



A STUDY OF AUTOMOBILES AND PURCHASE EVALUATION OF
USED CAR BUYER IN BANGKOK

by

PRAPASSORN SOMNAITHAM

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

March 2003

**A STUDY OF AUTOMOBILES AND PURCHASE EVALUATION OF
USED CAR BUYER IN BANGKOK**

By

PRAPASSORN SOMNAITHAM

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

Master of Business Administration

Examination Committee :

1. Dr. Patricia Arttachariya (Advisor)
2. Dr. Ishwar C. Gupta (Member)
3. Dr. Navin Mathur (Member)
4. Dr. Thongdee Kijboonchoo (Member)
5. Assoc. Prof. Wirat Sanguanwongwan (MUA Representative)

.....
Ishwar Gupta
.....
Dr. Navin Mathur
.....
Dr. Thongdee Kijboonchoo
.....
W. Sanguanwongwan

Examined on : 17 March 2003

Approved for Graduation on :

Graduate School of Business
Assumption University
Bangkok Thailand
March
2003

ABSTRACT

This study was aimed at investigating the relationship between various automobile attributes and brand decisions of buyers of used cars in Bangkok.

A total of 384 questionnaires were distributed to buyers of used cars in nine tents located in three areas of Bangkok. Of these, 367 questionnaires were considered valid and these were used in analyzing data for this study.

The study found moderate to weak positive relationships between all the nine automobile attributes (performance quality, price, durability, after-sales maintenance, design, level of fuel consumption, safety, comfort, country of origin) and purchase evaluation although two - design, and country of origin, demonstrated the most significant correlations to brand.

The study also found that Thais' used car buying behavior had undergone a radical shift from the past. Instead of buying according to technical attributes (price, performance, durability, safety, etc.) Thais emphasized symbolic attributes, such as luxury, prestige and social status in their buying decision.

Overall, European brands were perceived most positively, followed by American, Japanese, and one Korean brand. Almost all of the Japanese brands, except one, Subaru, were rated positively in terms of technical attributes, nonetheless, they scored lower means in terms of country of origin than European brands.

The recommendations, based on the findings, were that the used car marketers should employ lifestyle segmentation (VALS models) to target their core customers better. They should also make more effective use of media such as car magazines. Finally, based on the findings of this study, it might be more useful for used car marketers to employ symbolic benefits in their promotional materials rather than merely functional benefits.

The study concluded with some suggestions for future research.



ACKNOWLEDGEMENT

This thesis could not be completed without the assistance and guidance from several persons to whom I would herewith like to express my appreciation.

I am extremely grateful to Dr. Patricia Arttachariya, my advisor, for her valuable suggestions, knowledge, inspiration and continuous encouragement given to me from the start until the completion of this thesis. I would like to express my sincere thanks to Dr. Ishwar Chandra Gupta, Dr. Thongdee Kijboonchoo, and Dr. Navin Chandra Mathur, for their valuable suggestions and feedback on this thesis.

My special thanks and appreciation go to all the members of my family who encouraged me to conduct this study. I would also like to thank every staff member in the nine tents, who provided me with data for this study.

My deep gratitude is expressed to my friends who always give me inspiration, kind assistance and their support and encouragement. Many thanks to my seniors in Batch 3, and especially to A. Frank and Ms. Piyanath who edited my work and gave me suggestions and kind help.

Finally, sincere thanks are also given to my parents and family for their inspiration, encouragement and love. Without you, this thesis would not have been possible.

Prapassorn Somnaitham

CONTENTS

	Page
Abstract	I
Acknowledgment	III
List of Tables	
List of figures	
CHAPTER ONE: Introduction to the study	
The Current Situation of the used car market	1
Statement of the Problem	3
Research Questions	4
Scope and Limitations of the Research	5
Significance of the Study	5
Definition of terms	6
CHAPTER TWO: Literature Review	
Problem Recognition	11
Information Search	12
Alternative Evaluation	15
Purchase	21
Post-Purchase Evaluation	37
CHAPTER THREE: Research Framework	
Framework	45
Hypothesis Statements	45
The Operational Definitions of Influencing Variables	55
CHAPTER FOUR: Research Methodology	
Method of Research Used	56
Research Instrument	57
Sampling Plan	57
Determining Sampling Size	58
Data Collection and Analysis	59
Pre-testing the Questionnaire	60
CHAPTER FIVE: Research findings and analysis	
Demographic profile	62
Testing Relationship between Automobile Attributes and Brand decision	66
Perception of Respondents toward Automobile Attributes	75
CHAPTER SIX: Summary, Conclusion, and Recommendations	
Finding of the Study	94
The Major Research Question Posed in the Study	95
Discussion	97
Recommendation	102
Suggestion for further Research	103
References	
Appendix	

LIST OF TABLES

	Page
Table 3.1: Operational Definition of Influencing Variables	54
Table 4.1: Theoretical Sample Sizes for Different Sizes of Population and a 95 Percent Level of Certainty	58
Table 4.2: Reliability Test of Pre-testing Questionnaire	61
Table 5.1: Frequency distribution by Gender	63
Table 5.2: Frequency distribution by Age	63
Table 5.3: Frequency distribution by Marital Status	64
Table 5.4: Frequency distribution by Income	64
Table 5.5: Frequency distribution by Education	65
Table 5.6: Frequency distribution by Career	66
Table 5.7: Correlation Coefficients of Automobile Attributes and Brand Decision	67
Table 5.8: Correlation Coefficients of Performance Quality and Brand Decision	68
Table 5.9: Correlation Coefficients of Price and Brand Decision	69
Table 5.10: Correlation Coefficients of Durability and Brand Decision	70
Table 5.11: Correlation Coefficients of After-Sales Maintenance and Brand Decision	70
Table 5.12: Correlation Coefficients of Design and Brand Decision	71
Table 5.13: Correlation Coefficients of Level of Fuel Consumption and Brand Decision	72
Table 5.14: Correlation Coefficients of Safety and Brand Decision	73
Table 5.15: Correlation Coefficients of Comfort and Brand Decision	73
Table 5.16: Correlation Coefficients of Country of Origin and Brand Decision	74
Table 5.17: Perception of Respondents toward Overall Automobile Attribute of each Brand	75

Table 5.18:	Perception of Respondents toward Mitsubishi	76
Table 5.19:	Perception of Respondents toward Nissan Attributes	77
Table 5.20:	Perception of Respondents toward Honda Attributes	78
Table 5.21:	Perception of Respondents toward Volvo Attributes	79
Table 5.22:	Perception of Respondents toward Mazda Attributes	79
Table 5.23:	Perception of Respondents toward Audi Attributes	80
Table 5.24:	Perception of Respondents toward Toyota Attributes	81
Table 5.25:	Perception of Respondents toward Isuzu Attributes	82
Table 5.26:	Perception of Respondents toward Subaru Attributes	83
Table 5.27:	Perception of Respondents toward Chrysler Attributes	83
Table 5.28:	Perception of Respondents toward BMW Attributes	84
Table 5.29:	Perception of Respondents toward Renault Attributes	85
Table 5.30:	Perception of Respondents toward Benz Attributes	86
Table 5.31:	Perception of Respondents toward Hyundai Attributes	86
Table 5.32:	Perception of Respondents toward Volkswagen Attributes	87
Table 5.33:	Perception of Respondents toward Suzuki Attributes	88
Table 5.34:	Perception of Respondents toward Fiat Attributes	89
Table 5.35:	Perception of Respondents toward Peugeot Attributes	89
Table 5.36:	Perception of Respondents toward Opel Attributes	90
Table 5.37:	Perception of Respondents toward Ford Attributes	91
Table 5.38:	Perception of Respondents toward Kia Attributes	92
Table 5.39:	Perception of Respondents toward Chevrolet Attributes	92
Table 5.40:	Perception of Respondents toward Overall Automobile Attributes Of Top Ten Brands	93
Table 5.41:	Bipolar Scale of Top Brands Sold	94

