0 | 3.0 | 100.0 |
| | Total | 400 | 100.0 | 100.0 | |

Table 5.7 shows that the most reasons for selecting that brand of computer notebook of respondents is well known brand computed as 177 respondents (44.3%) from the total respondents, followed by 104 (26%) of the respondents who selected belief in product and service quality, 57 (14.3%) of the respondents selected cheaper than other brands, 31 (7.8%) of the respondents selected internationally produced brand, 19 (4.8%) of the respondents selected advertising. Finally, respondents selected other counted for 12 respondents (3%).

Table 5.8 Type of Computer Notebook

Which is the types of your latest computer notebook you have purchased?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------------------|-----------|---------|---------------|--------------------|
| Valid | Notebook Computer | 332 | 83.0 | 83.0 | 83.0 |
| | Ultra Portable | 16 | 4.0 | 4.0 | 87.0 |
| | Desknote Computer | 52 | 13.0 | 13.0 | 100.0 |
| | Total | 400 | 100.0 | 100.0 | |

From Table 5.8 shows that the major type of computer notebook that respondents mostly purchased is notebook computer counted for 332 respondents (83%). The second type of computer notebook is desknote computer counted for 52 respondents (13%). The third is ultra portable counted for 16 respondents (4%).

Table 5.9 Reason for Selecting that Type

Your reason for choosing the computer notebook in question above?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------------------------------------|-----------|---------|---------------|--------------------|
| Valid | Portability | 89 | 22.3 | 22.3 | 22.3 |
| | Battery capacity | 67 | 16.8 | 16.8 | 39.0 |
| | Cheapest price | 61 | 15.3 | 15.3 | 54.3 |
| | Avoiding of CPU overheats problem | 64 | 16.0 | 16.0 | 70.3 |
| | Include of floppy drive, and CD-ROM | 96 | 24.0 | 24.0 | 94.3 |
| | Other | 23 | 5.8 | 5.8 | 100.0 |
| | Total | 400 | 100.0 | 100.0 | |

Table 5.9 shows that the first reason for selecting that type of computer notebook of respondents is include of floppy drive, and CD-Rom computed as 96 respondents (24%). The second reason is portability computed as 89 respondents (22.3%). The third reason is battery capacity computed as 67 respondents (16.8%). The forth reason is avoiding of CPU overheats problem computed as 64 respondents (16%). The fifth reason is cheapest price computed as 61 respondents (15.3%). The sixth reason is other computed as 23 respondents (5.8%).

Table 5.10 Reasonable Price of Computer Notebook

Please specific your reasonable price of computer notebook.

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|--------------------------|-----------|---------|---------------|--------------------|
| Valid 25,000-50,000 Baht | 118 | 29.5 | 29.5 | 29.5 |
| 50,001-75,000 Baht | 166 | 41.5 | 41.5 | 71.0 |
| 75,001-100,000 Baht | 112 | 28.0 | 28.0 | 99.0 |
| 100,001-125,000 Baht | 4 | 1.0 | 1.0 | 100.0 |
| Total | 400 | 100.0 | 100.0 | |

Table 5.10 shows that the reasonable price of computer notebook for the respondents is 50,001-75,000 baht which counted for 166 respondents (41.5%) followed by 25,000-50,000 baht which counted for 118 respondents (29.5%), 75,001-100,000 baht which counted for 112 respondents (28%), and 100,001-125,000 baht which counted for 4 respondents (1%), respectively.

5.2 Tests of the Hypotheses

The hypotheses stated in Chapter 3 involve six groups as follows:

Group A: Demographic factors VS Product choices. This group consists of hypotheses one to five.

Group B: Demographic factors VS Brand choices. This group consists of hypotheses six to ten.

Group C: Marketing stimuli factors VS Product choices. This group consists of hypotheses eleven to fourteen.

Group D: Marketing stimuli factors VS Brand choices. This group consists of hypotheses fifteen to eighteen.

Group E: Decision Making Style VS Product choices. This group consists of hypotheses nineteen and twenty.

Group F: Decision Making Style VS Brand choices. This group consists of hypotheses twenty-one and twenty two.

All of the evaluations use a significant level of 0.05 as the threshold for acceptance or rejection.

Group A: Demographic factors VS Product choices

Hypothesis 1. There is difference in product choices toward computer notebook when segmented by gender.

H1_o : There is no difference in product choices toward computer notebook when segmented by gender.

H1_a : There is a difference in product choices toward computer notebook when segmented by gender.

Table 5.11 The analysis of product choices toward computer notebook when segmented by gender by using Mann-Whitney U-test for Independent Samples.

| Test Statistics ^a | |
|------------------------------|---|
| | Which is the types of your latest computer notebook you have purchased? |
| Mann-Whitney U | 14772.000 |
| Wilcoxon W | 27018.000 |
| Z | -5.787 |
| Asymp. Sig. (2-tailed) | .000 |

a. Grouping Variable: Gender

The Mann-Whitney U-test for independent samples in Table 5.11 indicated that the null hypothesis is rejected. This means that there is a statistically significant difference in product choices toward computer notebook when segmented by gender at the .05 significant levels with a significance of .000.

Hypothesis 2. There is a difference in product choices toward computer notebook when segmented by age levels.

H2_o : There is no difference in product choices toward computer notebook when segmented by age levels.

H2_a : There is a difference in product choices toward computer notebook when segmented by age levels.

Table 5.12 The analysis of product choices toward computer notebook when segmented by age levels by using Kruskal-Wallis H-test for Independent Samples.

| Test Statistics ^{a,b} | |
|--------------------------------|---|
| | Which is the types of your latest computer notebook you have purchased? |
| Chi-Square | 186.991 |
| df | 3 |
| Asymp. Sig. | .000 |

a. Kruskal Wallis Test

b. Grouping Variable: Age

The Kruskal-Wallis H-test for Independent Samples in Table 5.12 indicated that there is a statistically significant difference in product choices toward computer notebook when segmented by age levels with a significance of .000 which is less than .05 (.000<.05). Accordingly, the null hypothesis is rejected which means that there is a difference in product choices toward computer notebook when segmented by age levels at the .05 significant levels.

Hypothesis 3. There is difference in product choices toward computer notebook when segmented by income levels.

H3_o : There is no difference in product choices toward computer notebook when segmented by income levels.

H3_a : There is a difference in product choices toward computer notebook when segmented by income levels.

Table 5.13 The analysis of product choices toward computer notebook when segmented by income levels by using Kruskal-Wallis H-test for Independent Samples.

| Test Statistics ^{a,b} | |
|--------------------------------|---|
| | Which is the types of your latest computer notebook you have purchased? |
| Chi-Square | 14.090 |
| df | 4 |
| Asymp. Sig. | .007 |

a. Kruskal Wallis Test
b. Grouping Variable: Average salary per month

The Kruskal-Wallis H-test for Independent Samples in Table 5.13 indicated that there is a statistically significant difference in product choices toward computer notebook when segmented by income levels with a significance of .007 which is less than .05 (.007<.05). Accordingly, the null hypothesis is rejected which means that there is a difference in product choices toward computer notebook when segmented by income levels at the .05 significant levels.

Hypothesis 4. There is a difference in product choices toward computer notebook when segmented by education levels.

H4₀ : There is no difference in product choices toward computer notebook when segmented by education levels.

H4_a : There is a difference in product choices toward computer notebook when segmented by education levels.

Table 5.14 The analysis of product choices toward computer notebook when segmented by education levels by using Kruskal-Wallis H-test for Independent Samples.

| Test Statistics ^{a,b} | |
|--------------------------------|---|
| | Which is the types of your latest computer notebook you have purchased? |
| Chi-Square | 26.337 |
| df | 3 |
| Asymp. Sig. | .000 |

a. Kruskal Wallis Test
b. Grouping Variable: Highest education level

The Kruskal-Wallis H-test for Independent Samples in Table 5.14 indicated that there is a statistically significant difference in product choices toward computer notebook when segmented by education levels with a significance of .000 which is less than .05 (.000<.05). Accordingly, the null hypothesis is rejected which means that there is a difference in product choices toward computer notebook when segmented by education levels at the .05 significant levels.

Hypothesis 5. There is difference in product choices toward computer notebook when segmented by occupations.

$H5_0$: There is no difference in product choices toward computer notebook when segmented by occupations.

$H5_a$: There is difference in product choices toward computer notebook when segmented by occupations.

Table 5.15 The analysis of product choices toward computer notebook when segmented by occupations by using Kruskal-Wallis H-test for Independent Samples.

| Test Statistics ^{a,b} | |
|--------------------------------|---|
| | Which is the types of your latest computer notebook you have purchased? |
| Chi-Square | 80.810 |
| df | 4 |
| Asymp. Sig. | .000 |

a. Kruskal Wallis Test
b. Grouping Variable: Occupation

The Kruskal-Wallis H-test for Independent Samples in Table 5.15 indicated that there is a statistically significant difference in product choices toward computer notebook when segmented by occupations with significance of .000 which is less than .05 ($.000 < .05$). Accordingly, the null hypothesis is rejected which means that there is a difference in product choices toward computer notebook when segmented by occupations at the .05 significant levels.

Group B: Demographic factors VS Brand choices

Hypothesis 6. There is no difference in brand choices computer notebook when segmented by gender.

H6_o : There is no difference in brand choices computer notebook when segmented by gender.

H6_a : There is a difference in brand choices computer notebook when segmented by gender.

Table 5.16 The analysis of brand choices toward computer notebook when segmented by gender by using Mann-Whitney U-test for Independent Samples.

| Test Statistics ^a | |
|------------------------------|---|
| | Which is the computer notebook's brand that influencing your purchasing decision for your latest computer notebook? |
| Mann-Whitney U | 15485.000 |
| Wilcoxon W | 27731.000 |
| Z | -3.177 |
| Asymp. Sig. (2-tailed) | .071 |

a. Grouping Variable: Gender

The Mann-Whitney U-test for independent samples in Table 5.16 indicated that there is not a statistically significant difference in brand choices toward computer notebook when segmented by gender at the .05 significant level with a significance of .071 (.071>.05).

Hypothesis 7. There is difference in brand choices toward computer notebook when segmented by age levels.

H7_o : There is no difference in brand choices toward computer notebook when segmented by age levels.

H7_a : There is a difference in brand choices toward computer notebook when segmented by age levels.

Table 5.17 The analysis of brand choices toward computer notebook when segmented by age levels by using Kruskal-Wallis H-test for Independent Samples.

| Test Statistics ^{a,b} | |
|--------------------------------|---|
| | Which is the computer notebook's brand that influencing your purchasing decision for your latest computer notebook? |
| Chi-Square | 9.746 |
| df | 3 |
| Asymp. Sig. | .063 |

a. Kruskal Wallis
b. Grouping Variable: Age

The Kruskal-Wallis H-test for Independent Samples in Table 5.17 indicated that there is not a statistically significant difference in brand choices toward computer notebook when segmented by age levels with a significance of .063 which is more than .05 (.063>.05). Accordingly, the null hypothesis is failed to rejected which means that there is no difference in product choices toward computer notebook when segmented by age levels at the .05 significant levels.

Hypothesis 8. There is difference in brand choices toward computer notebook when segmented by income levels.

$H8_0$: There is no difference in brand choices toward computer notebook when segmented by income levels.

$H8_a$: There is a difference in brand choices toward computer notebook when segmented by income levels.

Table 5.18 The analysis of brand choices toward computer notebook when segmented by income levels by using Kruskal-Wallis H-test for Independent Samples.

Test Statistics^{a,b}

| | |
|-------------|---|
| | Which is the computer notebook's brand that influencing your purchasing decision for your latest computer notebook? |
| Chi-Square | 38.926 |
| df | 4 |
| Asymp. Sig. | .000 |

a. Kruskal Wallis Test
b. Grouping Variable: Average salary per month

The Kruskal-Wallis H-test for Independent Samples in Table 5.18 indicated that there is a statistically significant difference in brand choices toward computer notebook when segmented by income levels with a 2-tailed significance of .000 which is less than .05 ($.000 < .05$). Accordingly, the null hypothesis is rejected which means that there is a difference in product choices toward computer notebook when segmented by income levels at the .05 significant levels.

Hypothesis 9. There is a difference in brand choices toward computer notebook when segmented by education levels.

H9₀ : There is no difference in brand choices toward computer notebook when segmented by education levels.

H9_a : There is a difference in brand choices toward computer notebook when segmented by education levels.

Table 5.19 The analysis of brand choices toward computer notebook when segmented by education levels by using Kruskal-Wallis H-test for Independent Samples.

| Test Statistics ^{a,b} | |
|--------------------------------|---|
| | Which is the computer notebook's brand that influencing your purchasing decision for your latest computer notebook? |
| Chi-Square | 68.889 |
| df | 3 |
| Asymp. Sig. | .000 |

a. Kruskal Wallis Test
b. Grouping Variable: Highest education level

The Kruskal-Wallis H-test for Independent Samples in Table 5.19 indicated that there is a statistically significant difference in brand choices toward computer notebook when segmented by education levels with a significance of .000 which is less than .05 (.000<.05). Accordingly, the null hypothesis is rejected which means that there is a difference in product choices toward computer notebook when segmented by education levels at the .05 significant levels.

Hypothesis 10. There is a difference in brand choices toward computer notebook when segmented by occupations.

H10₀ : There is no difference in brand choices toward computer notebook when segmented by occupations.

H10_a : There is a difference in brand choices toward computer notebook when segmented by occupations.

Table 5.20 The analysis of brand choices toward computer notebook when segmented by occupations by using Kruskal-Wallis H-test for Independent Samples.

| Test Statistics ^{a, b} | |
|---------------------------------|---|
| | Which is the computer notebook's brand that influencing your purchasing decision for your latest computer notebook? |
| Chi-Square | 18.629 |
| df | 4 |
| Asymp. Sig. | .001 |

a. Kruskal Wallis Test
b. Grouping Variable: Occupation

The Kruskal-Wallis H-test for Independent Samples in Table 5.20 indicated that there is a statistically significant difference in brand choices toward computer notebook when segmented by occupations with a significance of .001 which is less than .05 (.001<.05). Accordingly, the null hypothesis is rejected which means that there is a difference in product choices toward computer notebook when segmented by occupations at the .05 significant levels.

Group C: Marketing stimuli factors VS Product choices

Hypothesis 11. There is relationship between product factor and product choices toward computer notebook.

H11_o : There is no relationship between product factor and product choices toward computer notebook.

H11_a : There is relationship between product factor and product choices toward computer notebook.

Table 5.21 The analysis of the relationship between product factor and product choices of computer notebook by using Spearman Rho Correlation Coefficient Test.

| Correlations | | | | |
|----------------|---|-------------------------|---|---------|
| | | | Which is the types of your latest computer notebook you have purchased? | PRODUCT |
| Spearman's rho | Which is the types of your latest computer notebook you have purchased? | Correlation Coefficient | 1.000 | .313 * |
| | | Sig. (2-tailed) | . | .000 |
| | | N | 400 | 400 |
| PRODUCT | PRODUCT | Correlation Coefficient | .313 * | 1.000 |
| | | Sig. (2-tailed) | .000 | . |
| | | N | 400 | 400 |

**. Correlation is significant at the .01 level (2-tailed).

The Spearman Rho Correlation Coefficient analysis in Table 5.21 indicated that there was a statistically significant in correlation between product factor and product choices of notebook computer with a 2-tailed significance of .000 which is less than .01 (.000<.01). Therefore, the null hypothesis was rejected which means that there is a relationship between product factor and product choices toward computer notebook at the .01 significant levels.

For Spearman Rho Correlation is the .313 or 31.3 percentage means the product factor and product choices of notebook computer have a weak positive relationship.

Hypothesis 12. There is relationship between price factor and product choices toward computer notebook.

H12_o : There is no relationship between price factor and product choices toward computer notebook.

H12_a : There is relationship between price factor and product choices toward computer notebook.

Table 5.22 The analysis of the relationship between price factor and product choices of notebook computer by using Spearman Rho Correlation Coefficient Test.

| Correlations | | | | |
|----------------|---|---|---------|--------|
| | | Which is the types of your latest computer notebook you have purchased? | PRICE | |
| Spearman's rho | Which is the types of your latest computer notebook you have purchased? | Correlation Coefficient | 1.000 | .435 * |
| | | Sig. (2-tailed) | . | .000 |
| | | N | 400 | 400 |
| | PRICE | Correlation Coefficient | .435 ** | 1.000 |
| | | Sig. (2-tailed) | .000 | . |
| | | N | 400 | 400 |

**. Correlation is significant at the .01 level (2-

The Spearman Rho Correlation Coefficient analysis in Table 5.22 indicated that there was a statistically significant in correlation between price factor and product choices of computer notebook with a 2-tailed significance of .000 which is less than .01 (.000<.01). Therefore, the null hypothesis was rejected which means that there is a relationship between price factor and product choices of computer notebook at the .01 significant levels.

For Spearman Rho Correlation is the .435 or 43.5 percentage means the price factor and product choices of notebook computer have a moderate positive relationship.

Hypothesis 13. There is relationship between place factor and product choices toward computer notebook.

H13₀ : There is no relationship between place factor and product choices toward computer notebook.

H13_a : There is relationship between place factor and product choices toward computer notebook.

Table 5.23 The analysis of the relationship between place factor and product choices of notebook computer by using Spearman Rho Correlation Coefficient Test.

| Correlations | | | | |
|----------------|---|-------------------------|---|--------|
| | | | Which is the types of your latest computer notebook you have purchased? | PLACE |
| Spearman's rho | Which is the types of your latest computer notebook you have purchased? | Correlation Coefficient | 1.000 | .264 * |
| | | Sig. (2-tailed) | . | .000 |
| | | N | 400 | 400 |
| | PLACE | Correlation Coefficient | .264 ** | 1.000 |
| | | Sig. (2-tailed) | .000 | . |
| | | N | 400 | 400 |

** . Correlation is significant at the .01 level (2-

The Spearman Rho Correlation Coefficient analysis in Table 5.23 indicated that there was a statistically significant in correlation between place factor and product choices of notebook computer with a 2-tailed significance of .000 which is less than .01 (.000<.01). Therefore, the null hypothesis was rejected which means that there is a relationship between place factor and product choices of notebook computer at the .01 significant levels.