Table 6.1: Correlation Coefficients of Automobile Attributes and Correlation level

95

Table 6.2: Correlation Coefficients of Nine Attributes and Brand Decision

97



LIST OF FIGURES

	Page
Figure 2.1: Stages of the consumer decision process	10
Figure 2.2: Consumer information processing	18
Figure 2.3: Consumer decision making	21
Figure 2.4: Involvement and information processing	24
Figure 2.5: A model of complex decision making	27
Figure 2.6: A comprehensive model of buyer behavior	29
Figure 2.7: Purchase and post purchase evaluation	34
Figure 3.1: Stages of the consumer decision process	40
Figure 3.2: The theoretical framework of the study	42
Figure 3.3: Conceptual framework	45



CHAPTER ONE

INTRODUCTION TO THE STUDY

The Current Situation of the used car market

In 2002; Thailand's auto industry was in an unusual situation. This was because the industry had not seen a 300,000 unit performance in a long time, six years to be exact since the Asian financial crunch cast a gloomy spell over the region. Last year's impressive performance that slightly missed the 300,000 cars has prompted industry players to forecast that this year's annual haul will be 300,000 to 320,000 units (Thai Autobiz, January, 28th, 2003).

Fortunately, the excitement is not only in the sales numbers but more on the colorful side of the industry with many events giving rise to developments and market trends that spiced up the entire automotive market in Thailand. During last year, a satisfactory growth expansion of 13.3 percent boosted the annual sales total to 297,052 units. By the final forecast, sales for the industry in 2002 was set at 290,000 units. If sales statistics measure the success of the passenger car or sedan market then just about every manufacturer had an increase in sales. However, sales are but the results of their marketing strategies and promotion activities. Last year was the first time that the sedan market surpassed the 100,000-unit barrier with total sales of 104,502 units since the economic slump of 1997 (Thai Autobiz, January 28th, 2003).

Positive influences were new car launches from the Honda City, Toyota Vios and the Mitsubishi Lancer Cedia, (in addition to consumers making the transition from old car to new cars). The emergence of the popular MPV market has also been a factor, while other

influences include sales incentives, promotion campaigns and unique financial packages – all helping to push the sedan segment past 100,000 units (Thai Autobiz, January 28th, 2003).

This above scenario shows a case of positive consumption in terms of automobile purchases. Some of this positive consumer behavior can be attributed to special sales promotions—low rate of down payment, long term payment, low interest rate, insurance free, or gift vouchers. Further, the low rate of interest offered by banks is reduced to 1.75-2% on the long-term deposits (Thai Autobiz, January 28th, 2003).

When people are not offered enough incentives to save, they invest money in other activities—share buying, land & house buying, house repairs, or exchanging their present cars for better models, both old and new. Kridsadathanon (2001) explained the factors that support the used car business in this era. The first factor is that people have been moving their residences from the city to rural areas. Thus, a car is a necessity that they need for commuting. The second factor is the new finance deals from trust companies, with low interest rates and low down payments. Thirdly, the high price of new cars. Therefore, all of these factors are major explanations for the booming business in the used car market.

In 2002, it was estimated that approximately 800,000 used cars were sold, while the sales volume of new cars was approximately 300,000 cars (Prachachatturakit, February 29, 2003). Kridsadathanon (2002), also believed that 2002 is the golden year for the used car market. As a result of price increases for new cars and the economy still in the recession, many people still cannot afford to buy new cars (Thai Autobiz, January 28th, 2003).

Suyasunanon (2002) in a study revealed there are at least 10,000 tents selling used cars in Bangkok and the surrounding areas. These are good for customers because they offer more choices to customers. Customers also find it convenient to locate used car tents as several of them tend to be clustered along two major areas; Car Avenue, Srinakarin Road, and Ratchadapisek Road.

Sukneramid (2002) also pointed out that the customers who tend to own middle-sized cars want to buy larger sized used cars, moreover, they want to upgrade these by changing from Japanese middle-sized cars to European larger cars, especially models such as Mercedes Benz. These group of customers focus on the economic trends, maintenance cost, and fuel price. Because a large proportion of Thai people have turned to second hand cars over the past five years, there is serious competition between used car tents as well as new car dealerships. The managers have to use price and promotion strategy in order to attract customers.

Statement of the Problem

The Thai economy is slowly emerging from recession, nevertheless people are more rational as well as careful in their buying decisions. As consumers, they spend longer time on pre-purchase search, and also are more vigilant in the evaluation process, weighing the pros and cons of each alternative. This is especially true for high-involvement products, such as automobiles, real estate, and home appliances.

There are hundreds of used-car tents scattered across Bangkok offering myriad car models to consumers. The study's setting is tents selling used cars and the researcher has

focused this study on a family business that owns 9 tents in Bangkok. While many studies have focused on new car buying behavior, there have been few on the decision process involved in buying used cars. Many factors come into consideration—performance quality, price, durability, after-sales service, style, level of fuel consumption, safety, comfort, and even country of origin. Therefore, this study examined the factors that affect brand decision of consumers buying used cars.

Research Questions:

- What is the relationship between various automobile attributes and purchase evaluation of consumers buying used cars?
1. Does performance quality have a significant relationship with brand decision?
 2. Does price have a significant relationship with brand decision?
 3. Does durability have a significant relationship with brand decision?
 4. Does after sales maintenance have a significant relationship with brand decision?
 5. Does design have a significant relationship with brand decision?
 6. Does the level of fuel consumption have a significant relationship with brand decision?
 7. Does safety have a significant relationship with brand decision?
 8. Does the comfort have a significant relationship with brand decision?
 9. Does the country of origin have a significant relationship with brand decision?
 10. What is the perception of consumers on different brands of cars and their attributes?

Scope and Limitations of the Research

1. Only used car buyers in the Bangkok area were included. The result of this study cannot be used to judge Thai consumers of used cars as a whole, since buyers from other provinces are excluded.
2. The target respondents were only the household buyers who purchased a used car. Corporate and fleet car buyers were not included in this study.
3. The study focused only on two P's of the marketing mix: Product & Price. Other factors in marketing mix such as place and promotion are excluded.
4. Only nine automobile attributes were studied to see whether they affect brand decision for used cars. These are:
 - Performance quality
 - Price
 - Durability
 - After-sales maintenance
 - Design
 - Level of fuel consumption
 - Safety
 - Comfort
 - Country of origin

Significance of the Study

Since the economic crisis in 1997, the sales have actually increased. For instance, in 1995-6 the company sold 36,700 cars against 42,000 between 1997-98, which was the peak of the financial crisis. Each year, many new models are added to the company's inventory, nonetheless, only few models sell rapidly, whereas others are left for long in the tents. During the past year, the family has also invested in an additional 3 tents. On average, 60-70 people visit a tent each day, and roughly 100 visit on weekends. It takes 3-4 visits before a decision

to buy a used car is made, rarely will a consumer buy a car on his/her first visit (company records). Very often, the entire family is involved in the decision, and based on the researcher's observation, teenage children have a strong impact on their parent's brand decision.

In order to make better business decisions, the researcher needs to develop a better understanding of the relationship between various automobile attributes and brand decision for used cars. The knowledge about how consumers evaluate used cars in arriving at a brand decision is useful, not just to the researcher, but to other used car business marketers in Thailand, as well. The findings of this study can help these companies in designing marketing strategies in order to better satisfy the needs of Thai consumers.

Definition of Terms

- After-sales service: All assistance that marketer can provide to maintain the product use-ready (Sheth, Banwari, & Newman, 1999).
- Attribute: The characteristics or features that an object may or may not have. It can be identified into two classes; intrinsic attributes and extrinsic attributes. Each attribute provides the consumer with a specific benefit that has some degree of utility for that consumer (Mowen & Minor, 1998).
- Automobile: A self-propelled passenger vehicle that usually has four wheels and an internal-combustion engine, used for land transport. Also called a motor car (www.dictionary.com).

Brand:	Brand is a name, symbol, or other distinguishing feature that serves to identify the goods or services of one seller and to set them apart from those of competitors (Mason and Hazel, 1987).
Comfort:	A condition or feeling of pleasurable ease, well being, and contentment (www.dictionary.com).
Country of Origin (COO):	A country which a consumer associates with a certain product or brand as being its country of origin, regardless of where the product is produced (Nebenzahl, Jaffe & Lambert, 1997).
Durability:	A measure of the product's expected operating life under natural or stressful conditions (Kotler, 1997).
Performance:	The level at which the primary characteristics of the product operate. It is the ability of the product to perform its function (Kotler, 1997).
Price:	Amount of money paid in order to buy goods or service (Kotler, 1997).
Safety:	A device designed to prevent accidents (Boulding & Purohit, 1996).
Style:	Style describing the product's looks and feels to the buyer. It simply describes the appearance of a product for example; luxury, interior design and decoration, or beauty and shape. (Kotler, 1997).

CHAPTER TWO

LITERATURE REVIEW

The consumer today is simply the most cared for and pampered in the world. There is significantly more product selection, more product information, and more places at which to shop than in the old days. A multitude of suppliers offer a complex mix of products and services. They utilize highly sophisticated pricing, distribution, and promotional strategies in a continuous race to please finicky consumers (Hanna and Wozniak, 2000)

In each of the roles, customers constantly face choices—how much to spend, what alternative to acquire, and where to purchase it from. These choice call for customers to make decisions. Customer decisions are decisions customers make in the marketplace as buyers, payers, and users. Typically, these decisions include *whether* to purchase, *what* to purchase, *when* to purchase, from *whom* to purchase, and *how* to pay for it. *Whether* to purchase something is the first level of decision that entails weighing alternative uses of money and time resources. Customers have finite money and time, and they must allocate them judiciously. Alternative demands on time may constrain a customer to postpone or dismiss a purchase altogether (Sheth et al, 1998).

Therefore, when the term *consumer decision* produces an image of an individual carefully evaluating the attributes of a set of products, brands, or services and rationally selecting the one that solves a clearly recognized need for the least cost it has a rational, functional connotation. While consumers do make many decisions in this manner, many others involve little conscious effort. Further, many consumer decisions focus not on brand

attributes but rather on the feelings or emotions associated with acquiring or using the brand or with the environment in which the product is purchased or used (Mowen, 1998).

This literature review presents a model of complex decision making. The process of consumer decision making includes many of the important behavioral concepts of problem recognition and, it involves an active search for information; therefore, consumer information processing is introduced. It also involves the evaluation of alternative brands; therefore, the process consumers use to assess products in case of their needs is also considered. Finally, complex decision making involves the consumers' evaluation of the brand after purchasing it; therefore, concepts of consumer satisfaction and post-purchase evaluation are formulated.

Since the basis for evaluating the product happens after the purchase is consumed, the literature review here considers not only the purchasing process, but the consumption experience. It highlights the fact that products can be purchased and consumed for both utilitarian and emotional reasons.

THE NATURE OF THE CONSUMER DECISION PROCESS

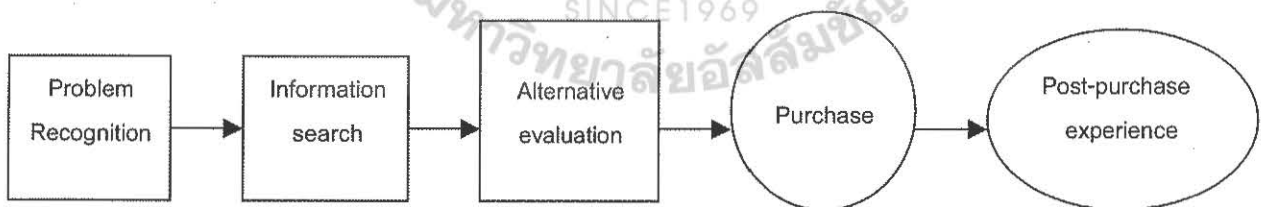
Consumer decision process can be characterized as a form of problem solving. When consumers perceive a discrepancy between an actual state of affairs and a desired or ideal state of affairs, problem recognition arises. Individuals then become involved in a problem-solving process. This process entails a sequence of activities designed to arrive at a decision leading to satisfactory solution to the perceived problem.

Sheth (1998), identified five stages in problem solving. In a slightly modified and adapted form, they are as follows:

1. Problem recognition
2. Information search
3. Alternative evaluation
4. Purchase
5. Post-purchase experience

Although these steps are suggestive, shoppers may proceed directly from problem recognition to purchase. In some instances, a problem may not even exist before the purchase occurs, such as in the case of impulse purchases. The mental or physical activity associated with each stage may vary significantly based on the financial magnitude and social or psychological importance to the individual of the issue at hand.

Figure 2.1 Stages of the consumer decision process



Source: Jagdish N. Sheth, Banwari Mittal, Bruce I. Newman (1998), *Customer Behavior: Consumer behavior and beyond*, The Dryden Press, p. 520.

36103 e. 2

From a consumer behavior point of view, the chance of buying a product or service is enhanced when marketers successfully create a tension state for the consumer. If the disturbance in an individual's psychological field is strong enough, a problem surfaces at the conscious level. The tension may be sufficiently intense to arouse motives or reasons that impel the consumer to think about the problem and trigger a need for him or her to take corrective measures. However, it does not follow that every problem finds a solution via product purchase and use. In some instances, individuals process information or engage in physical or mental activity that leads only to frustration or further anxiety. That is, consumers may discover that there is no viable, simple, and instant solution to their problem. They may even discover that a course of action they hoped would bring their problem to a satisfactory resolution has failed to provide the anticipated end result (Hanna and Wozniak, 2000).

1. PROBLEM RECOGNITION

Problem recognition is not merely an outcome of marketing efforts aiming at making consumers aware of product groups or brands. It is, in many instances, the outgrowth of consumers' striving to fulfill the demands of every life. People buy for five specific reasons: to Protect, to Reduce, to Improve, to Save or to Make. Each of these is discussed below.