For Spearman Rho Correlation is the .264 or 26.4 percentage means the place factor and product choices of notebook computer have a weak positive relationship.

Hypothesis 14. There is relationship between promotion factor and product choices toward computer notebook.

- H14_o : There is no relationship between promotion factor and product choices toward computer notebook.
- H14_a : There is relationship between promotion factor and product choices toward computer notebook.

Table 5.24 The analysis of the relationship between promotion factor and product choices of notebook computer by using Spearman Rho Correlation Coefficient Test.

| Correlations | | | | |
|----------------|---|---|----------|--------|
| | | Which is the types of your latest computer notebook you have purchased? | PROMOTIO | |
| Spearman's rho | Which is the types of your latest computer notebook you have purchased? | Correlation Coefficient | 1.000 | .292 * |
| | | Sig. (2-tailed) | . | .000 |
| | | N | 400 | 400 |
| | PROMOTIO | Correlation Coefficient | .292 ** | 1.000 |
| | | Sig. (2-tailed) | .000 | . |
| | | N | 400 | 400 |

**. Correlation is significant at the .01 level (2-

The Spearman Rho Correlation Coefficient analysis in Table 5.24 indicated that there was a statistically significant in correlation between promotion factor and product choices of computer notebook with a 2-tailed significance of .000 which is less than .01 (.000<.01). Therefore, the null hypothesis was rejected which means that there is a relationship between promotion factor and product choices of computer notebook at the .01 significant levels.

For Spearman Rho Correlation at the .292 or 29.2 percentage means the promotion factor and product choices of computer notebook have a weak positive relationship.

Group D: Marketing stimuli factors VS Brand choices

Hypothesis 15. There is relationship between product factor and brand choices toward computer notebook.

H15₀ : There is no relationship between product factor and brand choices toward computer notebook.

H15_a : There is relationship between product factor and brand choices toward computer notebook.

Table 5.25 The analysis of the relationship between product factor and brand choices of computer notebook by using Spearman Rho Correlation Coefficient Test.

| Correlations | | | | |
|----------------|---|---|---------|-------|
| | | Which is the computer notebook's brand that influencing your purchasing decision for your latest computer notebook? | PRODUCT | |
| Spearman's rho | Which is the computer notebook's brand that influencing your purchasing decision for your latest computer notebook? | Correlation Coefficient | 1.000 | .487* |
| | | Sig. (2-tailed) | .000 | |
| | | N | 400 | 400 |
| | PRODUCT | Correlation Coefficient | .487* | 1.000 |
| | | Sig. (2-tailed) | .000 | |
| | | N | 400 | 400 |

**. Correlation is significant at the .01 level (2-tailed).

The Spearman Rho Correlation Coefficient analysis in Table 5.25 indicated that there was a statistically significant in correlation between product factor and brand choices of computer notebook with a 2-tailed significance of .000 which is less than .01 (.000<.01). Therefore, the null hypothesis was rejected which means that there is a relationship between product factor and brand choices of computer notebook at the .01 significant levels.

For Spearman Rho Correlation at the .487 or 48.7 percentage means the product factor and brand choices of computer notebook have a moderate positive relationship.

Hypothesis 16. There is relationship between price factor and brand choices toward computer notebook.

H16_o : There is no relationship between price factor and brand choices toward computer notebook.

H16_a : There is relationship between price factor and brand choices toward computer notebook.

Table 5.26 The analysis of the relationship between price factor and brand choices of computer notebook by using Spearman Rho Correlation Coefficient Test.

| Correlations | | | | |
|----------------|---|-------------------------|---|-------|
| | Which is the computer notebook's brand that influencing your purchasing decision for your latest computer notebook? | | Which is the computer notebook's brand that influencing your purchasing decision for your latest computer notebook? | PRICE |
| Spearman's rho | Which is the computer notebook's brand that influencing your purchasing decision for your latest computer notebook? | Correlation Coefficient | 1.000 | .589* |
| | | Sig. (2-tailed) | . | .000 |
| | | N | 400 | 400 |
| | PRICE | Correlation Coefficient | .589** | 1.000 |
| | | Sig. (2-tailed) | .000 | . |
| | | N | 400 | 400 |

**. Correlation is significant at the .01 level (2-tailed).

The Spearman Rho Correlation Coefficient analysis in Table 5.26 indicated that there was a statistically significant in correlation between price factor and brand choices of computer notebook with a 2-tailed significance of .000 which is less than .01 (.000<.01). Therefore, the null hypothesis was rejected which means that there is

a relationship between price factor and brand choices of computer notebook at the .01 significant levels.

For Spearman Rho Correlation at the .589 or 58.9 percentage means the price factor and brand choices of computer notebook have a moderate positive relationship.

Hypothesis 17. There is relationship between place factor and brand choices toward computer notebook.

H17_o : There is no relationship between place factor and brand choices toward computer notebook.

H17_a : There is relationship between place factor and brand choices toward computer notebook.

Table 5.27 The analysis of the relationship between place factor and brand choices of computer notebook by using Spearman Rho Correlation Coefficient Test.

| Correlations | | | | |
|----------------|---|-------------------------|---|-------|
| | | | Which is the computer notebook's brand that influencing your purchasing decision for your latest computer notebook? | PLACE |
| Spearman's rho | Which is the computer notebook's brand that influencing your purchasing decision for your latest computer notebook? | Correlation Coefficient | 1.000 | .215* |
| | | Sig. (2-tailed) | . | .000 |
| | | N | 400 | 400 |
| | PLACE | Correlation Coefficient | .215** | 1.000 |
| | | Sig. (2-tailed) | .000 | . |
| | | N | 400 | 400 |

**. Correlation is significant at the .01 level (2-tailed).

The Spearman Rho Correlation Coefficient analysis in Table 5.27 indicated that there was a statistically significant in correlation between place factor and brand choices of computer notebook with a 2-tailed significance of .000 which is less than .01 (.000<.01). Therefore, the null hypothesis was rejected which means that there is

a relationship between place factor and brand choices of computer notebook at the .01 significant levels.

For Spearman Rho Correlation at the .215 or 21.5 percentage means the place factor and brand choices of computer notebook have a weak positive relationship.

Hypothesis 18. There is relationship between promotion factor and brand choices toward computer notebook.

H18_o : There is no relationship between promotion factor and brand choices toward computer notebook.

H18_a : There is relationship between promotion factor and brand choices toward computer notebook.

Table 5.28 The analysis of the relationship between promotion factor and brand choices of computer notebook by using Spearman Rho Correlation Coefficient Test.

| Correlations | | | | |
|----------------|---|---|-----------|-------|
| | | Which is the computer notebook's brand that influencing your purchasing decision for your latest computer notebook? | PROMOTION | |
| Spearman's rho | Which is the computer notebook's brand that influencing your purchasing decision for your latest computer notebook? | Correlation Coefficient | 1.000 | .422* |
| | | Sig. (2-tailed) | . | .000 |
| | | N | 400 | 400 |
| PROMOTION | | Correlation Coefficient | .422** | 1.000 |
| | | Sig. (2-tailed) | .000 | . |
| | | N | 400 | 400 |

**. Correlation is significant at the .01 level (2-tailed).

The Spearman Rho Correlation Coefficient analysis in Table 5.28 indicated that there was a statistically significant in correlation between promotion factor and brand choices of computer notebook with a 2-tailed significance of .000 which is less

than .01 (.000<.01). Therefore, the null hypothesis was rejected which means that there is a relationship between promotion factor and brand choices of computer notebook at the .01 significant levels.

For Spearman Rho Correlation at the .422 or 42.2 percentage means the promotion factor and brand choices of computer notebook have a moderate positive relationship.

Group E: Decision Making Style VS Product choices

Hypothesis 19. There is relationship between price conscious and product choices toward computer notebook.

H19_o : There is no relationship between price conscious and product choices toward computer notebook.

H19_a : There is relationship between price conscious and product choices toward computer notebook.

Table 5.29 The analysis of the relationship between price conscious and product choices of computer notebook by using Spearman Rho Correlation Coefficient Test.

| Correlations | | | Which is the types of your latest computer notebook you have purchased? | PRICON |
|----------------|---|-------------------------|---|--------|
| Spearman's rho | Which is the types of your latest computer notebook you have purchased? | Correlation Coefficient | 1.000 | .517* |
| | | Sig. (2-tailed) | . | .000 |
| | | N | 400 | 400 |
| | PRICON | Correlation Coefficient | .517* | 1.000 |
| | | Sig. (2-tailed) | .000 | . |
| | | N | 400 | 400 |

**. Correlation is significant at the .01 level (2-tailed).

The Spearman Rho Correlation Coefficient analysis in Table 5.29 indicated that there was a statistically significant in correlation between price conscious and product choices of computer notebook with a 2-tailed significance of .000 which is less than .01 (.000<.01). Therefore, the null hypothesis was rejected which means

that there is a relationship between price conscious and product choices of computer notebook at the .01 significant levels.

For Spearman Rho Correlation at the .517 or 51.7 percentage means the price conscious and product choices of computer notebook have a moderate positive relationship.

Hypothesis 20. There is relationship between technological conscious and product choices toward computer notebook.

H20_o : There is no relationship between technological conscious and product choices toward computer notebook.

H20_a : There is relationship between technological conscious and product choices toward computer notebook.

Table 5.30 The analysis of the relationship between technological conscious and product choices toward computer notebook by using Spearman Rho Correlation Coefficient Test.

| Correlations | | | | |
|----------------|---|-------------------------|---|---------|
| | Which is the types of your latest computer notebook you have purchased? | | Which is the types of your latest computer notebook you have purchased? | TECHCON |
| Spearman's rho | Which is the types of your latest computer notebook you have purchased? | Correlation Coefficient | 1.000 | .065 |
| | | Sig. (2-tailed) | . | .001 |
| | | N | 400 | 400 |
| | TECHCON | Correlation Coefficient | .065 | 1.000 |
| | | Sig. (2-tailed) | .001 | . |
| | | N | 400 | 400 |

The Spearman Rho Correlation Coefficient analysis in Table 5.30 indicated that there was a statistically significant in correlation between technological conscious and product choices toward computer notebook with a 2-tailed significance of .001 which is less than .05 (.001<.05). Therefore, the null hypothesis was rejected which means that there is relationship between technological conscious and product choices toward computer notebook at the .05 significant levels.

For Spearman Rho Correlation at the .065 or 6.5 percentage means the price conscious and product choices of computer notebook have a very weak positive relationship.

Group F: Decision Making Style VS Brand choices

Hypothesis 21. There is relationship between price conscious and brand choices toward computer notebook.

H21_o : There is no relationship between price conscious and brand choices toward computer notebook.

H21_a : There is relationship between price conscious and brand choices toward computer notebook.

Table 5.31 The analysis of the relationship between price conscious and brand choices toward computer notebook by using Spearman Rho Correlation Coefficient

| Correlations | | | | |
|----------------|---|-------------------------|---|-------|
| | | | Which is the computer notebook's brand that influencing your purchasing decision for your latest computer notebook? | |
| Spearman's rho | Which is the computer notebook's brand that influencing your purchasing decision for your latest computer notebook? | Correlation Coefficient | 1.000 | .485* |
| | | Sig. (2-tailed) | . | .000 |
| | | N | 400 | 400 |
| | PRICON | Correlation Coefficient | .485** | 1.000 |
| | | Sig. (2-tailed) | .000 | . |
| | | N | 400 | 400 |

**. Correlation is significant at the .01 level (2-tailed).

The Spearman Rho Correlation Coefficient analysis in Table 5.31 indicated that there was a statistically significant with a 2-tailed significance of .000 which is less than .01 (.000<.01). Therefore, the null hypothesis was rejected which means

that there is a relationship between price conscious and brand choices toward computer notebook at the .01 significant levels.

For Spearman Rho Correlation at the .485 or 48.5 percentage means the price conscious and brand choices toward computer notebook have a moderate positive relationship.

Hypothesis 22. There is relationship between technological conscious and brand choices toward computer notebook.

H22₀ : There is no relationship between technological conscious and brand choices toward computer notebook.

H22_a : There is relationship between technological conscious and brand choices toward computer notebook.

Table 5.32 The analysis of the relationship between technological conscious and brand choices toward computer notebook by using Spearman Rho Correlation Coefficient Test.

| Correlations | | | | |
|----------------|---|---|-------------------------|-------|
| | | Which is the computer notebook's brand that influencing your purchasing decision for your latest computer notebook? | Technological conscious | |
| Spearman's rho | Which is the computer notebook's brand that influencing your purchasing decision for your latest computer notebook? | Correlation Coefficient | 1.000 | .216* |
| | | Sig. (2-tailed) | . | .000 |
| | | N | 400 | 400 |
| | Technological conscious | Correlation Coefficient | .216** | 1.000 |
| | | Sig. (2-tailed) | .000 | . |
| | | N | 400 | 400 |

**. Correlation is significant at the .01 level (2-tailed).

The Spearman Rho Correlation Coefficient analysis in Table 5.32 indicated that there was a statistically significant in correlation between technological conscious and brand choices toward computer notebook with a 2-tailed significance of .000

which is less than .01 ($.000 < .01$). Therefore, the null hypothesis was rejected which means that there is a relationship between technological conscious and brand choices toward computer notebook at the .01 significant levels.

For Spearman Rho Correlation at the .216 or 21.6 percentage means the price conscious and brand choices toward computer notebook have a moderate positive relationship.



CHAPTER 6

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter consists of three sections. The first section is the interpretation of the results or summary of findings. The second section is the conclusion drawn against the research problem. The last section contains recommendations and suggestions for future research.

6.1 Summary of Finding

This section presents interpretations of the results from the data gathered, which include a summary of respondents' characteristics, a summary of purchase decision making of product choice & brand choices and a summary of hypotheses testing.

Summary of Respondents' Characteristics

Based on the data of 400 respondents collected from the survey research, there are 39% of female respondents and 61% of male respondents. The highest percentage of age group of the respondents is in between 21-30 years old accounting for 53 % from the total respondents. According to a substantial number of respondents' education levels is bachelor's degree consisting of 210 respondents accounting for 52.5% from the total respondents. With regards to occupation of the respondents, the findings show that most of the respondents (51.5%) are students. Similarly, Jumpei (2001) also indicates that the mostly computer notebooks' consumers are students and employees. The highest numbers of respondents have an average monthly income of 15,001-20,000 baht accounting for 41.8% from the total respondents. In addition the highest percentage of respondents are persons who use notebook computer (83%). The second type of computer notebook is desknote computer accounted for 13% and the rest is ultra portable counted for 4% from the total respondents.

For the marketing mix, the findings show that the most important factor that influences the respondents to buy computer notebook in term of product choice and brand choice is the price factor which accounted for 43.5% and 58.9%, respectively. Moreover, the results of the analyses show that product factor is the second factor that

influences the respondents to buy computer notebook in term of product choice and brand choice, which counted for 31.3% and 48.7%, respectively.

Summary of Hypotheses Testing

The hypotheses are divided into six groups. The summary results of hypotheses testing are shown in Table 6.1 to Table 6.6.

Table 6.1 Summary of Group A Hypotheses Testing Result

| Hypotheses | Test Statistics | Level of Significance | Results |
|--|-----------------------|-----------------------|-----------|
| H1 _o : There is no difference in product choices toward computer notebook when segmented by gender. | Mann-Whitney U-test | .000 | Reject Ho |
| H2 _o : There is no difference in product choices toward computer notebook when segmented by age levels. | Kruskal-Wallis H-test | .000 | Reject Ho |
| H3 _o : There is no difference in product choices toward computer notebook when segmented by income levels. | Kruskal-Wallis H-test | .007 | Reject Ho |
| H4 _o : There is no difference in product choices toward computer notebook when segmented by education levels. | Kruskal-Wallis H-test | .000 | Reject Ho |
| H5 _o : There is no difference in product choices toward computer notebook when segmented by occupations. | Kruskal-Wallis H-test | .000 | Reject Ho |

Table 6.2 Summary of Group B Hypotheses Testing Result

| Hypotheses | Test Statistics | Level of Significance | Results |
|--|-----------------------|-----------------------|---------------------|
| H6 _o : There is no difference in brand choices toward computer notebook when segmented by gender. | Mann-Whitney U-test | .071 | Failed to Reject Ho |
| H7 _o : There is no difference in brand choices toward computer notebook when segmented by age levels. | Kruskal-Wallis H-test | .063 | Failed to Reject Ho |
| H8 _o : There is no difference in brand choices toward computer notebook when segmented by income levels. | Kruskal-Wallis H-test | .000 | Reject Ho |
| H9 _o : There is no difference in brand choices toward computer notebook when segmented by education levels. | Kruskal-Wallis H-test | .000 | Reject Ho |
| H10 _o : There is no difference in brand choices toward computer notebook when segmented by occupations. | Kruskal-Wallis H-test | .001 | Reject Ho |

Table 6.3 Summary of Group C Hypotheses Testing Result

| Hypotheses | Test Statistics | Level of Significance | Results |
|--|-----------------|-----------------------|-----------|
| H11 _o : There is no relationship between product factor and product choices of computer notebook. | Spearman Rho | .000 | Reject Ho |
| H12 _o : There is no relationship between price factor and product choices of computer notebook. | Spearman Rho | .000 | Reject Ho |
| H13 _o : There is no relationship between place factor and product choices of computer notebook. | Spearman Rho | .000 | Reject Ho |
| H14 _o : There is no relationship between promotion factor and product choices of computer notebook. | Spearman Rho | .000 | Reject Ho |

Table 6.4 Summary of Group D Hypotheses Testing Result

| Hypotheses | Test Statistics | Level of Significance | Results |
|--|-----------------|-----------------------|-----------|
| H15 _o : There is no relationship between product factor and brand choices toward computer notebook. | Spearman Rho | .000 | Reject Ho |
| H16 _o : There is no relationship between price factor and brand choices toward computer notebook. | Spearman Rho | .000 | Reject Ho |
| H17 _o : There is no relationship between place factor and brand choices toward computer notebook. | Spearman Rho | .000 | Reject Ho |
| H18 _o : There is no relationship between promotion factor and brand choices toward computer notebook. | Spearman Rho | .000 | Reject Ho |

Table 6.5 Summary of Group E Hypotheses Testing Result

| Hypotheses | Test Statistics | Level of Significance | Results |
|---|-----------------|-----------------------|-----------|
| H19 _o : There is no relationship between price conscious and product choices toward computer notebook. | Spearman Rho | .000 | Reject Ho |
| H20 _o : There is no relationship between technological conscious and product choices of notebook computer. | Spearman Rho | .001 | Reject Ho |

Table 6.6 Summary of Group F Hypotheses Testing Result

| Hypotheses | Test Statistics | Level of Significance | Results |
|---|-----------------|-----------------------|-----------|
| H21 _o : There is no relationship between price conscious and brand choices toward computer notebook. | Spearman Rho | .000 | Reject Ho |
| H22 _o : There is no relationship between technological conscious and brand choices toward computer notebook. | Spearman Rho | .000 | Reject Ho |

6.2 Conclusions

This research study focuses on investigating the differences among consumers' purchase decision toward computer notebook. Moreover, this research also investigates the relationship between essential factors including of marketing stimuli, decision-making style, and demographic factors with consumers' purchase decision toward computer notebook. The researcher interprets the results of the hypotheses testing to answer all research objectives. The results can be classified into six groups as follows:

Group A: Demographic factors VS Product choices

There is a difference in consumer's purchase decision in term of product choices of notebook computer, ultra portable, and desknote computer toward computer notebook when segmented by gender, age levels, education levels, income levels and occupations.