Consumer problems can be the result of *assortment depletion*, wherein individuals experience inadequacies in their stock of goods. A family can run out of milk, breakfast cereal, aspirin, soft drinks, or some other commodity. At other times, *changes in consumers' life circumstances* may cause them to need something they never had occasion to need or use before. For example, career changes may require that individuals purchase a PC in order to maintain a home office. Retirement causes some to search for hobbies to occupy their newly

found free time. *Product acquisitions* frequently require the purchase of further products such as supplies, accessories, and energy sources. Consumers who buy a PC may soon purchase a printer, various software packages, disks, and other related accessories to use in conjunction with their computer. *Product obsolescence* may cause individuals to replace goods. Some products break or wear out; other go out of fashion. *Expanded means*, financial or otherwise, may lead to expanded desires and higher levels of aspiration. A promotion and corresponding pay raise may translate into a desire for more possessions, expanded roles, or changes in lifestyle—causes for generating new consumer problems. Similarly, *contracted means* (such as a job layoff) may cause someone to purchase new suits suitable for job interviews. Finally, *expanded awareness* can be a source or problem recognition. Consumers constantly receive new information about their surrounding, largely through marketing stimuli such as advertising and other promotion activities. Discoveries of *new* and *improved* products create cognitions that may alter consumers' satisfaction with their present state of affairs (Becker and Cunningham, 2002).

2. INFORMATION SEARCH

Once a need has been recognized, customers search for information about various alternative ways of solving the problem. For instance, there are a number of questions one should ask about each car before taking the time to test-drive it. Some information may already be listed in the ads, but it is important to verify the facts. One might consider creating a form for oneself to keep track of the different cars one calls about (Reed and DiPietro, 2001).

That search rarely includes every brand in existence, customers consider only a select subset of brands, organized as follows:

- The awareness set consists of brands a customer is aware of.
- An evoked set consists of the brands in a product or service category that the customer remembers at the time of decision making.
- Of the brands in the evoked set, not all are deemed to fit needs. Those considered unfit are eliminated right away. The remaining brands are termed the consideration set—the brands a customer will consider buying.

Initially, customers seek information about the consideration set of brands—which is a subset of evoked sets. New information can bring in additional brands into the awareness, evoked, and consideration set. It should be the minimum objective of all marketing communications to place the brand in the consideration set (rather than merely in the “awareness or evoked set”) of its target customers (Sheth, 1998).

Types of Search

Information search can be internal, external, or a combination. Whereas internal search entails scanning one’s memory for product-related information, external search involves physical efforts to solicit and gather information from outside sources.

Internal Search

Internal search is the mental activity of retrieving information that has been stored in long-term memory and deals with products or services that can help an individual solve a problem. Past experiences, positive or negative, with products, services, stores, salespeople,

or other aspects of the purchase situation as well as ads or conversations with friends may be recalled. Consumers may recollect previous experiences such as how nicely they were treated by a waitress at a particular restaurant, how wonderful the main courses were, and how delicious the desserts tasted (Schiffman and Kanuk, 2000).

External Search

External search seeks out new information through a variety of avenues that may include *market-oriented sources*, such as advertising, promotional materials, and packaging, and *interpersonal sources*, such as visits to stores, talks with salespeople and peers, and e-mail or communication via electronic media (such as chat rooms). Consumers become more familiar with alternative brands, criteria on which to compare them, and the relative importance of the criteria. They also learn about the attributes various brands possess and the benefits they provide (Hanna and Wozniak, 2000).

Studies have shown that surprisingly little external search actually takes place, even when the additional information can benefit the consumer and is readily available. A 1990 study of shopping in a supermarket, where many brand options were displayed on shelves directly in front of the shopper, revealed that customers spent on average 12 seconds in their selection process for each item purchased (Dickson and Sawyer, 1990). Immediately after customers made a selection, they were asked the price of the item selected. Only 59 percent of the grocery store shoppers claimed to have checked its price. Less than half could provide the correct price, and 32 percent stated a price that was incorrect by an average of 15 percent. Surprisingly, when a product was on sale, less than half were aware of the reduced price (Hanna and Wozniak, 2000).

Many consumers visit only a single store and consider just a single brand. One study showed that lower-income shoppers, who have more to lose by making the wrong choice, tended to search less before purchasing a product than more affluent consumers (Cobb and Hoyer, 1985). Other studies found that even in making a major purchase decision, such as when purchasing durables, some consumers typically visit only one or two stores and seldom seek out unbiased information sources. This tendency, however, was not manifested in the purchase of items that have symbolic meanings, such as clothing and makeup. In these cases consumers conducted a fair amount of external search and in particular sought the opinions of peers (Midgley, 1983).

3. ALTERNATIVE EVALUATION

Consumer's Psychological Set

The consumer's psychological set is his or her state of mind at the time needs are recognized and motives are aroused. In the context of consumer decision making, the consumer's psychological set is directed to brand, product, or store evaluations. The psychological set is made up of two components: benefits sought and brand attitudes (Assael, 1998).

Benefits Sought in Used Cars

Benefit criteria are the factors consumers consider important in deciding on one brand or another. For example, a woman customer's most important criteria in a car are economy and service dependability; but other criteria such as road performance, comfort, styling, and

safety are also relevant. Marketers identify benefit segments by consumers who emphasize the same benefit criteria. In identifying consumer segments which emphasize benefits such as economy, performance, and style, marketers try to develop product characteristics that satisfy these benefits. The car manufacturer that appeals to a performance segment might advertise product characteristics such as quick acceleration and a smooth ride.

Consumers regard product characteristics, as goal objects that may or may not satisfy desired benefits. Thus, the goal object consumers use to evaluate economy may include gas mileage and service costs (Rubel, 1996).

Used cars provide more flexibility to choose from, and step up to a better model than could be purchased new. The same money could buy a brand-new Hyundai, or four-year-old BMW. Moreover, a car bought several years into its life span has stabilized greatly in value because the rate of depreciation was flattening ended out. But the car has not declined significantly in either mechanical reliability or appearance. Insurance costs and other fees are often considerably less than when a car is new. Therefore, if the main goal as a vehicle buyer is obtaining reliable transportation for a good price, the used-car market can be the best place to shop.

The cost of owning and operating a used car will be fifty percent less than that of a new car, primarily because the tremendous depreciation that occurs in the first year of ownership is no longer an issue. Also, the overall cost is much less because there are no financing fees, and operating expenses, often even repair costs and insurance rates are lower. Indeed, price is the primary reason most people consider buying used cars.

Therefore, buying a used car is an effective means of acquiring lower cost, high quality transportation. However, the process carries with it concerns about picking the right car for a customer's transportation needs and one that will not cost an arm and a leg in repairs.

Nowadays, there are so many automakers who provide the process of evaluating and selecting a specific car to buy, preparing for the process of buying a used vehicle, selecting a mechanic for in-depth evaluation, discovering what to expect from that inspection, what a customer can learn from the inspection and test drive, how to use it in decision making, and finally, how to determine a fair price (Rubel, 1996).

Brand Evaluation

Brand evaluation are consumers' predispositions to evaluate a brand favorably or unfavorably. They are represented by three factors: beliefs about brands, evaluation of brands, and tendency to act (Schiffman et al, 1999). The assumption is that these components operate in sequence as follows:

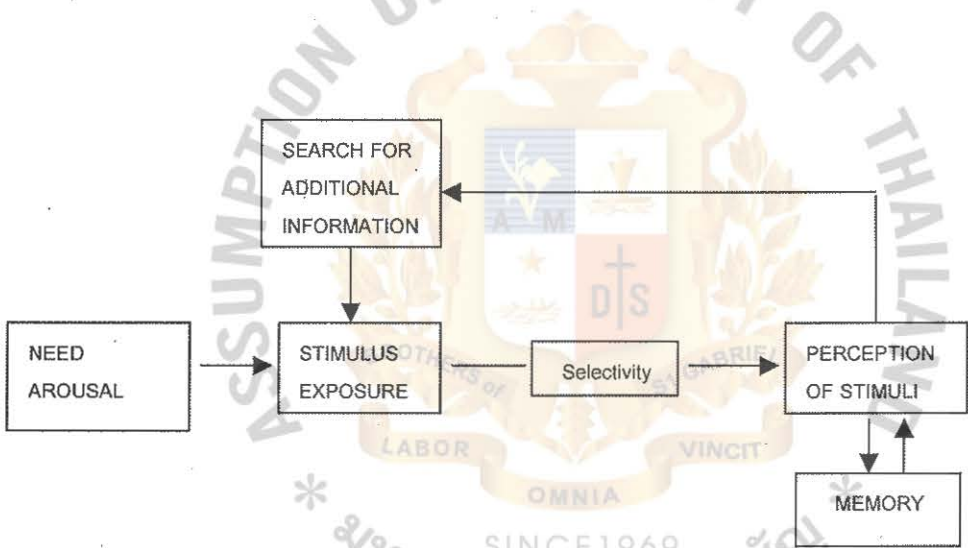
1. Beliefs are formed about the brand.
2. Attitudes toward the brand.
3. An intention to buy (or not to buy).

This is, if brand beliefs result in positive attitudes, there is a greater chance the consumer will buy the brand. This sequence has been referred to as a hierarchy of effects model of consumer decision making. It stipulates the sequence of stages consumers go through in purchasing, a sequence involving thinking (beliefs), feelings (evaluations), and

actions (the intention to buy the brand), (Lavidge and Steiner, 1961). Interestingly, the first person to theorize this decision-making sequence of thinking, feeling, and acting was Plato in ancient Greece. The hierarchy of effects is particularly important to marketers because it provides a basis for defining the factors that influence consumer behavior. This sequence was implicit in the description at the beginning of this chapter.

CONSUMER INFORMATION PROCESSION

Figure 2.2: Consumer information processing.



Sources: Assael, Henry (1998), *Consumer behavior and marketing action*, sixth edition, South-Western College, p. 76.

Consumer information processing involves the exposure to, selection of information and it's retention in memory.

Stimulus Exposure

Once a need is recognized, consumers are more likely to search for and process information relevant to that need. For example, customers are more likely to notice stimuli related to cars such as advertisements, comments friends make about their cars and cars in showrooms and on the street. They are also more likely to be aware of information that affects the cost of owning and operating a car such as sticker prices, trade-in allowances, gasoline, and service and parts (Assael, 1998). Consumers' exposure to stimuli is often selective. People tend to choose friends who support their views, reinforce their egos, and parallel their lifestyles. They often seek commercials that support recent purchases in an attempt to justify them.

They also frequently tune out information that conflicts with their needs or beliefs. The recent car buyer may ignore the negative experiences of a friend with the same make or may rationalize poor performance by thinking the car is not yet broken in. Therefore, stimulus exposure is a selective process that is directed by the need to reinforce existing brand attitudes and perceptions and to seek additional information.

Perception of Stimuli

Perception is the process by which consumers select, organize, and interpret stimuli to make sense of them. Stimuli are more likely to be perceived when they:

- Conform to consumers' past experiences.
- Conform to consumers' current beliefs about a brand.
- Are not too complex.

- Are believable.
- Relate to a set of current needs.
- Do not produce excessive fears and anxieties.

It is clear that consumers' perceptions of stimuli, as well as their exposure to stimuli, are selective. Ads that reinforce consumers' beliefs and experiences are more likely to be noticed and retained. Also, consumers are more likely to dismiss or reinterpret those ads that contradict past experiences and current beliefs about a brand. By perceiving stimuli selectively, consumers attempt to achieve a state of psychological equilibrium, namely, a state that lacks conflict and avoids contradictory information (Assael, 1998).

Search for Additional Information

Consumers may not have enough information to make adequate decisions. In such cases, they will search for additional information. Such a search is most likely when consumers:

- Believe that alternative brands being considered are inadequate.
- Have insufficient information about the brands under consideration.
- Receive information from friends or media sources that conflicts with past experiences and current information.
- Are close to deciding on a particular brand and would like to confirm expectations regarding its performance.

Studies have shown that consumers do not engage in an extensive information search unless they consider the value of any additional information collected worth the cost of

obtaining it. One study found that when consumers were presented with information on 16 alternative brands, they used only 2 percent of the information available in making a decision (Hanna and Wozniak, 2000)

4. PURCHASE

Assael (1998) explained that the process by which consumers make purchasing decisions must be understood in order to develop strategic applications. Consumer decision making is not a single process. Deciding to buy a used car is a different process from deciding to buy toothpaste.

Figure 2.3 Consumer decision making

HABIT
(little or no information search, consideration of only one brand)

DECISION MAKING
(information search, consideration of brand alternatives)

HIGH-INVOLVEMENT PURCHASE DECISION	LOW-INVOLVEMENT PURCHASE DECISION
COMPLEX DECISION MAKING	LIMITED DECISION MAKING
BRAND LOYALTY	INERTIA

Source: Assael, Henry (1998), *Consumer behavior and marketing action*, sixth edition, South-Western College, p. 67.

The first dimension represents a continuum from decision making to habit. Consumers can base their decisions on a cognitive (thought) process of information search and evaluation of brand alternatives. On the other hand, little or no decision making may take place when the consumer is satisfied with a particular brand and purchases it consistently.

The second dimension depicts a continuum from high-to low-involvement purchases. High-involvement purchases are those that are important to the consumer. Such purchases are closely tied to the consumer's ego and self-image and involve some financial, social, or personal risk. In such cases, it is worth the consumer's time and energies to consider product alternatives carefully.

Low-involvement purchases are not as important to the consumer, and the financial, social, and psychological risks are not nearly as great. In such cases, it may not be worth the consumer's time and effort to search for information about brands and to consider a wide range of alternatives (Assael, 1998).

Decision making versus habit and low versus high involvement produce four types of consumer purchase processes. The first process, called complex decision making, takes place when involvement is high and decision making occurs. Examples might be the decision to buy a home computer, a car or used car, or even clothing if the purchase is sufficiently important to the consumer. In such cases, consumers have time to search for information and process it in more detail. They use this information to evaluate and consider alternative brands by using specific criteria such as economy, durability, and service for an automobile.

When a consumer makes a decision in a low-involvement condition, it is likely to be characterized by limited decision process in buying, even if they are not highly involved, because they have little past experience with a product. Limited decision making is also likely to take place when consumers seek variety. When involvement is low, consumers are more likely to switch brands out of boredom and in a search for variety. Since the brand decision is not important enough to be preplanned, the consumer is more likely to make the decision inside the store.

Complex or even limited decision making will not occur every time the consumer purchases a brand. When choice is repetitive, the consumer learns from past experience and with little or no decision making buys the brand that is most satisfactory. Such brand loyalty is the result of repeated satisfaction and a strong commitment to a particular brand.