Table 1.1-1.5 in Appendix C show that Most of male respondents likely to purchase notebook computer and desknote computer more than ultra portable but most of female respondents likely to purchase only notebook computer. The age of respondents who likely to purchase notebook computer is 21-30 years old but respondents who likely to purchase ultra portable and desknote computer is 31-40 years old. Most of respondents who graduated for bachelor's degree are likely to purchase the notebook computer and desknote computer. In contrast, most of the respondents who likely to purchase ultra portable are the person who graduated for master's degree or higher. Most of respondents who likely to purchase notebook computer, ultra portable, and desknote computer are student, private sector employee, and self-employed, respectively. Consumers who have high income are likely to purchase notebook computer more than ultra portable, and desknote computer. Consumers who have income levels below 15,001-20,000 baht are likely to purchase desknote computer more than the other types.

Group B: Demographic factors VS Brand choices

There is a difference in consumer's purchase decision in term of brand choices of notebook computer, ultra portable, and desknote computer toward computer notebook when segmented by occupation, education levels, and income levels. In contrast, there is no difference in consumer's purchase decision in term of brand

choices of notebook computer, ultra portable, and desknote computer toward computer notebook when segmented by gender, and age levels.

Table 1.6-1.8 in Appendix C show that most of respondents who are students likely to purchase Toshiba, Fujitsu, Compaq and Asustek brand name. Civil service employee/state enterprise employee and the others occupation likely to purchase Compaq computer notebook brand. The respondents who are private sector employee and self-employed, they prefer to buy the computer notebook's brand of IBM and ECS, respectively. Most of respondents who graduated in bachelor's degree likely to purchase Toshiba and Compaq brand name. For master's degree or higher, most of the respondents likely to purchase IBM, Fujitsu, and Toshiba brand name. Finally, most of respondents who have average salary per month at 15,001-20,000 baht, which is the highest percentage from the total respondents, prefer to purchase Compaq, Toshiba, and Fujitsu notebook computer.

Group C: Marketing stimuli factors VS Product choices

There is relationship between marketing stimuli, which included product factor, price factor, place factor, promotion factor and product choices toward computer notebook with a positive relationship. It means that the higher the marketing stimuli, the higher the consumer's purchase decision.

In conclusion for notebook computer, marketing stimuli clearly influences consumer's purchase decision. Thus, price has the highest relationship, product, promotion and place also. The results of this research correspond with the research study of Kitti (2002) who found that the factors that affected the consumers to buy notebook computer rated from high to low are price, product, and distribution factors.

For price factor, Table 2.1-2.3 in Appendix C show that the reasonable price, competitive price with other brand, and lower price than other brands has higher influencing on consumer's purchase decision to buy notebook computer and desknote computer than ultra portable notebook. For product, Table 2.4-2.6 in Appendix C show that the more concerning in the well known brand, service quality, battery capacity/power management, and include of floppy diskette drive, CD/DVD-Rom, the more influence on consumer purchase decision to buy computer notebook. For promotion factor, Table 2.7 in Appendix C show that increasing in outdoor, brochure or leaflet advertisement, premium, and information given by sales person can influence consumer to purchase notebook computer. For place factor, Table 2.8 in

Appendix C show that the higher distribution channel (including of convenient and easy location for purchasing, the shop provides a variety of products, the shop provides good inventory management, and the shop provides good arrangement of product), the higher chance for consumers in selecting the product.

Group D: Marketing stimuli factors VS Brand choices

There is relationship between marketing stimuli, which included product factor, price factor, place factor, promotion factor and brand choices toward computer notebook with a positive relationship. In conclusion for notebook computer, marketing stimuli influences consumer's purchase decision. Price has the highest relationship, product, promotion and place also. For price factor, Table 2.10 in Appendix C show that lower price than other brands is the most factors that influence on consumer to purchase notebook computer. The reasonable price, and competitive price with other brand also influence consumer's purchase decision to buy computer notebook. For product, Table 2.9 in Appendix C show that the more concerning in the well known brand, warranty of product, service quality, battery capacity/power management, durability, specification/performance of CPU, and include of floppy diskette drive, CD/DVD-Rom, the more influence consumer purchase decision to buy notebook computer. For promotion factor, Table 2.11 in Appendix C show that increasing in information given by sales person and premium have high influencing on consumer to purchase notebook computer. The outdoors, brochure or leaflet advertisement also influence consumer to purchase notebook computer. For place factor, Table 2.12 in Appendix C show that the higher distribution channel (including of convenient and easy location for purchasing, the shop provides good inventory management, reputable and trust worthy shop, and the shop provides good arrangement of product), the higher chance for consumers in selecting the product.

Group E: Decision Making Style VS Product choices

There is relationship between price conscious and product choices toward computer notebook with a positive relationship. Most of consumers who purchase notebook computer base their decision making on price conscious style. Table 2.13-2.15 in Appendix C show that consumers who purchase desknote computer based their decision-making on price conscious style for the highest proportion from the total respondents and price conscious style also has high influence on consumer's

decision-making to purchase notebook computer. For ultra portable notebook, there is relationship between price conscious and product choices toward ultra portable notebook but the relationship is not too high.

There is relationship between technological conscious and product choices toward computer notebook with a positive relationship. Table 2.16-2.18 in Appendix C show that consumers who purchase notebook computer based their decision-making on technological conscious style for the highest proportion from the total respondents and technological conscious style also has high influence on consumer's decision-making to purchase desknote computer. For ultra portable notebook, there is relationship between technological conscious and product choices toward ultra portable notebook but the relationship is not too high.

Group F: Decision Making Style VS Brand choices

There is relationship between price conscious and brand choices toward computer notebook with a positive relationship. Table 2.19 in Appendix C show that consumers who purchase ECS desknote computer based their decision-making on price conscious style for the highest proportion from the total respondents and price conscious style also has high influence on consumer's decision-making to purchase Fujitsu, Toshiba, Compaq, Asustek, IBM, Liberta, and Belta notebook computer. For the rest brand of notebook computer, there is relationship between price conscious and brand choices but the relationship is not too high.

There is relationship between technological conscious and brand choices toward computer notebook. Table 2.20 in Appendix C show that consumers based their decision-making on technological conscious style or technological conscious style can influence on consumer's decision-making toward brand choice of notebook computer. Consumers may consider that there is different in technology for computer notebook's brand in Thai market because every computer notebook's brand in market try to use high technology to differentiate their product from the other notebook computer's brand such as hot key technology, MP3 player center, touch pad, and etc.

6.3 Recommendations

The Specific Solution based on the Results

Today computer notebook business has highly competitive market, a sound understanding of consumer characteristic helps marketers gain a competitive advantage. The results of this research will be beneficial to marketers who are in computer notebook industry in order to understand buyers better.

The consumers in Bangkok area have many factors to influence their purchase decision and there is a different in each factor. The marketers have to understand what the differences are and have to adapt the marketing strategies to suit with the consumers. In order to expand the market, there are many factors that marketers have to be concerned with such as marketing stimuli, other stimuli and buyer's characteristic factors. Marketing stimuli are the controllable factors which marketers can adjust in order to serve customers' needs. The following recommendations are for some strategies that the marketers have to be concerned with.

Product

According to this research, it is found that product is the second influential factor when the consumer will buy computer notebook. From the results of this research, the researcher found that product factor has high relationship with the consumer's purchase decision and the major importance factor for consumers in buying computer notebook is well known brand. The marketer in notebook computer industry should increase brand awareness as much as they can to expand their market.

Computer notebook producers should be concerned more with producing high service quality because nowadays the high technology leads the producer in computer notebook industry hard to differentiate their product from the competitors. Producers should be concerned more on producing computer notebook with high performance of CPU because high performance or speed of CPU easy to attract consumers to buy the notebook computer. Consumers are much more concerned about the battery capacity/power management of computer notebook. Therefore, producers should improve their production process in order to produce computer notebook with high durability. Computer notebook producers should be concerned about the components of notebook computer, which should be include of floppy diskette drive, CD/DVD-Rom because consumers are more concern on all in one notebook computer.

Price

The researcher found that price factor has highest relationship with the consumer's purchase decision and the major importance factors for consumers in buying computer notebook are lower price than other brands and reasonable price. In this research shows that the reasonable price of computer notebook for the respondents is 50,001-75,000 baht. Consumers are likely to be more price-conscious on decision-making style. Thus, a decrease in price may be sufficient to influence the consumers to buy. Therefore, the producers of notebook computer should try to reduce the cost in order to keep constant prices or lower prices in order to have competitive price with other brands.

Place (Distribution)

According to this research, it is found that place is the fourth influential factor when the consumer will buy computer notebook. The marketer should increase the distribution channel as much as possible to make the product available in order to provide consumers with convenient and easy location for purchasing. Push strategy is appropriate for computer notebook. (A push strategy involves the manufacturer using sales force and trade promotion to induce intermediaries to carry, promote, and sell the product to end users). In this case, marketer should use trade promotion such as give discount, give longer credit term, or give premium to distributors in order to stimulate distributors to sell the product to consumers. Moreover, water bottlers should provide fast delivery service to make customers satisfied with the service.

The marketer should focus on inventory management to ensure that consumer will surely get the product when they buy. The markets should make sure that the store provides a variety and good arrangement of their products to attract more of consumers.

Promotion

According to this research, it is found that promotion is the third influential factor when the consumer will buy computer notebook. Outdoor, brochure or leaflet advertisement is one tool that marketer in notebook computer can use to build brand awareness and to make consumers more acquainted with the brand of the product. The other tool is premium such as free software, games, accessories, and Internet account.

Furthermore, information given by sales person is also very important because sales person directly contact with consumers. Thus, it easy to create a good relationship with the consumers but sales person also create bad image to the consumers, too. Therefore, the marketers should focus on the good training programs to make sure that the sales person can transfer the accurate and useful information about the products to the consumer and also create the good relationship with the consumers.

All of these factors are very important for consumers for buying notebook computer.

Recommendation for a buyer

As a buyer, the research found that the buyers should focus on the price of computer notebook and select the well-known brand of notebook computer to ensure for the service quality, power management technology, and durability. The buyers should consider the computer notebook which including of floppy diskette drive, CD/DVD-ROM to make sure that they can get all in one notebook computer or the notebook computer that serve for all of consumer's need.

Suggestions for Future Research

This research study is to find out the factors influencing consumers' purchase decisions in term of product choice and brand choice toward computer notebook by examining demographic factors, marketing stimuli, and decision-making style affecting purchase decision on computer notebook. Understanding of consumer characteristic is beneficial to marketers. Therefore, the researcher recommends the following items for future research.

- To do a similar research but change the product or expand the research into other areas.
- To study factors influencing the computer notebook's distributors in selecting area to distribute.
- To do a comparative study on marketing strategies of computer notebook's vendor.

BIBLIOGRAPHY

- Aradhna Krishna (1992), The Normative Impact of Consumer Price Expectations for Multiple Brands on Consumer Purchase Behavior, Marketing Science, p. 226.
- Aradhna Krishna (1994), The Effect of Deal Knowledge on Consumer Purchase Behavior, Journal of Marketing Research, p. 76.
- Arthur Andersen (1999), Laptops and Remote Access: The Roaming Workforce. Business Risks and the Virtual Office, p. 83
- Barton A. Weitz and Sandy D. Jap (1995), Relationship Marketing and Distribution Channels, Journal of the Academy of Marketing Science, pp. 308-309.
- Dale Cotton (2000), Should You Buy a Portable?, Buying Your Portable Computer, pp. 11-21
- Darden, W.R. and Ashton, D. (1974), Psychographic profiles of patronage preference groups, Journal of Retailing, Vol. 50, Winter, pp. 99-112.
- Del I. Hawkins, Roger J. Best and Kenneth A. Coney. (1992), Consumer Behavior: Implications for Marketing Strategy, (5th ed.). Illinois: Irwin, pp. 76-81.
- Del I. Hawkins, Roger J. Best and Kenneth A. Coney. (2001), Consumer Behavior: Building Marketing Strategy, (8th ed.), New York: McGraw-Hill, pp. 19-21, 113-119.
- Donald R. Lehmann and Russell S. Winer (1991), Analysis for Marketing Planning, Homewood, Illinois: Irwin, p. 109.
- Encel, James F., Blackwell, Roger D., and Miniard, Paul W. (1993), Consumer Behavior, The Dryden Press Series in Marketing, p. 4.
- Henry Assael (1993), Marketing Principle & Strategy (2nd ed.), Texas: Dryden, pp. 89,251-252.
- Henry Assael (1998), Consumer Behavior and Marketing Action. (6th ed.), Ohio: South-Western, pp. 161-166.
- J. Barry Mason and Hazel F. Ezell (1993), Marketing Management, New York: Mcmillian, pp. 277-280.
- Jagdish N. Sheth, Banwari Mittal and Bruce I. Newman. (1999), Customer Behavior: Consumer Behavior and Beyond, Texas: Dryden, pp. 222-225, 369-375.
- Jame F. Engel, Roger D. Blackwell, and Paul W. Miniard (1994), Consumer Behavior. (8th ed.), Fort Worth, Texas: Dryden.

- James R. Loy, Joseph D. Myers and Charles C. Tappert (1996), Notebook Versus Desktop Computers for Cadets at West Point, IEEE Transactions on Education, p. 499.
- Joel R. Evans and Barry Berman (1994), Marketing, New York: Macmillan. P. 255.
- Jon Freiden and Scott Takacs (1996), Consumer behavior: The Business Impact, Journal of Consumer Marketing, p. 4.
- Jumpei Ichinosawa (2001), Purchase Intention Formation Structure of Thai at-Home Personal Computer Users: An Application of Structural Equation Modeling, Master of Business Administration. Major Field of Business Administration. Assumption University.
- Kardes, Frank R. (1999), Consumer behavior and management decision making, New York, pp. 314-315.
- Kenneth V. Henderson, Ronald E. Goldsmith, and Leisa R. Flynn (1995), Demographic Characteristics of Subject Age, The Journal of Social Psychology, pp. 447-457.
- Kincaid, William M., Jr. (1985), Promotion: products, services, and ideas, Oklahoma, pp. 13-14.
- Kirthi Kalyanam and Daniel S. Putler (1997), Incorporating Demographic Variables in Brand Choice Models: An Indivisible Alternatives Framework, Marketing Science, p. 167.
- Kitti (2002), Factors influencing consumer's purchasing decision toward notebook computer, Bangkok: Thammasat University.
- Lastovicka, J.L. (1982), On the validation of lifestyle traits: a review and illustration, Journal of Marketing Research, Vol. 19, February, pp. 126-138.
- Mandell I. and Rosenbenj J. (1981), Are Tech Buyers Different, Business Week, January 26, 1998, p. 65
- McCarthy, E. Jerome Perreault, and William D., Jr. (1987), Basic Marketing: A Managerial Approach (9th ed.), Homewood: Richard D.
- Moschis, G.P. (1976), Shopping orientations and consumer uses of information, Journal of Retailing, Vol. 52, Summer, pp. 61-70, 93.
- Nessim Hanna and Richard Wozniak (2001), Consumer Behavior: An Applied Approach, Northern Illinois, p. 2.
- Nippapat Sukkokee. (2000), Marketing factors explaining consumer's purchase decision in debit card business, Master of Business Administration. Major

Field of Business Administration, Assumption University.

Nuchcharnart Chongsakvidtayasarn. (2002), Factors Influencing Consumer's Behavior and Attitude towards Starbucks' Specialty Coffeehouse in Bangkok Metropolis, Master of Business Administration. Major Field of Business Administration, Assumption University.

Patrick De Pelsmacker, Maggie Geuens and Joeri Vanden Bergh. (2001), Marketing Communication, Ashford Colour, pp. 2-5.

Pattranit Limsombatanan (2001). A study of the Factors Influencing Consumer's Purchase Decision toward Bottled Drinking Water in Bangkok and Samutsaongkhram, Master of Business Administration. Major Field of Business Administration, Assumption University.

Peter Paul J. and Olson Jerry C. (1996), Consumer Behavior and Marketing Strategy. (4th ed.), Homewood, IL: Irwin Book Term, p.432.

Philip Kotler (1997), Marketing Management: Analysis, Planning, Implementation, and Control. (9th ed.), New Jersey: Prentice-Hall.

Philip Kotler (2000), Marketing Management. (10th ed.), New Jersey: Prentice-Hall, pp. 11, 15, 160-161, 179-183, 263, 456, 550.

Philip Kotler and Gary Armstrong (1987), Marketing: An Introduction. (3rd ed.), New Jersey: Prentice-Hall, p. 150.

Phomnart, M. (2000), Determinants of customer satisfaction in personal computer (PC) purchase: A selected survey on Pantip Plaza area, Master of Business Administration. Major Field of Business Administration, Assumption University.

Sasirin Sayasonti (2001), Factor Affecting Consumer Behavior toward Purchasing Motor Insurance Policy, Master of Business Administration. Major Field of Business Administration, Assumption University.

Schiffman, Leon G. and Kanuk, Leslie Lazar (2000), Consumer Behavior, Prentice Hall, pp. 202-205.

Siam Commercial Bank (1996), Consumer behavior on personal computer purchase, Bangkok: Siam Commercial Bank.

Sproles, E.K. and Sproles, G.B. (1990), Consumer decision-making styles as a function of individual learning styles, The Journal of Consumer Affairs, Vol. 24, Summer, pp. 134-147.

Sproles, G.B. (1985), From perfectionism to faddism: measuring consumers'

- decision-making styles, Schnittgrund, K.P. (Ed.), Proceedings, American Council on Consumer Interests, ACCI, Columbia, MO, pp. 79-85.
- Sproles, G.B. and Kendall, E.L. (1986), A methodology for profiling consumer decision-making styles, The journal of Consumer Affairs, Vol. 20, Winter, pp. 267-279.
- Steven J. Skinner (1994), Marketing, (2nd ed.), Massachusetts: Houghton Mifflin, pp. 218-225.
- Steven Lysonski and Srini Durvasula (1995), Consumer Decision-making styles: A Multi-country investigation, European Journal of Marketing, pp. 11-12
- Thai Farmers Bank (1997), Consumer behavior on personal computer purchase in the area of Bangkok, Bangkok: Thai Farmers Bank.
- Timothy R. Graeff (1995), Product Comprehension and Promotional Strategies, Journal of Consumer Marketing, pp. 28, 33.
- Walter, C. Glem and Bergiel, Blaise J. (1989), Consumer behavior: A decision Making Approach, Cincinnati, Ohio : South-western, p. 9.
- Wanida D. (2002), Factors influencing consumer's purchasing decision and consumer behavior toward handheld and notebook computer, Bangkok: Thammasat University.
- Wells, W.D. (Ed.) (1975), Life Style and Psychographics, American Marketing Association, Chicago, IL.
- William D. Wells and David Prensky (1996), Consumer Behavior, New York: Chichester, pp. 40-41.
- William G. Zikmund and Michael D' Amico (1996), Basic Marketing, Minneapolis: St. Paul, pp. 6-7.
- William G. Zikmund (2000), Business Research Methods. (6th ed.), Oklahoma: Dryden.
- William L. Wilkie (1986), Consumer Behavior, New York: Chichester, p. 8.
- William M. Kincaid, Jr. (1990), Promotion Products, Services, and Ideas. (2nd ed.), New York: Merrill, p. 17.

<http://idctracker.com> (April 11, 2002)

http://www.infotechtrands.com/notebook_analysis.htm (April 15, 2002)

<http://members.rogers.com/dale-cotton/Writing/BuyFirstPortablev1.2.html>

(October 4, 2002)

<http://www.pantip.ient.co.th> (August 17, 2002)

<http://www.sric-bi.com/VALS> (November 2, 2002)

<http://www.tfrc.co.th> (August 9, 2002)



Appendix A – English Version Questionnaire



Questionnaire

This questionnaire is constructed for use as part of a thesis entitled “ A study of the factors influencing consumer’s purchase decision of computer notebook in Bangkok metropolis area” by a master’s degree student at Assumption University. Please fill in each item of the questionnaire according to your experience. The information obtained will only be used for study purpose. Thank you for your kind co-operation.

PA RT I: Purchase Decision Making of Product choices & Brand choices

Instruction: Please select the choice that most matches for your answer

- 1) Which is the computer notebook’s brand that influencing your purchasing decision for your latest computer notebook?

- | | | |
|----------------------------------|------------|------------|
| 1) Fujitsu | 2) Toshiba | 3) IBM |
| 4) Dell | 5) Compaq | 6) Asustek |
| 7) Belta | 8) ECS | 9) Acer |
| 10) Liberta | 11) Sony | 12) NEC |
| 13) Other (please specify) | | |

- 2) The most important reason for choosing the brand of computer notebook that influencing your purchasing in question 1 above.

- | | |
|--|---------------------------------------|
| 1) Well known brand | 2) The internationally produced brand |
| 3) Cheaper than other brands | 4) Advertising |
| 5) Belief/trust in its product and service quality | |
| 6) Other (please specify) | |

- 3) Which is the type of your latest computer notebook you have purchased?

- 1) Notebook Computer
- 2) Ultra Portable
- 3) Desknote Computer

- 4) Your reason for choosing the computer notebook in question 3 above.
- 1) Portability
 - 2) Battery capacity
 - 3) Cheapest price
 - 4) Avoiding of CPU overheats problem
 - 5) Include of floppy diskette drive, and CD-ROM
 - 6) Other (please specify)
- 5) Please specific your reasonable price of computer notebook.
- 1) Lower than 25,000 Baht
 - 2) 25,000 – 50,000 Baht
 - 3) 50,001 – 75,000 Baht
 - 4) 75,001 – 100,000 Baht
 - 5) 100,001 – 125,000 Baht
 - 6) More than 125,000 Baht

PART II: Factors Influencing Your Choice of Buying Computer Notebook by Marketing Stimuli

Instruction: Please indicate which is your level of influence toward each of the statements by using the scales as follows:

- 1 = Not at all Important
- 2 = Not Important
- 3 = Neutral
- 4 = Important
- 5 = Very Important

| Factor influencing your choice of | Level of Influence | | | | |
|---------------------------------------|--------------------|---|---|---|---|
| | 5 | 4 | 3 | 2 | 1 |
| <i>Product Factor</i> | | | | | |
| 1. Well known brand name | | | | | |
| 2. Convenience of portability | | | | | |
| 3. Warranty of product | | | | | |
| 4. Service quality | | | | | |
| 5. Battery capacity/Power management | | | | | |
| 6. Weight | | | | | |
| 7. Design of product | | | | | |
| 8. Durability | | | | | |
| 9. Capacity of HDD (Hard Disk drive) | | | | | |
| 10. Specification/ Performance of CPU | | | | | |

| Factor influencing your choice of | Level of Influence | | | | |
|---|--------------------|---|---|---|---|
| | 5 | 4 | 3 | 2 | 1 |
| 11. The size/resolution of LCD display screen | | | | | |
| 12. Suspend/Resume and Hibernation Technology | | | | | |
| 13. The number of expansion slots | | | | | |
| 14. Include of floppy diskette drive, CD/DVD-ROM | | | | | |
| Price Factor | | | | | |
| 15. Competitive price with other brand | | | | | |
| 16. Lower price than other brands | | | | | |
| 17. Reasonable price | | | | | |
| Distribution Channel Factor | | | | | |
| 18. Convenient and easy location for purchasing | | | | | |
| 19. Reputable and trust worthy shop | | | | | |
| 20. The shop provides a variety of products | | | | | |
| 21. Delivery service | | | | | |
| 22. The shop provides good inventory management to ensure that customers will surely get the product when they buy. | | | | | |
| 23. The shop provides good arrangement of product to attract customer | | | | | |
| Promotion Factor | | | | | |
| 24. Outdoor, brochure or leaflet advertisement | | | | | |
| 25. Premium (Free software/games/accessories/ Internet account) | | | | | |
| 26. Information given by sales person | | | | | |

PART III: Decision Making Style

Instruction: Please indicate how much you agree or disagree with each of the statements by using the scales as follows:

- 1 = Strongly disagree
- 2 = Disagree
- 3 = Neither agree nor disagree
- 4 = Agree
- 5 = Strongly agree

| Decision making style | Level of agreement | | | | |
|---|--------------------|---|---|---|---|
| | 5 | 4 | 3 | 2 | 1 |
| <i>Price Conscious</i> | | | | | |
| 1. I shop a lot for specials price. | | | | | |
| 2. I find myself checking the prices in the grocery store even for small items. | | | | | |
| 3. I usually watch the advertisements for announcements of sales. | | | | | |
| 4. I can save a lot of money by shopping around for bargains. | | | | | |
| <i>Technological Conscious</i> | | | | | |
| 1. I usually have one or more outfits that are of the very latest model. | | | | | |
| 2. When I must choose between the two, I usually choose for technological, not for price. | | | | | |
| 3. An important part of my life and activities is to be up to date. | | | | | |
| 4. I often try the latest technology when they change. | | | | | |

PART IV: Personal Information of Respondents

Instruction: Please select the choice that most matches your answer

1. Sex

1) Male

2) Female

2. Age

1) Less than 21 years old

2) 21 - 30 years old

3) 31 - 40 years old

4) More than 40 years old

3. Occupation

1) Student

2) Civil service employee/State
enterprise employee

3) Private sector employee

4) Self-Employed

5) Others (please specify)

4. Highest education level

1) High school or less

2) Diploma/Occupational certificate

3) Bachelor's degree

4) Master's degree or higher

5. Average salary per month

1) 10,000 Baht or less

2) 10,001 - 15,000 Baht

3) 15,001 - 20,000 Baht

4) 20,001 - 25,000 Baht

5) More than 25,000 Baht

◆ Thank you for your co-operation ◆

Appendix B – Thai Version Questionnaire



แบบสอบถาม

แบบสอบถามฉบับนี้จัดทำขึ้นเพื่อใช้เป็นส่วนประกอบในการทำวิทยานิพนธ์หัวข้อ “ปัจจัยที่มีอิทธิพลต่อการตัดสินใจซื้อคอมพิวเตอร์โน้ตบุ๊กของผู้บริโภคในเขตกรุงเทพฯ โดยนักศึกษาปริญญาโท คณะบริหารธุรกิจ มหาวิทยาลัยอัสสัมชัญขอความกรุณาท่านช่วยสละเวลาตอบแบบสอบถามตามความเป็นจริงจากประสบการณ์ของท่าน ข้อมูลที่ได้จะนำไปใช้เพื่อการศึกษาเท่านั้น ขอขอบคุณทุกท่านที่ให้ความร่วมมือ

ส่วนที่ 1: การตัดสินใจเลือกซื้อในเชิงตัวเลือกของสินค้า & กลุ่มตัวเลือกของตรายี่ห้อ

คำแนะนำ : กรุณาเลือกคำตอบที่ตรงกับคำตอบของท่านมากที่สุด

1) ตรายี่ห้อของคอมพิวเตอร์โน้ตบุ๊กใดที่มีอิทธิพลต่อการตัดสินใจซื้อคอมพิวเตอร์โน้ตบุ๊กเครื่องล่าสุดของท่านมากที่สุด

- | | | |
|--------------------------|---------------------|--------------------|
| 1) ฟุจิตุ (Fujitsu) | 2) โตชิบา (Toshiba) | 3) ไอบีเอ็ม (IBM) |
| 4) เดลล์ (Dell) | 5) คอมแพ็ค (Compaq) | 6) เอสัส (Asus) |
| 7) เบลด้า (Belta) | 8) อีซีเอส (ECS) | 9) เอเซอร์ (Acer) |
| 10) ลิเบอร์ต้า (Liberta) | 11) โซนี่ (Sony) | 12) เอ็นอีซี (NEC) |
| 13) อื่นๆ (ระบุ) | | |

2) สาเหตุที่สำคัญที่สุดของการเลือกตรายี่ห้อของคอมพิวเตอร์โน้ตบุ๊กที่ท่านเลือกในข้อ 1

- | | |
|------------------------------------|--|
| 1) เป็นยี่ห้อที่มีชื่อเสียง | 2) เป็นยี่ห้อที่ผลิตและเป็นที่รู้จักในหลายประเทศ |
| 3) ราคาถูกกว่ายี่ห้ออื่นๆ | 4) การโฆษณาของตรายี่ห้อ |
| 5) เชื่อในคุณภาพของสินค้าและบริการ | 6) อื่นๆ (ระบุ) |

3) คอมพิวเตอร์โน้ตบุ๊กเครื่องล่าสุดของท่านเป็นคอมพิวเตอร์โน้ตบุ๊กชนิดใด

- 1) โน้ตบุ๊กคอมพิวเตอร์ (Notebook Computer)
- 2) อุลตราพอร์เทเบิล (Ultra Portable)
- 3) เดสก์ท็อปคอมพิวเตอร์ (Desktop Computer)

4) สาเหตุของการเลือกใช้คอมพิวเตอร์โน้ตบุ๊กดังที่กล่าวมาในข้อ 3

- 1) พกพาสะดวก
- 2) แบตเตอรี่ ใช้งานได้นาน
- 3) ราคาถูก
- 4) ไม่มีปัญหาเรื่องความร้อนของ หน่วยประมวลผล
- 5) มีดิสก์ไดรฟ์ และ ไดรฟ์ซีดีรอมรวมอยู่ในตัวเครื่อง
- 6) อื่นๆ (ระบุ)

5) ท่านคิดว่าราคาที่เหมาะสมของคอมพิวเตอร์โน้ตบุ๊กควรมีราคาเท่าไร

- 1) ราคาต่ำกว่า 25,000 บาท
- 2) 25,000 – 50,000 บาท
- 3) 50,001 – 75,000 บาท
- 4) 75,001 – 100,000 บาท
- 5) 100,001 – 125,000 บาท
- 6) ราคามากกว่า 125,000 บาท

ส่วนที่ 2: ส่วนประสมทางการตลาดที่มีอิทธิพลต่อการเลือกซื้อคอมพิวเตอร์โน้ตบุ๊ก

คำแนะนำ : กรุณาระบุระดับความสำคัญของปัจจัยที่มีอิทธิพลต่อการเลือกซื้อคอมพิวเตอร์โน้ตบุ๊ก โดยมีระดับ

ความสำคัญดังต่อไปนี้ :

- 1 = สำคัญน้อยที่สุด
- 2 = สำคัญน้อย
- 3 = ปานกลาง
- 4 = สำคัญมาก
- 5 = สำคัญมากที่สุด

| ปัจจัยที่มีอิทธิพลต่อการเลือกซื้อคอมพิวเตอร์โน้ตบุ๊ก | ระดับอิทธิพล | | | | |
|--|--------------|---|---|---|---|
| | 5 | 4 | 3 | 2 | 1 |
| ปัจจัยทางด้านผลิตภัณฑ์ | | | | | |
| 1. เป็นยี่ห้อที่มีชื่อเสียง | | | | | |
| 2. พกพาสะดวก | | | | | |
| 3. การรับประกันคุณภาพของสินค้า | | | | | |
| 4. การบริการที่รวดเร็ว | | | | | |
| 5. แบตเตอรี่ ใช้งานได้นาน/ระบบประหยัดพลังงาน | | | | | |
| 6. น้ำหนัก | | | | | |

| ปัจจัยที่มีอิทธิพลต่อการเลือกซื้อคอมพิวเตอร์โน้ตบุ๊ก | ระดับอิทธิพล | | | | |
|--|--------------|---|---|---|---|
| | 5 | 4 | 3 | 2 | 1 |
| 7. รูปร่างลักษณะและการออกแบบสินค้า | | | | | |
| 8. ความทนทาน | | | | | |
| 9. ขนาดของพื้นที่จัดเก็บข้อมูล (Hard Disk space) | | | | | |
| 10. ความสามารถ และความเร็วของหน่วยประมวลผล | | | | | |
| 11. ขนาดและความคมชัดของจอแสดงผล | | | | | |
| 12. มีเทคโนโลยีการกู้คืนหรือกักเก็บของระบบและเอกสาร | | | | | |
| 13. จำนวนของช่องต่อพ่วงสำหรับอุปกรณ์ภายนอก | | | | | |
| 14. มีดิสก์ไดรฟ์ และ ไดรฟ์ซีดี/ดีวีดีรวมรวมอยู่ในตัวเครื่อง | | | | | |
| ปัจจัยด้านราคา | | | | | |
| 15. ราคาใกล้เคียงยี่ห้ออื่น | | | | | |
| 16. ราคาถูกกว่ายี่ห้ออื่น | | | | | |
| 17. ราคาที่เหมาะสม | | | | | |
| ปัจจัยด้านช่องทางการจัดจำหน่าย | | | | | |
| 18. ทำเลที่ตั้งสะดวกแก่การซื้อ หรือหาซื้อง่าย | | | | | |
| 19. ร้านค้ามีชื่อเสียง น่าเชื่อถือ | | | | | |
| 20. ร้านค้ามีสินค้าให้เลือกมากมาย | | | | | |
| 21. ร้านค้ามีบริการส่งถึงบ้าน | | | | | |
| 22. สินค้าไม่เคยขาด stock | | | | | |
| 23. การจัดวางสินค้าเป็นที่สะดุดตา | | | | | |
| ปัจจัยด้านการส่งเสริมการตลาด | | | | | |
| 24. การโฆษณาทางป้ายโฆษณา ใบปลิวและนิตยสาร | | | | | |
| 25. ของสมนาคุณ (ฟรี ซอฟต์แวร์ / เกม/ อุปกรณ์/ ชั่วโมงอินเทอร์เน็ต) | | | | | |
| 26. การให้ข้อมูลโดยพนักงานขาย | | | | | |

ส่วนที่ 3: รูปแบบการตัดสินใจ

คำแนะนำ : กรุณาแสดงความคิดเห็นของท่านว่าเห็นด้วย หรือไม่เห็นด้วยกับรูปแบบการตัดสินใจต่อไปนี้ โดย

มีระดับความคิดเห็นดังต่อไปนี้

1 = ไม่เห็นด้วยอย่างยิ่ง

2 = ไม่เห็นด้วย

3 = ไม่มีความเห็น

4 = เห็นด้วย

5 = เห็นด้วยอย่างยิ่ง

| รูปแบบการตัดสินใจ | ระดับความคิดเห็น | | | | |
|---|------------------|---|---|---|---|
| | 5 | 4 | 3 | 2 | 1 |
| คำนึงถึงปัจจัยด้านราคา | | | | | |
| 1. ท่านชอบการจับจ่ายเลือกซื้อสินค้าต่างๆเป็นพิเศษ | | | | | |
| 2. ท่านมักจะเปรียบเทียบราคาสินค้าต่างๆแม้ว่าจะเป็นของเล็กน้อย | | | | | |
| 3. ท่านมักจะคอยดูโฆษณาหรือประกาศสำหรับสินค้าที่จะลดราคา | | | | | |
| 4. ท่านสามารถประหยัดเงินได้เป็นจำนวนมากจากการต่อรองราคาสินค้า | | | | | |
| คำนึงถึงปัจจัยด้านความนิยม หรือ สมัยนิยม | | | | | |
| 5. ท่านมักจะซื้อสินค้าที่ออกใหม่หรือเป็นรุ่นล่าสุดเสมอ | | | | | |
| 5. หากจำเป็นต้องเลือกท่านมักจะเลือกผลิตภัณฑ์ที่มีเทคโนโลยีทันสมัยมากกว่าราคาถูก | | | | | |
| 7. สิ่งที่สำคัญต่อท่านอย่างหนึ่งก็คือความทันสมัย | | | | | |
| 3. ท่านมักทดลองเทคโนโลยีใหม่ๆ อยู่เสมอ | | | | | |

ส่วนที่ 4: ข้อมูลทั่วไป

คำแนะนำ: กรุณาเลือกคำตอบที่ตรงกับคำตอบของท่านมากที่สุด

1. 1949

- 1) ชาย 2) หญิง

2. อายุ

- 1) น้อยกว่า 21 ปี 2) 21 - 30 ปี
- 3) 31 - 40 ปี 4) มากกว่า 40 ปี

3. อาชีพ

- 1) นักเรียน/นักศึกษา
2) ข้าราชการ/พนักงานรัฐวิสาหกิจ
3) พนักงานบริษัทเอกชน
4) ธุรกิจส่วนตัว
5) อื่นๆ (ระบุ)

4. ระดับการศึกษาสูงสุด

- 1) มัธยมศึกษาหรือเทียบเท่า
- 2) อนุปริญญา/ปวส.
- 3) ปริญญาตรี
- 4) ปริญญาโทหรือสูงกว่า

5. รายได้โดยเฉลี่ย

- 1) 10,000 บาท หรือน้อยกว่า 2) 10,001 - 15,000 บาท
3) 15,001 - 20,000 บาท 4) 20,001 - 25,000 บาท
5) มากกว่า 25,000 บาท

◆ ขอขอบคุณในความร่วมมือ ◆

Appendix C



Table 1.1 There is a difference in product choices toward computer notebook when segmented by gender.