The fourth choice process in Figure 2.3 is inertia or low involvement with the product and no decision making. Inertia means the consumer is buying the same brand, not because of brand loyalty, but because it is not worth the time and trouble to search for an alternative (Assael, 1998)

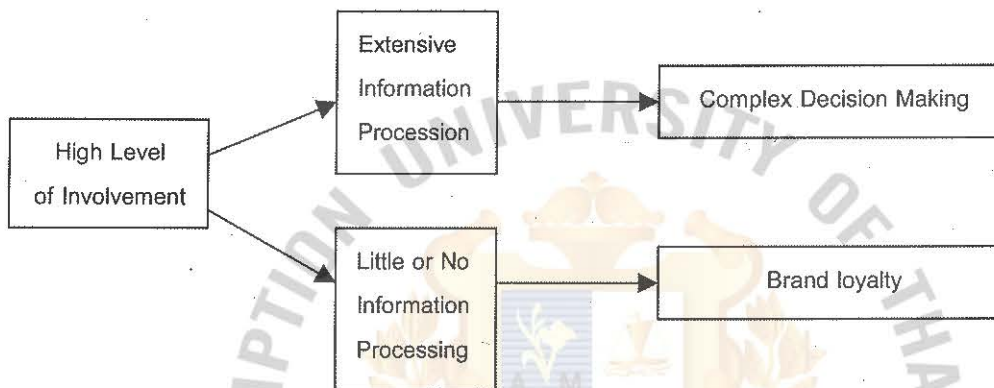
CONSUMER INVOLVEMENT AND COMPLEX DECISION MAKING

To understand complex decision making, we will first consider the nature of consumer involvement and then describe the nature of the decision process (Assael, 1998).

Involvement and Information Processing

The reason that involvement is linked to complex decision making is that, generally, the higher the level of involvement, the greater the search for information. Such information processing defines complex decision making.

Figure 2.4: Involvement and information processing



Source: Assael, Henry (1998), *Consumer behavior and marketing action*, sixth edition, South-Western College, p. 69.

In a study of involvement with tennis and tennis equipment, it was found that people who are more involved devote more attention to ads for tennis products and process the product information in the ads more extensively (Olson, 1988). Similarly, Gensch and Javalgi, (1987) found that farmers who were more involved with learning about farming methods were likely to use more attributes in evaluating alternative suppliers. Among involved farmers, 47 percent used three or more attributes in evaluating alternative retail stores. Among uninvolved farmers, only 15 percent used three or more attributes. Both

studies confirm that greater involvement results in consumers making choices by complex decision making (Gensch and Javalgi, 1987).

But as Figure 2.4 shows, a high level of involvement does not always lead to complex decision making. In some cases, consumers may be involved with a product and consider only one brand (see bottom branch of Figure 2.4). Such brand-loyal consumers are satisfied with a brand based on repeat purchases and do not feel the need to engage in extensive information processing. Even when decision making does take place, involved consumers are likely to vary greatly in the extent of information processing. Some may evaluate just a few brands on one or two attributes. Others might evaluate a larger number of brands on many attributes. This means that the extent of information processing should be regarded on a continuum from high to low, and the degree of decision making should be regarded on a continuum from complex to limited.

Types of Involvement

Behavioral researchers have identified two types of involvement with products: situational and enduring (Houston and Rothschild, 1978). Situational involvement occurs only in specific situations and is temporary, whereas enduring involvement is continuous and is more permanent. Situational involvement generally occurs when a purchase decision is required. For example, a salesman needs to buy a car for his sales job. This salesman will be highly involved with car only in that particular situation but not afterward. Another salesman may be very car model-conscious. He may also be looking a new car for his new job but his interest in cars is enduring, not situational. Such enduring involvement requires an ongoing interest in the product category, whether a purchase is required or not. According to Olson

(1988), the emphasis is on the product itself, and the inherent satisfaction its usage provides, rather than on some (situational) goal.

Both situational and enduring involvement is likely to result in complex decision making. Whether the salesman is interested in buying cars because of his job or on a more enduring basis, he will be aware of car model style, consider alternative lines of cars, and evaluate them carefully before making decision.

COMPLEX DECISION MAKING

In complex decision making, consumers evaluate brands in a detailed and comprehensive manner. More information is sought and more brands are evaluated than in other types of decision-making situations (Assael, 1998).

Conditions for Complex Decision Making

As we saw, complex decision making is most likely when consumers are involved with the product. Therefore, complex decision making is most likely for:

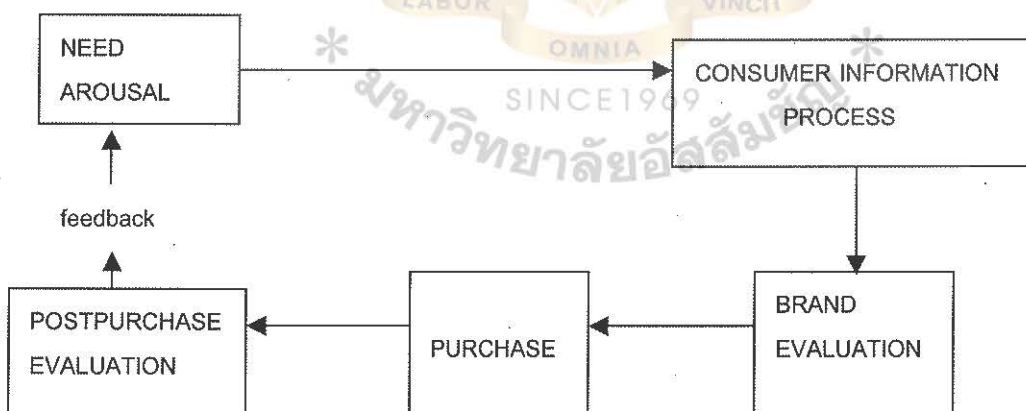
- High-priced products.
- Products associated with performance risks (medical products, automobiles).
- Complex products (compact disc players, personal computers).
- Products associated with one's ego (clothing, cosmetics).

The nature of the product is not the only condition for complex decision making. Certain facilitating conditions need to exist. The most important is adequate time for extensive information search and processing (Smith, 1987).

Complex decision making will not occur if a decision must be made quickly. A second condition for complex decision making is the availability of *adequate information* to evaluate alternative brands.

A study by Lehmann (1995) found that consumers sometimes delay a decision because of insufficient or inaccurate information. The same study also found that decision making is delayed when there are too many product characteristics and features to consider. Such confusion means that complex decision making also requires a consumer's ability to process information.