Which is the types of your latest computer notebook you have purchased? * Gender Crosstabulation

| | | | Gender | | Total |
|---|-------------------|--|--------|--------|--------|
| | | | Male | Female | |
| Which is the types of your latest computer notebook you have purchased? | Notebook Computer | Count | 182 | 150 | 332 |
| | | % within Which is the types of your latest computer notebook you have purchased? | 54.8% | 45.2% | 100.0% |
| | | % within Gender | 74.6% | 96.2% | 83.0% |
| | | % of Total | 45.5% | 37.5% | 83.0% |
| | | | | | |
| | Ultra Portable | Count | 10 | 6 | 16 |
| | | % within Which is the types of your latest computer notebook you have purchased? | 62.5% | 37.5% | 100.0% |
| | | % within Gender | 4.1% | 3.8% | 4.0% |
| | | % of Total | 2.5% | 1.5% | 4.0% |
| | | | | | |
| | Desknote Computer | Count | 52 | | 52 |
| | | % within Which is the types of your latest computer notebook you have purchased? | 100.0% | | 100.0% |
| | | % within Gender | 21.3% | | 13.0% |
| | | % of Total | 13.0% | | 13.0% |
| | | | | | |
| Total | | | 244 | 156 | 400 |
| | | | 61.0% | 39.0% | 100.0% |
| | | | 100.0% | 100.0% | 100.0% |
| | | | 61.0% | 39.0% | 100.0% |
| | | | | | |

Table 1.2 There is a difference in product choices toward computer notebook when segmented by age.

Which is the types of your latest computer notebook you have purchased? * Age Crosstabulation

| | | | Age | | | | Total |
|--|---|---|---------------------------|----------------------|----------------------|---------------------------|--------|
| | | | Less than 21 years old | 21 - 30 years old | 31 - 40 years old | More than 40 years old | |
| Which is the types of your latest computer notebook you have purchased? | Notebook Computer | Count | 112 | 192 | 16 | 12 | 332 |
| | | % within Which is the types of your latest computer notebook you have purchased? | 33.7% | 57.8% | 4.8% | 3.6% | 100.0% |
| | | % within Age | 100.0% | 90.6% | 25.0% | 100.0% | 83.0% |
| | | % of Total | 28.0% | 48.0% | 4.0% | 3.0% | 83.0% |
| | Ultra Portable | Count | | 6 | 10 | | 16 |
| | | % within Which is the types of your latest computer notebook you have purchased? | | 37.5% | 62.5% | | 100.0% |
| | | % within Age | | 2.8% | 15.6% | | 4.0% |
| | | % of Total | | 1.5% | 2.5% | | 4.0% |
| | Desknote Computer | Count | | 14 | 38 | | 52 |
| | | % within Which is the types of your latest computer notebook you have purchased? | | 26.9% | 73.1% | | 100.0% |
| | | % within Age | | 6.6% | 59.4% | | 13.0% |
| | | % of Total | | 3.5% | 9.5% | | 13.0% |
| Total | Count | | 112 | 212 | 64 | 12 | 400 |
| | % within Which is the types of your latest computer notebook you have purchased? | | 28.0% | 53.0% | 16.0% | 3.0% | 100.0% |
| | % within Age | | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| | % of Total | | 28.0% | 53.0% | 16.0% | 3.0% | 100.0% |

Table 1.3 There is a difference in product choices toward computer notebook when segmented by education levels.

Which is the types of your latest computer notebook you have purchased? * Highest education level Crosstabulation

| | | | Highest education level | | | | Total |
|---|-------------------|--|-------------------------|-----------------------------------|-------------------|---------------------------|--------|
| | | | High school or less | Diploma/ Occupational certificate | Bachelor's degree | Master's degree or higher | |
| Which is the types of your latest computer notebook you have purchased? | Notebook Computer | Count | 37 | 44 | 157 | 94 | 332 |
| | | % within Which is the types of your latest computer notebook you have purchased? | 11.1% | 13.3% | 47.3% | 28.3% | 100.0% |
| | | % within Highest education level | 88.1% | 100.0% | 74.8% | 90.4% | 83.0% |
| | | % of Total | 9.3% | 11.0% | 39.3% | 23.5% | 83.0% |
| | Ultra Portable | Count | | | 6 | 10 | 16 |
| | | % within Which is the types of your latest computer notebook you have purchased? | | | 37.5% | 62.5% | 100.0% |
| | | % within Highest education level | | | 2.9% | 9.6% | 4.0% |
| | | % of Total | | | 1.5% | 2.5% | 4.0% |
| | Desknote Computer | Count | 5 | | 47 | | 52 |
| | | % within Which is the types of your latest computer notebook you have purchased? | 9.6% | | 90.4% | | 100.0% |
| | | % within Highest education level | 11.9% | | 22.4% | | 13.0% |
| | | % of Total | 1.3% | | 11.8% | | 13.0% |
| Total | | Count | 42 | 44 | 210 | 104 | 400 |
| | | % within Which is the types of your latest computer notebook you have purchased? | 10.5% | 11.0% | 52.5% | 26.0% | 100.0% |
| | | % within Highest education level | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| | | % of Total | 10.5% | 11.0% | 52.5% | 26.0% | 100.0% |

Table 1.4 There is a difference in product choices toward computer notebook when segmented by occupation.

Which is the types of your latest computer notebook you have purchased? * Occupation Crosstabulation

| | | | Occupation | | | | | Total |
|---|-------------------|--|------------|--|-------------------------|---------------|--------|--------|
| | | | Student | Civil service employee/State enterprise employee | Private sector employee | Self-Employed | Others | |
| Which is the types of your latest computer notebook you have purchased? | Notebook Computer | Count | 188 | 39 | 77 | 12 | 16 | 332 |
| | | % within Which is the types of your latest computer notebook you have purchased? | 56.6% | 11.7% | 23.2% | 3.6% | 4.8% | 100.0% |
| | | % within Occupation | 91.3% | 70.9% | 88.5% | 35.3% | 88.9% | 83.0% |
| | | % of Total | 47.0% | 9.8% | 19.3% | 3.0% | 4.0% | 83.0% |
| | Ultra Portable | Count | 6 | | 10 | | | 16 |
| | | % within Which is the types of your latest computer notebook you have purchased? | 37.5% | | 62.5% | | | 100.0% |
| | | % within Occupation | 2.9% | | 11.5% | | | 4.0% |
| | | % of Total | 1.5% | | 2.5% | | | 4.0% |
| | Desknote Computer | Count | 12 | 16 | | 22 | 2 | 52 |
| | | % within Which is the types of your latest computer notebook you have purchased? | 23.1% | 30.8% | | 42.3% | 3.8% | 100.0% |
| | | % within Occupation | 5.8% | 29.1% | | 64.7% | 11.1% | 13.0% |
| | | % of Total | 3.0% | 4.0% | | 5.5% | .5% | 13.0% |
| Total | | Count | 206 | 55 | 87 | 34 | 18 | 400 |
| | | % within Which is the types of your latest computer notebook you have purchased? | 51.5% | 13.8% | 21.8% | 8.5% | 4.5% | 100.0% |
| | | % within Occupation | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| | | % of Total | 51.5% | 13.8% | 21.8% | 8.5% | 4.5% | 100.0% |

Table 1.5 There is difference in product choices toward computer notebook when segmented by income levels.

Which is the types of your latest computer notebook you have purchased? * Average salary per month Crosstabulation

| | | | Average salary per month | | | | | Total |
|---|--|--|--------------------------|----------------------|----------------------|----------------------|-----------------------|--------|
| | | | 10,000 Baht or less | 10,001 - 15,000 Baht | 15,001 - 20,000 Baht | 20,001 - 25,000 Baht | More than 25,000 Baht | |
| Which is the types of your latest computer notebook you have purchased? | Notebook Computer | Count | 14 | 91 | 149 | 68 | 10 | 332 |
| | | % within Which is the types of your latest computer notebook you have purchased? | 4.2% | 27.4% | 44.9% | 20.5% | 3.0% | 100.0% |
| | | % within Average salary per month | 87.5% | 72.8% | 89.2% | 85.0% | 83.3% | 83.0% |
| | | % of Total | 3.5% | 22.8% | 37.3% | 17.0% | 2.5% | 83.0% |
| | Ultra Portable | Count | | 7 | 1 | 6 | 2 | 16 |
| | | % within Which is the types of your latest computer notebook you have purchased? | | 43.8% | 6.3% | 37.5% | 12.5% | 100.0% |
| | | % within Average salary per month | | 5.6% | .6% | 7.5% | 16.7% | 4.0% |
| | | % of Total | | 1.8% | .3% | 1.5% | .5% | 4.0% |
| | Desknote Computer | Count | 2 | 27 | 17 | 6 | | 52 |
| | | % within Which is the types of your latest computer notebook you have purchased? | 3.8% | 51.9% | 32.7% | 11.5% | | 100.0% |
| | | % within Average salary per month | 12.5% | 21.6% | 10.2% | 7.5% | | 13.0% |
| | | % of Total | .5% | 6.8% | 4.3% | 1.5% | | 13.0% |
| Total | Count | 16 | 125 | 167 | 80 | 12 | 400 | |
| | % within Which is the types of your latest computer notebook you have purchased? | 4.0% | 31.3% | 41.8% | 20.0% | 3.0% | 100.0% | |
| | % within Average salary per month | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | |
| | % of Total | 4.0% | 31.3% | 41.8% | 20.0% | 3.0% | 100.0% | |



Table 1.6 There is a difference in brand choices toward computer notebook when segmented by occupations.

Which is the computer notebook’s brand that influencing your purchasing decision for your latest computer notebook? * Occupation Crosstabulation

| | | | Occupation | | | | | Total |
|---|---------|------------|------------|--|-------------------------|---------------|--------|--------|
| | | | Student | Civil service employee/State enterprise employee | Private sector employee | Self-Employed | Others | |
| Which is the computer notebook's brand that influencing your purchasing decision for your latest computer notebook? | Fujitsu | Count | 35 | | 12 | | | 47 |
| | | % of Total | 8.8% | | 3.0% | | | 11.8% |
| | Toshiba | Count | 60 | 3 | 14 | 1 | 4 | 82 |
| | | % of Total | 15.0% | .8% | 3.5% | .3% | 1.0% | 20.5% |
| | IBM | Count | 5 | 8 | 32 | 10 | 3 | 58 |
| | | % of Total | 1.3% | 2.0% | 8.0% | 2.5% | .8% | 14.5% |
| | Dell | Count | 6 | 7 | | | 1 | 14 |
| | | % of Total | 1.5% | 1.8% | | | .3% | 3.5% |
| | Compaq | Count | 35 | 21 | 4 | 6 | 5 | 71 |
| | | % of Total | 8.8% | 5.3% | 1.0% | 1.5% | 1.3% | 17.8% |
| | Asustek | Count | 26 | 7 | | | 1 | 34 |
| | | % of Total | 6.5% | 1.8% | | | .3% | 8.5% |
| | Belta | Count | 9 | 1 | | | | 10 |
| | | % of Total | 2.3% | .3% | | | | 2.5% |
| | ECS | Count | 2 | 7 | | 16 | 1 | 26 |
| | | % of Total | .5% | 1.8% | | 4.0% | .3% | 6.5% |
| | Acer | Count | 2 | | 15 | | 1 | 18 |
| | | % of Total | .5% | | 3.8% | | .3% | 4.5% |
| | Liberta | Count | 8 | | | | | 8 |
| | | % of Total | 2.0% | | | | | 2.0% |
| | Sony | Count | | | 6 | | | 6 |
| | | % of Total | | | 1.5% | | | 1.5% |
| | NEC | Count | 14 | 1 | 1 | | 1 | 17 |
| | | % of Total | 3.5% | .3% | .3% | | .3% | 4.3% |
| | Other | Count | 4 | | 3 | 1 | 1 | 9 |
| | | % of Total | 1.0% | | .8% | .3% | .3% | 2.3% |
| Total | | Count | 206 | 55 | 87 | 34 | 18 | 400 |
| | | % of Total | 51.5% | 13.8% | 21.8% | 8.5% | 4.5% | 100.0% |

Table 1.7 There is a difference in brand choices toward computer notebook when segmented by education levels.

Which is the computer notebook's brand that influencing your purchasing decision for your latest computer notebook? * Highest education level Crosstabulation

| | | | Highest education level | | | | Total |
|---|---------|------------|-------------------------|----------------------------------|-------------------|---------------------------|--------|
| | | | High school or less | Diploma/Occupational certificate | Bachelor's degree | Master's degree or higher | |
| Which is the computer notebook's brand that influencing your purchasing decision for your latest computer notebook? | Fujitsu | Count | | 3 | 17 | 27 | 47 |
| | | % of Total | | .8% | 4.3% | 6.8% | 11.8% |
| | Toshiba | Count | 7 | 2 | 48 | 25 | 82 |
| | | % of Total | 1.8% | .5% | 12.0% | 6.3% | 20.5% |
| | IBM | Count | | 8 | 10 | 40 | 58 |
| | | % of Total | | 2.0% | 2.5% | 10.0% | 14.5% |
| | Dell | Count | 1 | | 13 | | 14 |
| | | % of Total | .3% | | 3.3% | | 3.5% |
| | Compaq | Count | 3 | 21 | 46 | 1 | 71 |
| | | % of Total | .8% | 5.3% | 11.5% | .3% | 17.8% |
| | Asustek | Count | 2 | 8 | 24 | | 34 |
| | | % of Total | .5% | 2.0% | 6.0% | | 8.5% |
| | Belta | Count | 8 | | 2 | | 10 |
| | | % of Total | 2.0% | | .5% | | 2.5% |
| | ECS | Count | | | 26 | | 26 |
| | | % of Total | | | 6.5% | | 6.5% |
| | Acer | Count | 9 | 2 | 7 | | 18 |
| | | % of Total | 2.3% | .5% | 1.8% | | 4.5% |
| | Liberta | Count | | | 8 | | 8 |
| | | % of Total | | | 2.0% | | 2.0% |
| | Sony | Count | | | 2 | 4 | 6 |
| | | % of Total | | | .5% | 1.0% | 1.5% |
| | NEC | Count | 12 | | 5 | | 17 |
| | | % of Total | 3.0% | | 1.3% | | 4.3% |
| | Other | Count | | | 2 | 7 | 9 |
| | | % of Total | | | .5% | 1.8% | 2.3% |
| Total | | Count | 42 | 44 | 210 | 104 | 400 |
| | | % of Total | 10.5% | 11.0% | 52.5% | 26.0% | 100.0% |

Table 2.1 There is relationship between price factor and product choices toward notebook computer.

Correlations

| | | | notebook computer | Competitive price with other brand | Lower price than other brands | Reasonable price |
|----------------|------------------------------------|-------------------------|-------------------|------------------------------------|-------------------------------|------------------|
| Spearman's rho | notebook computer | Correlation Coefficient | 1.000 | .390** | .364** | .394* |
| | | Sig. (2-tailed) | . | .000 | .000 | .000 |
| | | N | 400 | 400 | 400 | 400 |
| | Competitive price with other brand | Correlation Coefficient | .390** | 1.000 | .701** | .416* |
| | | Sig. (2-tailed) | .000 | . | .000 | .000 |
| | | N | 400 | 400 | 400 | 400 |
| | Lower price than other brands | Correlation Coefficient | .364** | .701** | 1.000 | .587** |
| | | Sig. (2-tailed) | .000 | .000 | . | .000 |
| | | N | 400 | 400 | 400 | 400 |
| | Reasonable price | Correlation Coefficient | .394** | .416** | .587** | 1.000 |
| | | Sig. (2-tailed) | .000 | .000 | .000 | . |
| | | N | 400 | 400 | 400 | 400 |

** . Correlation is significant at the .01 level (2-tailed).

Table 2.2 There is relationship between price factor and product choices toward ultra portable notebook.