Figure 2.5: A Model of Complex Decision Making



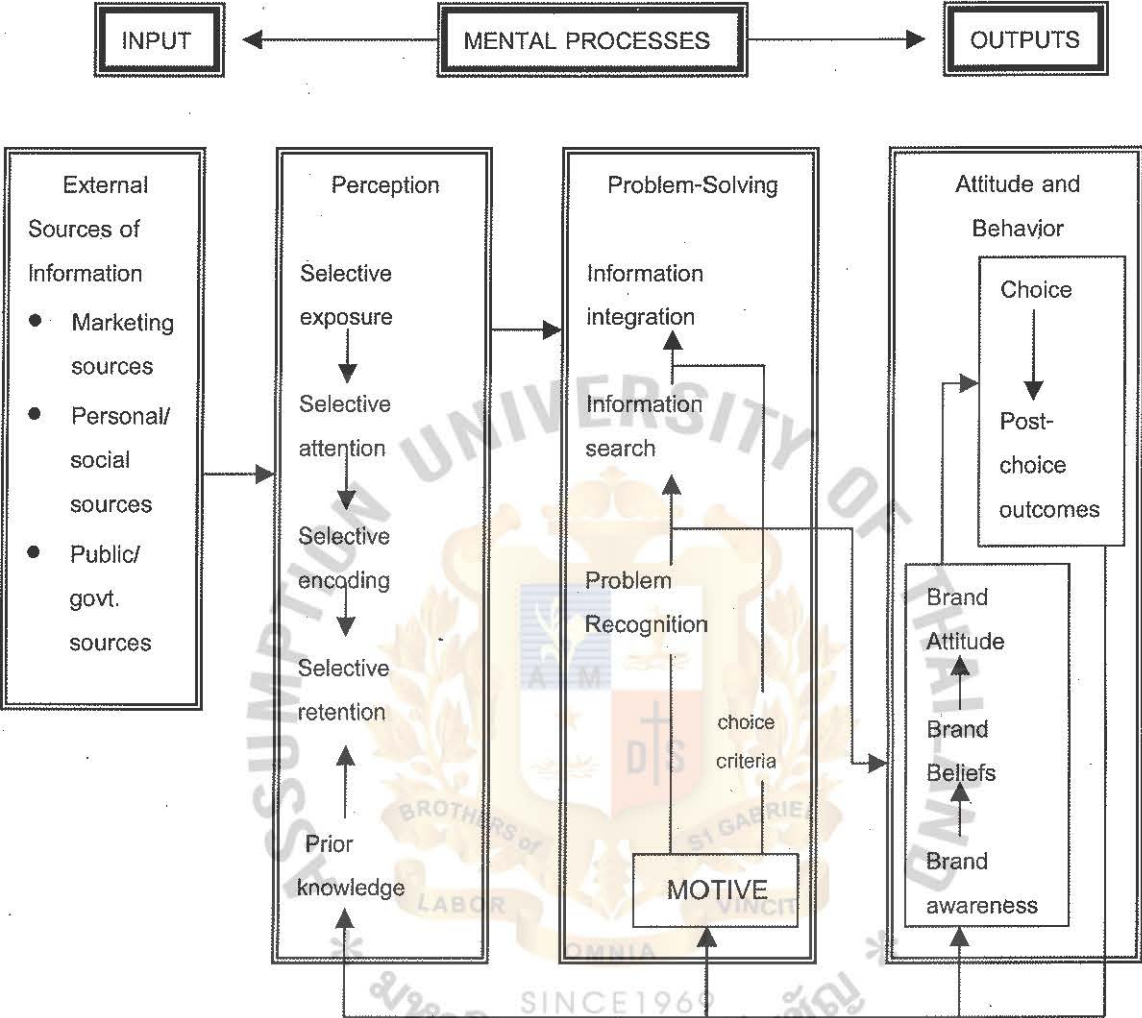
Sources: Assael, Henry (1998), *Consumer behavior and marketing action*, sixth edition, South-Western College, p. 76.

NEED AROUSAL

Need arousal is outlined in Figure 2.5. A consumer's recognition of a need is a function of various input variables: (1) the consumer's past experiences, (2) consumer characteristics, (3) consumer motives, (4) environmental influences (face-to-face groups, culture, social class, and the buying situation), and (5) marketing stimuli (seeing advertising, noticing the product on the shelf, hearing about it from salespeople).

Recognition of a need represents a disparity between a consumer's current situation and some desired goal (Need for a more economical means of transportation, desire for more stylish clothing). Such a disparity produces a motivation to act. Need recognition shapes the benefits consumers seek in a brand and brand attitudes. Desired benefits and brand attitudes determine the consumer's psychological set, that is, the mindset of the consumer toward various brands prior to seek and process information (Assael, 1998)

FIGURE 2.6: A comprehensive model of buyer behavior



Source: Adapted from John A. Howard and Jagdish N. Sheth, *The Theory of Buyer Behavior* (New York: John Wiley & Sons, 1961).

A COMPREHENSIVE MODEL OF CUSTOMER BEHAVIOR

Howard and Sheth (1961) proposed the general and comprehensive model of buyer behavior shown in Figure 2.6. This model has four major components: Inputs (information sources), the mental processes of perceptions and problem solving, and outputs (attitudes and behaviors). The input component basically comprises the external sources of information. The perceptual processes concern how the information from the input component (i.e., external sources) is registered and coded by the consumer. The problem-solving process concerns how a purchase problem is recognized, and how this problem is solved using the information registered by the perceptual system. The outputs of this process are a set of cognitions about and evaluations of the various brands, which then lead to a choice and purchase decision, a purchase, and post-purchase behaviors (Sheth, 1998).

The perception system is the gateway for all incoming information. Any information received from external sources is handled by the perception processes. That is, it is sensed (or registered), coded, and interpreted, in that order. These processes are influenced by prior knowledge, which includes expectations so that selective attention is given to incoming information, and there is biased interpretation of it.

"Irvine, 2001", a new study measuring the effects of recent events on automotive consumer attitudes does, however, reveal a range of shifting consumer priorities with regards to the car-shopping process and vehicle specifications. Notably, the poll illuminates a heightened consumer concern for fuel economy, safety and price, as well as an emphasis on research and pricing comparisons during the car-shopping process.

The increased consumer emphasis on fuel economy and safety is perhaps a reflection of the fact that forty-six percent of those surveyed indicated that in light of recent events, they are now more likely to travel by car than by airplane.

Respondents were asked to indicate whether certain factors would either be "more important" or "less important" to them now than they were a month ago if they were planning to buy or lease a new or used car. Thirty-seven percent of respondents indicated that fuel economy is now more important; thirty-four percent stated that safety is now more important; and twenty-four percent responded that price is now more important. This increased concern for safety, fuel efficiency and price stands in contrast to respondents' largely unchanged consideration for more cosmetic features like "luxury" and "style or design." (Irvine, 2001).

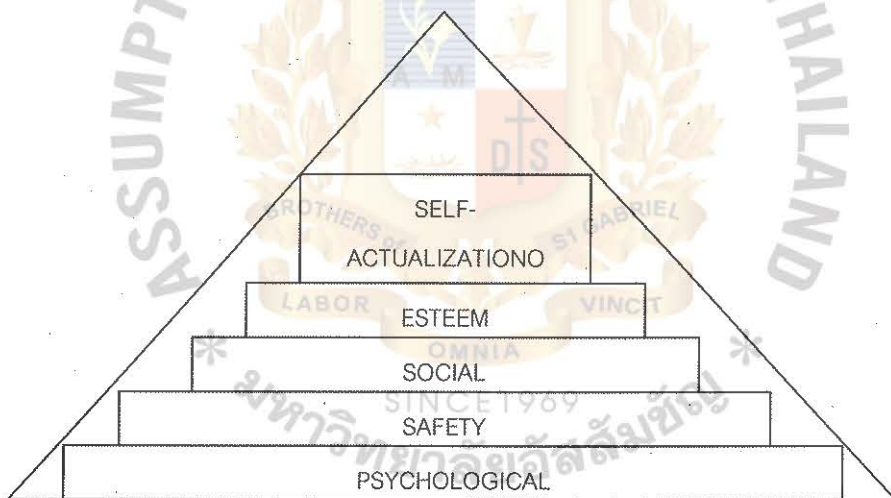
Over forty percent of respondents indicated that, in light of the slowing economy, they would now be more likely to research and compare vehicle pricing or specifications before they shopped for a new or used vehicle than they were a month ago. Fuel efficiency was cited as a particularly important category for vehicle research and data, with a full eighty-one percent of those polled indicating that it would be either "very important" or "somewhat important" to be able to easily compare fuel efficiency ratings of various vehicles (Irvine, 2001).