Correlations

| | | | ultra portable | Competitive price with other brand | Lower price than other brands | Reasonable price |
|----------------|------------------------------------|-------------------------|----------------|------------------------------------|-------------------------------|------------------|
| Spearman's rho | ultra portable | Correlation Coefficient | 1.000 | -.058 | .173** | .166* |
| | | Sig. (2-tailed) | . | .245 | .001 | .001 |
| | | N | 400 | 400 | 400 | 400 |
| | Competitive price with other brand | Correlation Coefficient | -.058 | 1.000 | .701** | .416* |
| | | Sig. (2-tailed) | .245 | . | .000 | .000 |
| | | N | 400 | 400 | 400 | 400 |
| | Lower price than other brands | Correlation Coefficient | .173** | .701** | 1.000 | .587** |
| | | Sig. (2-tailed) | .001 | .000 | . | .000 |
| | | N | 400 | 400 | 400 | 400 |
| | Reasonable price | Correlation Coefficient | .166** | .416** | .587** | 1.000 |
| | | Sig. (2-tailed) | .001 | .000 | .000 | . |
| | | N | 400 | 400 | 400 | 400 |

** . Correlation is significant at the .01 level (2-tailed).

Table 2.3 There is relationship between price factor and product choices toward desknote computer.

Correlations

| | | desknote computer | Competitive price with other brand | Lower price than other brands | Reasonable price |
|----------------|---------------------------------------|-------------------------|--|-------------------------------------|---------------------|
| Spearman's rho | desknote computer | Correlation Coefficient | 1.000 | .469* | .508* |
| | | Sig. (2-tailed) | . | .000 | .000 |
| | | N | 400 | 400 | 400 |
| | | | | | |
| | Competitive price with other brand | Correlation Coefficient | .469* | 1.000 | .701* |
| | | Sig. (2-tailed) | .000 | . | .000 |
| | | N | 400 | 400 | 400 |
| | | | | | |
| | Lower price than other brands | Correlation Coefficient | .508* | .701* | 1.000 |
| | | Sig. (2-tailed) | .000 | .000 | . |
| | | N | 400 | 400 | 400 |
| | | | | | |
| | Reasonable price | Correlation Coefficient | .537* | .416* | .587* |
| | | Sig. (2-tailed) | .000 | .000 | .000 |
| | | N | 400 | 400 | 400 |
| | | | | | |

** . Correlation is significant at the .01 level (2-tailed).



Correlations

| | | notebook computer | Well known brand name | Convenience of portability | Warranty of product | Service quality | Battery capacity/Power management | Weight | Design of product | Durability | Capacity of HDD (Hard Disk drive) | Specification/Performance of CPU | The size/resolution of LCD display screen | Resume and Hibernation Technology | The number of expansion slots | Include of floppy drive, CD/DVD-ROM |
|---|-------------------|-------------------|-----------------------|----------------------------|---------------------|-----------------|-----------------------------------|--------|-------------------|------------|-----------------------------------|----------------------------------|---|-----------------------------------|-------------------------------|-------------------------------------|
| Spearman's rho | notebook computer | 1.000 | .561* | .149* | -.255* | .395* | .569* | .102* | .029 | -.065 | -.032 | -.081 | .144* | .176* | .095 | .606* |
| | Sig. (2-tailed) | | .000 | .003 | .000 | .000 | .000 | .042 | .558 | .194 | .517 | .104 | .004 | .000 | .059 | .000 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Well known brand name | notebook computer | .561* | 1.000 | .129* | .207* | .440* | .368* | .109* | .291* | .205* | -.079 | -.065 | -.085 | .237* | .018 | .098 |
| | Sig. (2-tailed) | .000 | | .010 | .000 | .000 | .000 | .030 | .000 | .000 | .114 | .195 | .089 | .000 | .716 | .051 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Convenience of portability | notebook computer | .149* | .129* | 1.000 | -.011 | .329* | .353* | .342* | .405* | -.074 | -.016 | .209* | .152* | -.050 | .276* | .284* |
| | Sig. (2-tailed) | .003 | .010 | | .831 | .000 | .000 | .000 | .000 | .142 | .745 | .000 | .002 | .317 | .000 | .000 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Warranty of product | notebook computer | .255* | -.207* | -.011 | 1.000 | .271* | .125* | .019 | .012 | .126* | .115* | .104* | -.025 | -.005 | .225* | .223* |
| | Sig. (2-tailed) | .000 | .000 | .831 | | .000 | .012 | .704 | .813 | .012 | .021 | .038 | .615 | .920 | .000 | .000 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Service quality | notebook computer | .395* | -.440* | .329* | .271* | 1.000 | .106* | .108* | -.006 | .057 | -.039 | -.016 | -.018 | -.057 | .425* | -.058 |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | | .034 | .030 | .911 | .254 | .434 | .743 | .716 | .252 | .000 | .249 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Battery capacity/Power management | notebook computer | .569* | .368* | .353* | .125* | .106* | 1.000 | .174* | .098* | -.017 | .143* | .124* | .032 | .213* | .157* | .245* |
| | Sig. (2-tailed) | .000 | .000 | .000 | .012 | .034 | | .000 | .050 | .737 | .004 | .013 | .524 | .000 | .002 | .000 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Weight | notebook computer | .102* | .109* | .342* | -.019 | .108* | .174* | 1.000 | .245* | .182* | .138* | .023 | .027 | .077 | .146* | .067 |
| | Sig. (2-tailed) | .042 | .030 | .000 | .704 | .030 | .000 | | .000 | .000 | .006 | .645 | .592 | .125 | .003 | .181 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Design of product | notebook computer | -.029 | .291* | .405* | -.012 | -.006 | .098* | .245* | 1.000 | -.001 | .093 | .173* | -.055 | .196* | .090 | .086 |
| | Sig. (2-tailed) | .558 | .000 | .000 | .813 | .911 | .050 | .000 | | .989 | .064 | .000 | .271 | .000 | .071 | .085 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Durability | notebook computer | -.065 | -.205* | -.074 | .126* | .057 | -.017 | .182* | -.001 | 1.000 | .111* | .157* | .250* | .074 | .144* | .015 |
| | Sig. (2-tailed) | .194 | .000 | .142 | .012 | .254 | .737 | .000 | .989 | | .027 | .002 | .000 | .141 | .004 | .761 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Capacity of HDD (Hard Disk drive) | notebook computer | -.032 | -.079 | -.016 | .115* | -.039 | .143* | .138* | .093 | .111* | 1.000 | .081 | .002 | .158* | .146* | .133* |
| | Sig. (2-tailed) | .517 | .114 | .745 | .021 | .434 | .004 | .006 | .064 | .027 | | .106 | .968 | .001 | .003 | .008 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Specification/Performance of CPU | notebook computer | -.081 | -.065 | .209* | .104* | -.016 | .124* | .023 | .173* | .157* | .081 | 1.000 | .322* | .101* | .045 | .104* |
| | Sig. (2-tailed) | .104 | .195 | .000 | .038 | .743 | .013 | .645 | .000 | .002 | .106 | | .000 | .043 | .366 | .037 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| The size/resolution of LCD display screen | notebook computer | .144* | -.085 | .152* | .025 | -.018 | -.032 | .027 | -.055 | .250* | .002 | .322* | 1.000 | -.064 | .126* | .287* |
| | Sig. (2-tailed) | .004 | .089 | .002 | .615 | .716 | .524 | .592 | .271 | .000 | .968 | .000 | | .202 | .012 | .000 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Resume and Hibernation Technology | notebook computer | .176* | .237* | -.050 | -.005 | -.057 | .213* | -.077 | .196* | .074 | .158* | .101* | -.064 | 1.000 | .400* | .293* |
| | Sig. (2-tailed) | .000 | .000 | .317 | .920 | .252 | .000 | .125 | .000 | .141 | .001 | .043 | .202 | | .000 | .000 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| The number of expansion slots | notebook computer | .095 | .018 | .276* | .225* | .425* | .157* | .146* | .090 | .144* | .146* | .045 | .126* | .400* | 1.000 | .010 |
| | Sig. (2-tailed) | .059 | .716 | .000 | .000 | .000 | .002 | .003 | .071 | .004 | .003 | .366 | .012 | .000 | | .841 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Include of floppy drive, CD/DVD-ROM | notebook computer | .606* | -.098 | .284* | .223* | -.058 | .245* | -.067 | .086 | .015 | .133* | .104* | .287* | .293* | .010 | 1.000 |
| | Sig. (2-tailed) | .000 | .051 | .000 | .000 | .249 | .000 | .181 | .085 | .761 | .008 | .037 | .000 | .000 | .841 | |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |

** . Correlation is significant at the .01 level (2-tailed).

* . Correlation is significant at the .05 level (2-tailed).

PRODUCT CHOICES TOWARD ULTRA PORTABLE NOTEBOOK.

Correlations

| | | ultra portable | Well known brand name | Convenience of portability | Warranty of product | Service quality | Battery capacity/Power management | Weight | Design of product | Durability | Capacity of HDD (Hard Disk drive) | Specification/Performance of CPU | The size/resolution of LCD display screen | Resume and Hibernation Technology | The number of expansion slots | Include of floppy drive, CD/DVD-ROM |
|---|-------------------------|----------------|-----------------------|----------------------------|---------------------|-----------------|-----------------------------------|--------|-------------------|------------|-----------------------------------|----------------------------------|---|-----------------------------------|-------------------------------|-------------------------------------|
| Spearman's rho ultra portable | Correlation Coefficient | 1.000 | .284 | .206 | .014 | .102* | .061 | .049 | .098* | .069 | .064 | .218* | .167* | .064 | .011 | .293* |
| | Sig. (2-tailed) | . | .044 | .007 | .031 | .042 | .021 | .009 | .049 | .000 | .000 | .000 | .001 | .003 | .026 | .000 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Well known brand name | Correlation Coefficient | .284 | 1.000 | .129* | -.207* | -.440* | .368* | .109* | .291* | -.205* | -.079 | -.065 | -.085 | .237* | .018 | .098 |
| | Sig. (2-tailed) | .044 | . | .010 | .000 | .000 | .000 | .030 | .000 | .000 | .114 | .195 | .089 | .000 | .716 | .051 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Convenience of portability | Correlation Coefficient | .206 | .129* | 1.000 | -.011 | .329* | .353* | .342* | .405* | -.074 | -.016 | .209* | .152* | -.050 | .276* | .284* |
| | Sig. (2-tailed) | .007 | .010 | . | .831 | .000 | .000 | .000 | .000 | .142 | .745 | .000 | .002 | .317 | .000 | .000 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Warranty of product | Correlation Coefficient | .014 | -.207* | -.011 | 1.000 | .271* | -.125* | .019 | .012 | .126* | -.115* | .104* | -.025 | -.005 | .225* | -.223* |
| | Sig. (2-tailed) | .031 | .000 | .831 | . | .000 | .012 | .704 | .813 | .012 | .021 | .038 | .615 | .920 | .000 | .000 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Service quality | Correlation Coefficient | .102* | -.440* | .329* | .271* | 1.000 | -.106* | .108* | -.006 | .057 | -.039 | -.016 | -.018 | -.057 | .425* | -.058 |
| | Sig. (2-tailed) | .042 | .000 | .000 | .000 | . | .034 | .030 | .911 | .254 | .434 | .743 | .716 | .252 | .000 | .249 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Battery capacity/Power management | Correlation Coefficient | .061 | .368* | .353* | -.125* | -.106* | 1.000 | .174* | .098* | -.017 | -.143* | -.124* | .032 | .213* | .157* | .245* |
| | Sig. (2-tailed) | .021 | .000 | .000 | .012 | .034 | . | .000 | .050 | .737 | .004 | .013 | .524 | .000 | .002 | .000 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Weight | Correlation Coefficient | .049 | .109* | .342* | .019 | .108* | .174* | 1.000 | .245* | .182* | -.138* | .023 | .027 | .077 | .146* | .067 |
| | Sig. (2-tailed) | .009 | .030 | .000 | .704 | .030 | .000 | . | .000 | .000 | .006 | .645 | .592 | .125 | .003 | .181 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Design of product | Correlation Coefficient | .098* | .291* | .405* | .012 | -.006 | .098* | .245* | 1.000 | -.001 | .093 | .173* | -.055 | -.196* | .090 | .086 |
| | Sig. (2-tailed) | .049 | .000 | .000 | .813 | .911 | .050 | .000 | . | .989 | .064 | .000 | .271 | .000 | .071 | .085 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Durability | Correlation Coefficient | .069 | -.205* | -.074 | .126* | .057 | -.017 | .182* | -.001 | 1.000 | -.111* | .157* | .250* | .074 | .144* | .015 |
| | Sig. (2-tailed) | .004 | .000 | .142 | .012 | .254 | .737 | .000 | .989 | . | .027 | .002 | .000 | .141 | .004 | .761 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Capacity of HDD (Hard Disk drive) | Correlation Coefficient | .064 | -.079 | -.016 | -.115* | -.039 | -.143* | -.138* | .093 | -.111* | 1.000 | .081 | .002 | -.158* | -.146* | .133* |
| | Sig. (2-tailed) | .000 | .114 | .745 | .021 | .434 | .004 | .006 | .064 | .027 | . | .106 | .968 | .001 | .003 | .008 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Specification/Performance of CPU | Correlation Coefficient | .218* | -.065 | .209* | .104* | -.016 | -.124* | .023 | .173* | .157* | .081 | 1.000 | .322* | -.101* | .045 | .104* |
| | Sig. (2-tailed) | .000 | .195 | .000 | .038 | .743 | .013 | .645 | .000 | .002 | .106 | . | .000 | .043 | .366 | .037 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| The size/resolution of LCD display screen | Correlation Coefficient | .167* | -.085 | .152* | -.025 | -.018 | .032 | .027 | -.055 | .250* | .002 | .322* | 1.000 | -.064 | -.126* | .287* |
| | Sig. (2-tailed) | .001 | .089 | .002 | .615 | .716 | .524 | .592 | .271 | .000 | .968 | .000 | . | .202 | .012 | .000 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Resume and Hibernation Technology | Correlation Coefficient | .064 | .237* | -.050 | -.005 | -.057 | .213* | .077 | -.196* | .074 | -.158* | -.101* | -.064 | 1.000 | .400* | -.293* |
| | Sig. (2-tailed) | .003 | .000 | .317 | .920 | .252 | .000 | .125 | .000 | .141 | .001 | .043 | .202 | . | .000 | .000 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| The number of expansion slots | Correlation Coefficient | .011 | .018 | .276* | .225* | .425* | .157* | .146* | .090 | .144* | -.146* | .045 | -.126* | .400* | 1.000 | .010 |
| | Sig. (2-tailed) | .026 | .716 | .000 | .000 | .000 | .002 | .003 | .071 | .004 | .003 | .366 | .012 | .000 | . | .841 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Include of floppy drive, CD/DVD-ROM | Correlation Coefficient | .293* | .098 | .284* | -.223* | -.058 | .245* | .067 | .086 | .015 | .133* | .104* | .287* | -.293* | .010 | 1.000 |
| | Sig. (2-tailed) | .000 | .051 | .000 | .000 | .249 | .000 | .181 | .085 | .761 | .008 | .037 | .000 | .000 | .841 | . |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |

*. Correlation is significant at the .05 level (2-tailed).

**. Correlation is significant at the .01 level (2-tailed).

Correlations

| | | desknote computer | Well known brand name | Convenience of portability | Warranty of product | Service quality | Battery capacity/Power management | Weight | Design of product | Durability | Capacity of HDD (Hard Disk drive) | Specification/Performance of CPU | The size/resolution of LCD display screen | Resume and Hibernation Technology | The number of expansion slots | Include of floppy drive, CD/DVD-ROM |
|---|-------------------------|-------------------|-----------------------|----------------------------|---------------------|-----------------|-----------------------------------|--------|-------------------|------------|-----------------------------------|----------------------------------|---|-----------------------------------|-------------------------------|-------------------------------------|
| Spearman's rho | Correlation Coefficient | 1.000 | .578* | .170* | .277* | .382* | .599* | .124* | .025 | .113* | .074 | .218* | -.064 | .160* | .112* | .506* |
| | Sig. (2-tailed) | | .000 | .001 | .000 | .000 | .000 | .013 | .624 | .024 | .141 | .000 | .204 | .001 | .025 | .000 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Well known brand name | Correlation Coefficient | .578* | 1.000 | .129* | .207* | .440* | .368* | .109* | .291* | .205* | -.079 | -.065 | -.085 | .237* | .018 | .098 |
| | Sig. (2-tailed) | .000 | | .010 | .000 | .000 | .000 | .030 | .000 | .000 | .114 | .195 | .089 | .000 | .716 | .051 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Convenience of portability | Correlation Coefficient | .170* | .129* | 1.000 | -.011 | .329* | .353* | .342* | .405* | -.074 | -.016 | .209* | .152* | -.050 | .276* | .284* |
| | Sig. (2-tailed) | .001 | .010 | | .831 | .000 | .000 | .000 | .000 | .142 | .745 | .000 | .002 | .317 | .000 | .000 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Warranty of product | Correlation Coefficient | .277* | .207* | -.011 | 1.000 | .271* | .125* | .019 | .012 | .126* | .115* | .104* | -.025 | -.005 | .225* | .223* |
| | Sig. (2-tailed) | .000 | .000 | .831 | | .000 | .012 | .704 | .813 | .012 | .021 | .038 | .615 | .920 | .000 | .000 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Service quality | Correlation Coefficient | .382* | .440* | .329* | .271* | 1.000 | .106* | .108* | -.006 | .057 | -.039 | -.016 | -.018 | -.057 | .425* | -.058 |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | | .034 | .030 | .911 | .254 | .434 | .743 | .716 | .252 | .000 | .249 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Battery capacity/Power management | Correlation Coefficient | .599* | .368* | .353* | .125* | .106* | 1.000 | .174* | .098* | -.017 | .143* | .124* | .032 | .213* | .157* | .245* |
| | Sig. (2-tailed) | .000 | .000 | .000 | .012 | .034 | | .000 | .050 | .737 | .004 | .013 | .524 | .000 | .002 | .000 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Weight | Correlation Coefficient | .124* | .109* | .342* | .019 | .108* | .174* | 1.000 | .245* | .182* | .138* | .023 | .027 | .077 | .146* | .067 |
| | Sig. (2-tailed) | .013 | .030 | .000 | .704 | .030 | .000 | | .000 | .000 | .006 | .645 | .592 | .125 | .003 | .181 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Design of product | Correlation Coefficient | .025 | .291* | .405* | .012 | -.006 | .098* | .245* | 1.000 | -.001 | .093 | .173* | -.055 | .196* | .090 | .086 |
| | Sig. (2-tailed) | .624 | .000 | .000 | .813 | .911 | .050 | .000 | | .989 | .064 | .000 | .271 | .000 | .071 | .085 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Durability | Correlation Coefficient | .113* | .205* | -.074 | .126* | .057 | -.017 | .182* | -.001 | 1.000 | .111* | .157* | .250* | .074 | .144* | .015 |
| | Sig. (2-tailed) | .024 | .000 | .142 | .012 | .254 | .737 | .000 | .989 | | .027 | .002 | .000 | .141 | .004 | .761 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Capacity of HDD (Hard Disk drive) | Correlation Coefficient | .074 | -.079 | -.016 | .115* | -.039 | .143* | .138* | .093 | .111* | 1.000 | .081 | .002 | .158* | .146* | .133* |
| | Sig. (2-tailed) | .141 | .114 | .745 | .021 | .434 | .004 | .006 | .064 | .027 | | .106 | .968 | .001 | .003 | .008 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Specification/Performance of CPU | Correlation Coefficient | .218* | -.065 | .209* | .104* | -.016 | .124* | .023 | .173* | .157* | .081 | 1.000 | .322* | .101* | .045 | .104* |
| | Sig. (2-tailed) | .000 | .195 | .000 | .038 | .743 | .013 | .645 | .000 | .002 | .106 | | .000 | .043 | .366 | .037 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| The size/resolution of LCD display screen | Correlation Coefficient | -.064 | -.085 | .152* | -.025 | -.018 | .032 | .027 | -.055 | .250* | .002 | .322* | 1.000 | -.064 | .126* | .287* |
| | Sig. (2-tailed) | .204 | .089 | .002 | .615 | .716 | .524 | .592 | .271 | .000 | .968 | .000 | | .202 | .012 | .000 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Resume and Hibernation Technology | Correlation Coefficient | .160* | .237* | -.050 | -.005 | -.057 | .213* | .077 | .196* | .074 | .158* | .101* | -.064 | 1.000 | .400* | .293* |
| | Sig. (2-tailed) | .001 | .000 | .317 | .920 | .252 | .000 | .125 | .000 | .141 | .001 | .043 | .202 | | .000 | .000 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| The number of expansion slots | Correlation Coefficient | .112* | .018 | .276* | .225* | .425* | .157* | .146* | .090 | .144* | .146* | .045 | .126* | .400* | 1.000 | .010 |
| | Sig. (2-tailed) | .025 | .716 | .000 | .000 | .000 | .002 | .003 | .071 | .004 | .003 | .366 | .012 | .000 | | .841 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Include of floppy drive, CD/DVD-ROM | Correlation Coefficient | .506* | .098 | .284* | .223* | -.058 | .245* | .067 | .086 | .015 | .133* | .104* | .287* | .293* | .010 | 1.000 |
| | Sig. (2-tailed) | .000 | .051 | .000 | .000 | .249 | .000 | .181 | .085 | .761 | .008 | .037 | .000 | .000 | .841 | |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |

**Correlation is significant at the .01 level (2-tailed).

*Correlation is significant at the .05 level (2-tailed).

Correlations

| | | | notebook computer | Outdoor, leaflet and magazine advertisement | Premium (Free software/ga mes/accesso ries/Internet account) | Information given by sales person |
|----------------|---|-------------------------|----------------------|--|---|---|
| Spearman's rho | notebook computer | Correlation Coefficient | 1.000 | .159** | .188** | .297* |
| | | Sig. (2-tailed) | . | .001 | .000 | .000 |
| | | N | 400 | 400 | 400 | 400 |
| | Outdoor, leaflet and magazine advertisement | Correlation Coefficient | .159** | 1.000 | .227** | .171* |
| | | Sig. (2-tailed) | .001 | . | .000 | .001 |
| | | N | 400 | 400 | 400 | 400 |
| | Premium (Free software/games/access ories/Internet account) | Correlation Coefficient | .188** | .227** | 1.000 | .255* |
| | | Sig. (2-tailed) | .000 | .000 | . | .000 |
| | | N | 400 | 400 | 400 | 400 |
| | Information given by sales person | Correlation Coefficient | .297** | .171** | .255** | 1.000 |
| | | Sig. (2-tailed) | .000 | .001 | .000 | . |
| | | N | 400 | 400 | 400 | 400 |

** . Correlation is significant at the .01 level (2-tailed).

Correlation

| | | | notebook computer | Convenient and location purchasing | Reputable and worthy | The shop provides variety products | Delivery service | The shop provides inventory management to ensure that customers surely get product they buy. | The shop provides arrangement of product attract customers |
|------------|--|---------------|----------------------|---|----------------------------|---|---------------------|---|---|
| Spearman's | notebook | Correlation | 1.000 | .138 * | .140 * | .261 * | .012 * | .151 * | .317 * |
| | | Sig. (2- N | . 400 | .006 400 | .005 400 | .000 400 | .000 400 | .003 400 | .000 400 |
| | Convenient and location for | Correlation | .138 * | 1.000 | .127 * | .389 * | .174 * | -.038 | .010 |
| | | Sig. (2- N | .006 400 | . 400 | .011 400 | .000 400 | .000 400 | .448 400 | .845 400 |
| | Reputable and worthy | Correlation | .140 * | .127 * | 1.000 | .654 * | .328 * | .347 * | .270 * |
| | | Sig. (2- N | .005 400 | .011 400 | . 400 | .000 400 | .000 400 | .000 400 | .000 400 |
| | The shop provides variety of | Correlation | .261 * | .389 * | .654 * | 1.000 | .165 * | -.045 | .078 |
| | | Sig. (2- N | .000 400 | .000 400 | .000 400 | . 400 | .001 400 | .365 400 | .120 400 |
| | Delivery | Correlation | .012 * | .174 * | .328 * | .165 * | 1.000 | .237 * | .080 |
| | | Sig. (2- N | .000 400 | .000 400 | .000 400 | .001 400 | . 400 | .000 400 | .111 400 |
| | The shop provides inventory management ensure that | Correlation | .151 * | -.038 | .347 * | -.045 | .237 * | 1.000 | .304 * |
| | | Sig. (2- N | .003 400 | .448 400 | .000 400 | .365 400 | .000 400 | . 400 | .000 400 |
| | The shop provides arrangement of to attract | Correlation | .317 * | .010 | .270 * | .078 | .080 | .304 * | 1.000 |
| | | Sig. (2- N | .000 400 | .845 400 | .000 400 | .120 400 | .111 400 | .000 400 | . 400 |

**. Correlation is significant at the .01 level (2-

*. Correlation is significant at the .05 level (2-

Table 2.9 There is relationship between product factor and brand choices toward computer notebook.

| Correlations | | | | | | | | | | | | | | | | |
|----------------|---|---|-----------------------|----------------------------|---------------------|-----------------|-----------------------------------|--------|-------------------|------------|-----------------------------------|----------------------------------|---|-----------------------------------|-------------------------------|-------------------------------------|
| | | Which is the computer notebook's brand that influencing your purchasing decision for your latest computer notebook? | Well known brand name | Convenience of portability | Warranty of product | Service quality | Battery capacity/Power management | Weight | Design of product | Durability | Capacity of HDD (Hard Disk drive) | Specification/Performance of CPU | The size/resolution of LCD display screen | Resume and Hibernation Technology | The number of expansion slots | Include of floppy drive, CD/DVD-ROM |
| Spearman's rho | Which is the computer notebook's brand that influencing your purchasing decision for your latest computer notebook? | Correlation Coefficient | 1.000 | .421* | .039 | .231* | .296* | .224* | .083 | .085 | .312* | .050 | .246* | .166* | .207* | .235* |
| | | Sig. (2-tailed) | | .000 | .033 | .000 | .000 | .005 | .001 | .000 | .018 | .000 | .001 | .000 | .018 | .000 |
| | | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| | Well known brand name | Correlation Coefficient | .421* | 1.000 | .129* | -.207* | -.440* | .368* | .109* | .291* | -.205* | -.079 | -.065 | -.085 | .237* | .098 |
| | | Sig. (2-tailed) | | | .010 | .000 | .000 | .000 | .030 | .000 | .114 | .195 | .089 | .000 | .018 | .051 |
| | | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| | Convenience of portability | Correlation Coefficient | .039 | .129* | 1.000 | -.011 | .329* | .353* | .342* | .405* | -.074 | -.016 | .209* | .152* | -.050 | .276* |
| | | Sig. (2-tailed) | | | | .831 | .000 | .000 | .000 | .000 | .142 | .745 | .000 | .317 | .000 | .000 |
| | | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| | Warranty of product | Correlation Coefficient | .231* | -.207* | -.011 | 1.000 | .271* | -.125* | .019 | .012 | .126* | -.115* | .104* | -.025 | -.005 | .225* |
| | | Sig. (2-tailed) | | | | | .000 | .012 | .704 | .813 | .012 | .038 | .615 | .920 | .000 | .000 |
| | | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| | Service quality | Correlation Coefficient | .296* | -.440* | .329* | .271* | 1.000 | -.106* | .108* | -.006 | .057 | -.039 | -.016 | -.018 | -.057 | .425* |
| | | Sig. (2-tailed) | | | | | | .034 | .030 | .911 | .254 | .434 | .743 | .716 | .252 | .000 |
| | | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| | Battery capacity/Power management | Correlation Coefficient | .224* | .368* | .353* | -.125* | -.106* | 1.000 | .174* | .098* | -.017 | -.143* | -.124* | .032 | -.213* | .157* |
| | | Sig. (2-tailed) | | | | .012 | .034 | | .000 | .050 | .737 | .004 | .013 | .524 | .000 | .000 |
| | | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| | Weight | Correlation Coefficient | .083 | .109* | .342* | .019 | .108* | .174* | 1.000 | .245* | .182* | -.138* | .023 | .027 | .077 | .146* |
| | | Sig. (2-tailed) | | | | .704 | .030 | .000 | .000 | .000 | .006 | .645 | .592 | .125 | .003 | .181 |
| | | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| | Design of product | Correlation Coefficient | .085 | .291* | .405* | .012 | -.006 | .098* | .245* | 1.000 | -.001 | .093 | .173* | -.055 | -.196* | .090 |
| | | Sig. (2-tailed) | | | | .813 | .911 | .050 | .000 | | .989 | .064 | .000 | .271 | .000 | .086 |
| | | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| | Durability | Correlation Coefficient | .312* | -.205* | -.074 | .126* | .057 | -.017 | .182* | -.001 | 1.000 | -.111* | .157* | .250* | .074 | .144* |
| | | Sig. (2-tailed) | | | | .142 | .254 | .737 | .000 | .989 | | .027 | .002 | .000 | .141 | .004 |
| | | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| | Capacity of HDD (Hard Disk drive) | Correlation Coefficient | .050 | -.079 | -.016 | -.115* | -.039 | -.143* | -.138* | .093 | -.111* | 1.000 | .081 | .002 | -.158* | -.146* |
| | | Sig. (2-tailed) | | | | .434 | .004 | .006 | .064 | .027 | .106 | | .106 | .968 | .001 | .008 |
| | | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| | Specification/Performance of CPU | Correlation Coefficient | .246* | -.065 | .209* | .104* | -.016 | -.124* | .023 | .173* | .157* | .081 | 1.000 | .322* | -.101* | .045 |
| | | Sig. (2-tailed) | | | | .038 | .743 | .013 | .645 | .000 | .002 | .106 | | .000 | .043 | .037 |
| | | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| | The size/resolution of LCD display screen | Correlation Coefficient | .166* | -.085 | .152* | -.025 | -.018 | .032 | .027 | -.055 | .250* | .002 | .322* | 1.000 | -.064 | -.126* |
| | | Sig. (2-tailed) | | | | .615 | .716 | .524 | .592 | .271 | .000 | .968 | .000 | | .202 | .012 |
| | | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| | Resume and Hibernation Technology | Correlation Coefficient | .207* | .237* | -.050 | -.005 | -.057 | .213* | .077 | -.196* | .074 | -.158* | -.101* | -.064 | 1.000 | .400* |
| | | Sig. (2-tailed) | | | | .920 | .252 | .000 | .125 | .000 | .141 | .001 | .043 | .202 | | .000 |
| | | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| | The number of expansion slots | Correlation Coefficient | .118* | .018 | .276* | .225* | .425* | .157* | .146* | .090 | .144* | -.146* | .045 | -.126* | .400* | 1.000 |
| | | Sig. (2-tailed) | | | | .000 | .000 | .002 | .003 | .071 | .004 | .366 | .012 | .000 | | .010 |
| | | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| | Include of floppy drive, CD/DVD-ROM | Correlation Coefficient | .235* | .098 | .284* | -.223* | -.058 | .245* | .067 | .086 | .015 | .133* | .104* | .287* | -.293* | 1.000 |
| | | Sig. (2-tailed) | | | | .000 | .249 | .000 | .181 | .085 | .761 | .037 | .000 | .000 | | .000 |
| | | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |

** Correlation is significant at the .01 level (2-tailed).

* Correlation is significant at the .05 level (2-tailed).

Table 2.10 There is relationship between price factor and brand choices toward computer notebook.

Correlations

| | Which is the computer notebook's brand that influencing your purchasing decision for your latest computer notebook? | | Competitive price with other brand | Lower price than other brands | Reasonable price |
|----------------|---|-------------------------|------------------------------------|-------------------------------|------------------|
| Spearman's rho | Which is the computer notebook's brand that influencing your purchasing decision for your latest computer notebook? | Correlation Coefficient | 1.000 | .417** | .616** |
| | | Sig. (2-tailed) | .000 | .000 | .000 |
| | | N | 400 | 400 | 400 |
| | Competitive price with other brand | Correlation Coefficient | .417** | 1.000 | .701** |
| | | Sig. (2-tailed) | .000 | .000 | .000 |
| | | N | 400 | 400 | 400 |
| | Lower price than other brands | Correlation Coefficient | .616** | .701** | 1.000 |
| | | Sig. (2-tailed) | .000 | .000 | .000 |
| | | N | 400 | 400 | 400 |
| | Reasonable price | Correlation Coefficient | .479** | .416** | .587** |
| | | Sig. (2-tailed) | .000 | .000 | .000 |
| | | N | 400 | 400 | 400 |

** . Correlation is significant at the .01 level (2-tailed).

Table 2.11 There is relationship between promotion factor and brand choices toward computer notebook.

Correlations

| | Which is the computer notebook's brand that influencing your purchasing decision for your latest computer notebook? | | Outdoor, leaflet and magazine advertisement | Premium (Free software/games/accessories/Internet account) | Information given by sales person |
|----------------|---|-------------------------|---|--|-----------------------------------|
| Spearman's rho | Which is the computer notebook's brand that influencing your purchasing decision for your latest computer notebook? | Correlation Coefficient | 1.000 | .132** | .354** |
| | | Sig. (2-tailed) | .008 | .000 | .000 |
| | | N | 400 | 400 | 400 |
| | Outdoor, leaflet and magazine advertisement | Correlation Coefficient | .132** | 1.000 | .227** |
| | | Sig. (2-tailed) | .008 | .000 | .001 |
| | | N | 400 | 400 | 400 |
| | Premium (Free software/games/accessories/Internet account) | Correlation Coefficient | .354** | .227** | 1.000 |
| | | Sig. (2-tailed) | .000 | .000 | .000 |
| | | N | 400 | 400 | 400 |
| | Information given by sales person | Correlation Coefficient | .420** | .171** | .255** |
| | | Sig. (2-tailed) | .000 | .001 | .000 |
| | | N | 400 | 400 | 400 |

** . Correlation is significant at the .01 level (2-tailed).

Correlations

| | | | Which is the computer notebook's brand that influencing your purchasing decision for your latest computer notebook? | Convenient and easy location for purchasing | Reputable and trust worthy shop | The shop provides a variety of products | Delivery service | The shop provides good inventory management to ensure that customers will surely get the product when they buy. | The shop provides good arrangement of product to attract customer |
|----------------|---|-------------------------|---|---|---------------------------------|---|------------------|---|---|
| Spearman's rho | Which is the computer notebook's brand that influencing your purchasing decision for your latest computer notebook? | Correlation Coefficient | 1.000 | .378** | .270** | .123* | .051 | .349** | .248* |
| | | Sig. (2-tailed) | | .000 | .000 | .013 | .310 | .000 | .000 |
| | | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| | Convenient and easy location for purchasing | Correlation Coefficient | .378** | 1.000 | -.127* | .389** | -.174** | -.038 | .010 |
| | | Sig. (2-tailed) | .000 | . | .011 | .000 | .000 | .448 | .845 |
| | | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| | Reputable and trust worthy shop | Correlation Coefficient | .270** | -.127* | 1.000 | -.654** | .328** | .347** | .270** |
| | | Sig. (2-tailed) | .000 | .011 | . | .000 | .000 | .000 | .000 |
| | | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| | The shop provides a variety of products | Correlation Coefficient | .123* | .389** | -.654** | 1.000 | -.165** | -.045 | .078 |
| | | Sig. (2-tailed) | .013 | .000 | .000 | . | .001 | .365 | .120 |
| | | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| | Delivery service | Correlation Coefficient | .051 | -.174** | .328** | -.165** | 1.000 | .237** | .080 |
| | | Sig. (2-tailed) | .310 | .000 | .000 | .001 | . | .000 | .111 |
| | | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| | The shop provides good inventory management to ensure that customers will surely get the product when they buy. | Correlation Coefficient | .349** | -.038 | .347** | -.045 | .237** | 1.000 | .304** |
| | | Sig. (2-tailed) | .000 | .448 | .000 | .365 | .000 | . | .000 |
| | | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| | The shop provides good arrangement of product to attract customer | Correlation Coefficient | .248* | .010 | .270** | .078 | .080 | .304** | 1.000 |
| | | Sig. (2-tailed) | .000 | .845 | .000 | .120 | .111 | .000 | . |
| | | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 |

** . Correlation is significant at the .01 level (2-tailed).

* . Correlation is significant at the .05 level (2-tailed).

Table 2.13 There is relationship between price conscious and product choices toward notebook computer.

| Correlations | | | notebook computer | Price conscious |
|----------------|-------------------|-------------------------|-------------------|-----------------|
| Spearman's rho | notebook computer | Correlation Coefficient | 1.000 | .500* |
| | | Sig. (2-tailed) | . | .000 |
| | | N | 400 | 400 |
| | Price conscious | Correlation Coefficient | .500* | 1.000 |
| | | Sig. (2-tailed) | .000 | . |
| | | N | 400 | 400 |

**. Correlation is significant at the .01 level (2-tailed).

Table 2.14 There is relationship between price conscious and product choices toward ultra portable notebook.

| Correlations | | | ultra portable | Price conscious |
|----------------|-----------------|-------------------------|----------------|-----------------|
| Spearman's rho | ultra portable | Correlation Coefficient | 1.000 | .018 |
| | | Sig. (2-tailed) | . | .024 |
| | | N | 400 | 400 |
| | Price conscious | Correlation Coefficient | .018 | 1.000 |
| | | Sig. (2-tailed) | .024 | . |
| | | N | 400 | 400 |

Table 2.15 There is relationship between price conscious and product choices toward desknote computer.

| Correlations | | | desknote computer | Price conscious |
|----------------|-------------------|-------------------------|-------------------|-----------------|
| Spearman's rho | desknote computer | Correlation Coefficient | 1.000 | .549* |
| | | Sig. (2-tailed) | . | .000 |
| | | N | 400 | 400 |
| | Price conscious | Correlation Coefficient | .549* | 1.000 |
| | | Sig. (2-tailed) | .000 | . |
| | | N | 400 | 400 |

**. Correlation is significant at the .01 level (2-tailed).

Table 2.16 There is relationship between technological conscious and product choices toward notebook computer.

| Correlations | | | notebook computer | Technological conscious |
|----------------|-------------------------|-------------------------|-------------------|-------------------------|
| Spearman's rho | notebook computer | Correlation Coefficient | 1.000 | .387 |
| | | Sig. (2-tailed) | . | .002 |
| | | N | 400 | 400 |
| | Technological conscious | Correlation Coefficient | .387 | 1.000 |
| | | Sig. (2-tailed) | .002 | . |
| | | N | 400 | 400 |

Table 2.17 There is relationship between technological conscious and product choices toward ultra portable notebook.

| Correlations | | | ultra portable | Technological conscious |
|----------------|-------------------------|-------------------------|----------------|-------------------------|
| Spearman's rho | ultra portable | Correlation Coefficient | 1.000 | .079 ** |
| | | Sig. (2-tailed) | . | .000 |
| | | N | 400 | 400 |
| | Technological conscious | Correlation Coefficient | .079 ** | 1.000 |
| | | Sig. (2-tailed) | .000 | . |
| | | N | 400 | 400 |

** . Correlation is significant at the .01 level (2-

Table 2.18 There is relationship between technological conscious and product choices toward desknote computer.

| Correlations | | | desknote computer | Technological conscious |
|----------------|-------------------------|-------------------------|-------------------|-------------------------|
| Spearman's rho | desknote computer | Correlation Coefficient | 1.000 | .266 |
| | | Sig. (2-tailed) | . | .000 |
| | | N | 400 | 400 |
| | Technological conscious | Correlation Coefficient | .266 | 1.000 |
| | | Sig. (2-tailed) | .000 | . |
| | | N | 400 | 400 |

Correlations

| | | Price conscious | Fujitsu | Toshiba | IBM | Dell | Compaq | Asustek | Belta | ECS | Acer | Liberta | Sony | NEC | Other |
|-----------------|---------------------|--------------------|---------|---------|---------|-------|---------|---------|--------|---------|--------|---------|-------|--------|--------|
| Price conscious | Pearson Correlation | 1.000 | .226** | .184** | .161** | .029 | .214** | .210** | .215** | .369** | .033 | .191** | .019 | .111* | .130** |
| | Sig. (2-tailed) | | .000 | .000 | .000 | .558 | .000 | .000 | .000 | .000 | .504 | .000 | .704 | .027 | .009 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Fujitsu | Pearson Correlation | .226** | 1.000 | -.185** | -.150** | -.069 | -.170** | -.111* | -.058 | -.096 | -.079 | -.052 | -.045 | -.077 | -.055 |
| | Sig. (2-tailed) | .000 | | .000 | .003 | .165 | .001 | .026 | .244 | .055 | .114 | .298 | .369 | .125 | .269 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Toshiba | Pearson Correlation | .184** | -.185** | 1.000 | -.209** | -.097 | -.236** | -.155** | -.081 | -.134** | -.110* | -.073 | -.063 | -.107* | -.077 |
| | Sig. (2-tailed) | .000 | .000 | | .000 | .053 | .000 | .002 | .104 | .007 | .027 | .148 | .211 | .032 | .124 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| IBM | Pearson Correlation | .161** | -.150** | -.209** | 1.000 | -.078 | -.191** | -.126* | -.066 | -.109* | -.089 | -.059 | -.051 | -.087 | -.062 |
| | Sig. (2-tailed) | .000 | .003 | .000 | | .117 | .000 | .012 | .188 | .030 | .074 | .240 | .311 | .083 | .212 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Dell | Pearson Correlation | .029 | -.069 | -.097 | -.078 | 1.000 | -.088 | -.058 | -.030 | -.050 | -.041 | -.027 | -.024 | -.040 | -.029 |
| | Sig. (2-tailed) | .558 | .165 | .053 | .117 | | .077 | .247 | .543 | .316 | .410 | .587 | .639 | .424 | .564 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Compaq | Pearson Correlation | .214** | -.170** | -.236** | -.191** | -.088 | 1.000 | -.142** | -.074 | -.122* | -.101* | -.066 | -.057 | -.098 | -.070 |
| | Sig. (2-tailed) | .000 | .001 | .000 | .000 | .077 | | .005 | .138 | .014 | .044 | .185 | .253 | .050 | .159 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Asustek | Pearson Correlation | .210** | -.111* | -.155** | -.126* | -.058 | -.142** | 1.000 | -.049 | -.080 | -.066 | -.044 | -.038 | -.064 | -.046 |
| | Sig. (2-tailed) | .000 | .026 | .002 | .012 | .247 | .005 | | .330 | .109 | .187 | .385 | .453 | .200 | .356 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Belta | Pearson Correlation | .215** | -.058 | -.081 | -.066 | -.030 | -.074 | -.049 | 1.000 | -.042 | -.035 | -.023 | -.020 | -.034 | -.024 |
| | Sig. (2-tailed) | .000 | .244 | .104 | .188 | .543 | .138 | .330 | | .400 | .488 | .648 | .694 | .501 | .628 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| ECS | Pearson Correlation | .369** | -.096 | -.134** | -.109* | -.050 | -.122* | -.080 | -.042 | 1.000 | -.057 | -.038 | -.033 | -.056 | -.040 |
| | Sig. (2-tailed) | .000 | .055 | .007 | .030 | .316 | .014 | .109 | .400 | | .253 | .453 | .516 | .268 | .425 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Acer | Pearson Correlation | .033 | -.079 | -.110* | -.089 | -.041 | -.101* | -.066 | -.035 | -.057 | 1.000 | -.031 | -.027 | -.046 | -.033 |
| | Sig. (2-tailed) | .504 | .114 | .027 | .074 | .410 | .044 | .187 | .488 | .253 | | .536 | .593 | .362 | .511 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Liberta | Pearson Correlation | .191** | -.052 | -.073 | -.059 | -.027 | -.066 | -.044 | -.023 | -.038 | -.031 | 1.000 | -.018 | -.030 | -.022 |
| | Sig. (2-tailed) | .000 | .298 | .148 | .240 | .587 | .185 | .385 | .648 | .453 | .536 | | .725 | .548 | .666 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Sony | Pearson Correlation | .019 | -.045 | -.063 | -.051 | -.024 | -.057 | -.038 | -.020 | -.033 | -.027 | -.018 | 1.000 | -.026 | -.019 |
| | Sig. (2-tailed) | .704 | .369 | .211 | .311 | .639 | .253 | .453 | .694 | .516 | .593 | .725 | | .604 | .709 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| NEC | Pearson Correlation | .111* | -.077 | -.107* | -.087 | -.040 | -.098 | -.064 | -.034 | -.056 | -.046 | -.030 | -.026 | 1.000 | -.032 |
| | Sig. (2-tailed) | .027 | .125 | .032 | .083 | .424 | .050 | .200 | .501 | .268 | .362 | .548 | .604 | | .524 |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Other | Pearson Correlation | .130** | -.055 | -.077 | -.062 | -.029 | -.070 | -.046 | -.024 | -.040 | -.033 | -.022 | -.019 | -.032 | 1.000 |
| | Sig. (2-tailed) | .009 | .269 | .124 | .212 | .564 | .159 | .356 | .628 | .425 | .511 | .666 | .709 | .524 | |
| | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Correlations

| | | | Technological conscious | Fujitsu | Toshiba | IBM | Dell | Compaq | Asustek | Belta | ECS | Acer | Liberta | Sony | NEC | Other |
|----------------|-------------------------|-------------------------|----------------------------|---------|---------|--------|-------|--------|---------|-------|--------|--------|---------|-------|--------|-------|
| Spearman's rho | Technological conscious | Correlation Coefficient | 1.000 | .092 | .169* | .377* | .215* | .441* | .067 | .270* | .033 | .245* | .241* | .210* | .257* | .107* |
| | | Sig. (2-tailed) | | .065 | .001 | .000 | .000 | .000 | .178 | .000 | .006 | .000 | .000 | .000 | .000 | .032 |
| | | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Fujitsu | | Correlation Coefficient | .092 | 1.000 | -.185* | -.150* | -.069 | -.170* | -.111* | -.058 | -.096 | -.079 | -.052 | -.045 | -.077 | -.055 |
| | | Sig. (2-tailed) | .065 | | .000 | .003 | .165 | .001 | .026 | .244 | .055 | .114 | .298 | .369 | .125 | .269 |
| | | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Toshiba | | Correlation Coefficient | .169* | -.185* | 1.000 | -.209* | -.097 | -.236* | -.155* | -.081 | -.134* | -.110* | -.073 | -.063 | -.107* | -.077 |
| | | Sig. (2-tailed) | .001 | .000 | | .000 | .053 | .000 | .002 | .104 | .007 | .027 | .148 | .211 | .032 | .124 |
| | | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| IBM | | Correlation Coefficient | .377* | -.150* | -.209* | 1.000 | -.078 | -.191* | -.126* | -.066 | -.109* | -.089 | -.059 | -.051 | -.087 | -.062 |
| | | Sig. (2-tailed) | .000 | .003 | .000 | | .117 | .000 | .012 | .188 | .030 | .074 | .240 | .311 | .083 | .212 |
| | | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Dell | | Correlation Coefficient | .215* | -.069 | -.097 | -.078 | 1.000 | -.088 | -.058 | -.030 | -.050 | -.041 | -.027 | -.024 | -.040 | -.029 |
| | | Sig. (2-tailed) | .000 | .165 | .053 | .117 | | .077 | .247 | .543 | .316 | .410 | .587 | .639 | .424 | .564 |
| | | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Compaq | | Correlation Coefficient | .441* | -.170* | -.236* | -.191* | -.088 | 1.000 | -.142* | -.074 | -.122* | -.101* | -.066 | -.057 | -.098 | -.070 |
| | | Sig. (2-tailed) | .000 | .001 | .000 | .000 | .077 | | .005 | .138 | .014 | .044 | .185 | .253 | .050 | .159 |
| | | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Asustek | | Correlation Coefficient | .067 | -.111* | -.155* | -.126* | -.058 | -.142* | 1.000 | -.049 | -.080 | -.066 | -.044 | -.038 | -.064 | -.046 |
| | | Sig. (2-tailed) | .178 | .026 | .002 | .012 | .247 | .005 | | .330 | .109 | .187 | .385 | .453 | .200 | .356 |
| | | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Belta | | Correlation Coefficient | .270* | -.058 | -.081 | -.066 | -.030 | -.074 | -.049 | 1.000 | -.042 | -.035 | -.023 | -.020 | -.034 | -.024 |
| | | Sig. (2-tailed) | .000 | .244 | .104 | .188 | .543 | .138 | .330 | | .400 | .488 | .648 | .694 | .501 | .628 |
| | | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| ECS | | Correlation Coefficient | .033 | -.096 | -.134* | -.109* | -.050 | -.122* | -.080 | -.042 | 1.000 | -.057 | -.038 | -.033 | -.056 | -.040 |
| | | Sig. (2-tailed) | .006 | .055 | .007 | .030 | .316 | .014 | .109 | .400 | | .253 | .453 | .516 | .268 | .425 |
| | | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Acer | | Correlation Coefficient | .245* | -.079 | -.110* | -.089 | -.041 | -.101* | -.066 | -.035 | -.057 | 1.000 | -.031 | -.027 | -.046 | -.033 |
| | | Sig. (2-tailed) | .000 | .114 | .027 | .074 | .410 | .044 | .187 | .488 | .253 | | .536 | .593 | .362 | .511 |
| | | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Liberta | | Correlation Coefficient | .241* | -.052 | -.073 | -.059 | -.027 | -.066 | -.044 | -.023 | -.038 | -.031 | 1.000 | -.018 | -.030 | -.022 |
| | | Sig. (2-tailed) | .000 | .298 | .148 | .240 | .587 | .185 | .385 | .648 | .453 | .536 | | .725 | .548 | .666 |
| | | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Sony | | Correlation Coefficient | .210* | -.045 | -.063 | -.051 | -.024 | -.057 | -.038 | -.020 | -.033 | -.027 | -.018 | 1.000 | -.026 | -.019 |
| | | Sig. (2-tailed) | .000 | .369 | .211 | .311 | .639 | .253 | .453 | .694 | .516 | .593 | .725 | | .604 | .709 |
| | | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| NEC | | Correlation Coefficient | .257* | -.077 | -.107* | -.087 | -.040 | -.098 | -.064 | -.034 | -.056 | -.046 | -.030 | -.026 | 1.000 | -.032 |
| | | Sig. (2-tailed) | .000 | .125 | .032 | .083 | .424 | .050 | .200 | .501 | .268 | .362 | .548 | .604 | | .524 |
| | | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Other | | Correlation Coefficient | .107* | -.055 | -.077 | -.062 | -.029 | -.070 | -.046 | -.024 | -.040 | -.033 | -.022 | -.019 | -.032 | 1.000 |
| | | Sig. (2-tailed) | .032 | .269 | .124 | .212 | .564 | .159 | .356 | .628 | .425 | .511 | .666 | .709 | .524 | |
| | | N | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |

** . Correlation is significant at the .01 level (2-tailed).

* . Correlation is significant at the .05 level (2-tailed).

Table 2.21 Frequency of price conscious toward computer notebook.

I shop a lot for specials.

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----------------------------|-----------|---------|---------------|--------------------|
| Valid | Strongly disagree | 18 | 4.5 | 4.5 | 4.5 |
| | Disagree | 84 | 21.0 | 21.0 | 25.5 |
| | Neither agree nor disagree | 196 | 49.0 | 49.0 | 74.5 |
| | Agree | 102 | 25.5 | 25.5 | 100.0 |
| | Total | 400 | 100.0 | 100.0 | |

I find myself checking the prices in the grocery store even for small items.

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----------------------------|-----------|---------|---------------|--------------------|
| Valid | Disagree | 114 | 28.5 | 28.5 | 28.5 |
| | Neither agree nor disagree | 126 | 31.5 | 31.5 | 60.0 |
| | Agree | 160 | 40.0 | 40.0 | 100.0 |
| | Total | 400 | 100.0 | 100.0 | |

I usually watch the advertisements for announcements of sales.

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----------------------------|-----------|---------|---------------|--------------------|
| Valid | Disagree | 146 | 36.5 | 36.5 | 36.5 |
| | Neither agree nor disagree | 114 | 28.5 | 28.5 | 65.0 |
| | Agree | 140 | 35.0 | 35.0 | 100.0 |
| | Total | 400 | 100.0 | 100.0 | |

I can save a lot of money by shopping around for bargains.

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----------------------------|-----------|---------|---------------|--------------------|
| Valid | Disagree | 230 | 57.5 | 57.5 | 57.5 |
| | Neither agree nor disagree | 124 | 31.0 | 31.0 | 88.5 |
| | Agree | 40 | 10.0 | 10.0 | 98.5 |
| | Strongly agree | 6 | 1.5 | 1.5 | 100.0 |
| | Total | 400 | 100.0 | 100.0 | |

Table 2.22 Frequency of technological conscious toward computer notebook.

I usually have one or more outfits that are of the very latest model.

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----------------------------|-----------|---------|---------------|--------------------|
| Valid | Disagree | 122 | 30.5 | 30.5 | 30.5 |
| | Neither agree nor disagree | 218 | 54.5 | 54.5 | 85.0 |
| | Agree | 60 | 15.0 | 15.0 | 100.0 |
| | Total | 400 | 100.0 | 100.0 | |

When I must choose between the two, I usually choose for technological, not for price.

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----------------------------|-----------|---------|---------------|--------------------|
| Valid | Disagree | 204 | 51.0 | 51.0 | 51.0 |
| | Neither agree nor disagree | 112 | 28.0 | 28.0 | 79.0 |
| | Agree | 78 | 19.5 | 19.5 | 98.5 |
| | Strongly agree | 6 | 1.5 | 1.5 | 100.0 |
| | Total | 400 | 100.0 | 100.0 | |

An important part of my life and activities is to be up to date.

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----------------------------|-----------|---------|---------------|--------------------|
| Valid | Disagree | 36 | 9.0 | 9.0 | 9.0 |
| | Neither agree nor disagree | 206 | 51.5 | 51.5 | 60.5 |
| | Agree | 148 | 37.0 | 37.0 | 97.5 |
| | Strongly agree | 10 | 2.5 | 2.5 | 100.0 |
| | Total | 400 | 100.0 | 100.0 | |

I often try the latest technology when they change.

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----------------------------|-----------|---------|---------------|--------------------|
| Valid | Disagree | 62 | 15.5 | 15.5 | 15.5 |
| | Neither agree nor disagree | 154 | 38.5 | 38.5 | 54.0 |
| | Agree | 140 | 35.0 | 35.0 | 89.0 |
| | Strongly agree | 44 | 11.0 | 11.0 | 100.0 |
| | Total | 400 | 100.0 | 100.0 | |