As a further indicator of the increased consumer interest in research, over half of those polled (53%) confirmed that the ability to easily learn about manufacturer's rebates and incentives at a free website would either "influence a great deal" or "influence somewhat" their decision to buy or lease a new vehicle. Again underscoring the increased concern for safety, seventy-five percent stated that it would be "very valuable" or "somewhat valuable" to

check on the Internet at a free website to see if a safety recall notice has been recently issued for their vehicles -- rather than waiting to be notified through the mail (Irvine, 2001).

A Hierarchy of Needs

Maslow developed a motivational theory based on a *hierarchy of needs* (Maslow, 1954). According to Maslow, consumers are motivated to act by first satisfying the lowest level of needs before the next higher level of needs becomes activated. Once these have been satisfied, the individual then attempts to satisfy the next higher level, and so on. Thus, the unfulfilled needs lead to action. Maslow defined five levels of needs, from the lowest to highest:



Source: Douglas T. Hall and Khalil E. Nougaim (1968), "An Examination of Maslow's Need Hierarchy in an Organizational Setting" *Organizational Behavior and Human Performance*, Vol. 3, pp.12-35.

1. Physiological (food, water, shelter, sex).
2. Safety (protection, security, stability).

3. Social (affection, friendship, acceptance).
4. Ego (prestige, success, self-esteem).
5. Self-actualization (self-fulfillment).

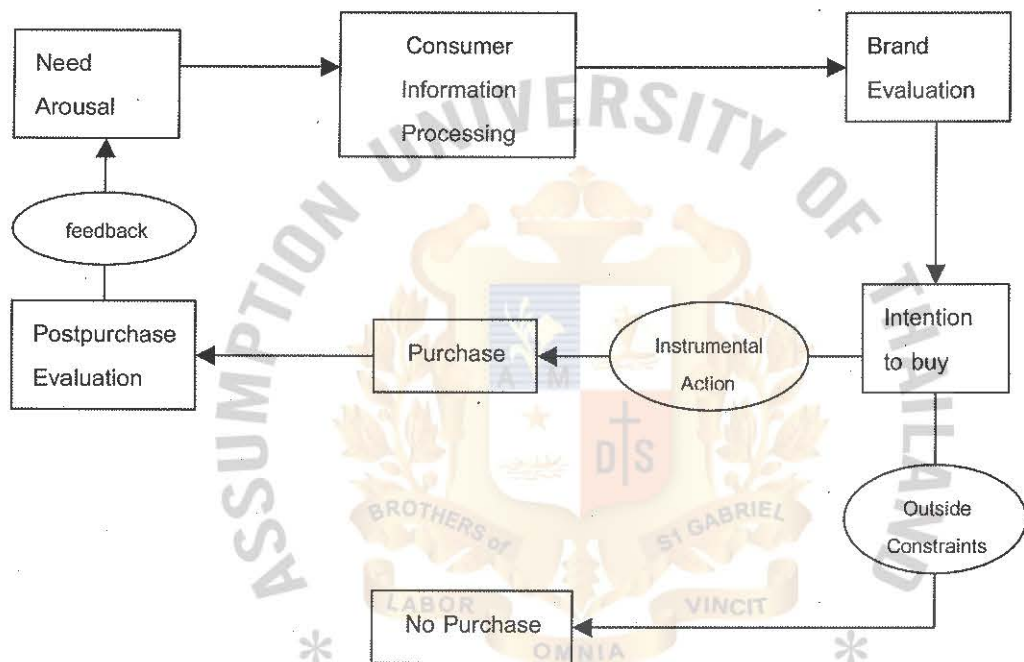
Marketers can appeal to a range of needs within Maslow's five levels. For example, they can appeal to:

- Physiological needs through sexual appeals, as in ads for personal grooming products.
- Safety needs, as in messages advertising safer cars or promoting a safer environment.
- Social needs, by showing group acceptance as a result of wearing certain types of clothing or using a brand of soap or deodorant.
- Ego needs, by linking a product to success in business (credit cards) or in sports activities (athletic shoes).
- Self-actualization needs, by showing self-fulfillment through travel, education, or cultural pursuits.

According to Maslow, few people satisfy their social and ego needs and move to the fifth level. In fact, most advertising appeals focus on social and ego needs, whether it is an appeal for the status of a luxury car or the more mundane appeal for the social protection a deodorant affords. In the first stage, young adults acquire material possessions primarily to gain acceptance and to emulate their peers (Level 3). Having established themselves in their middle years, consumers view possessions as a means of demonstrating success and gaining self-esteem (Level 4). As adults reach older age, possessions are no longer important. They now seek experiences that provide emotional satisfaction and self-realization (Douglas & Khalil, 1968).

PURCHASE AND POST PURCHASE EVALUATION

The outcome of brand evaluation is an intention to buy (or not to buy). The final sequence in complex decision making involves purchasing the intended brand, evaluating the brand during consumption, and storing this information for future use (that is, feedback). These steps are outlined in Figure 2.7.



Source: Assael, Henry (1998), *Consumer behavior and marketing action*, sixth edition, South-Western College, p.88.

Intention to Buy

Once consumers evaluate brands, they purchase the one achieving the highest level of expected satisfaction. Purchasing in complex decision making is not likely to be immediate. To purchase the car, a person must do several things called instrumental actions: select a dealer; determine when to purchase; go to the place of purchase; and, as is often the case with an automobile purchase, arrange for financing. Moreover, he or she may have to decide on options such as air conditioning or a CD player (Assael, 1998).

No Purchase

The consumer decision-making model shows that a decision might be made to delay purchase or not to buy. A person may decide not to buy a new car because he or she estimates that, in the long run, it would be cheaper to fix the old. Or, having evaluated the various brands, he or she may decide to wait and see if some additional options may be introduced in next year's models.

The study by Lehmann (1995), earlier found a number of reasons why consumers might delay a decision, namely that they:

- Are too busy to devote time to the decision.
- Do not like shopping for the item.
- Are concerned that the purchase may make other people think less well of them (social risk).
- Are concerned that they might have made the wrong decision or that the product might not work (ego and performance risk).

- Need more information about the item.
- Believe that the product's price may soon decrease or that a better item may soon become available.

Figure 2.7 demonstrates that the decision-making process may be terminated or delayed at any stage because of such outside constraints.

Purchase

Figure 2.7 demonstrates that the link between intention to buy and actual purchase requires instrumental action. The time lag between intention and purchase is likely to be greater in complex decision making because of the greater number of actions required for a purchase to take place.

Of the instrumental actions required for a purchase, store selection is most important. In fact, store selection may require a decision-making process of its own. Where to purchase a suit or dress may be more critical than what brand to buy. The act of purchasing may also require a customer to negotiate to get the best terms regarding price, used car allowance, and financing. Surely, a customer will select the dealer that gives him or her the best terms.

For many goods, decision and purchase are almost simultaneous because consumers make the brand decision in the store. For example, by a glance at the supermarket shelf, a consumer may be reminded of a need for canned peas. With no strong brand loyalties, the consumer may just select the lowest priced brand (Assel, 1998).

5. POST-PURCHASE EVALUATION

Once the product is purchased, the consumer will evaluate its performance in the process of consumption.

Purchasing versus Consuming

It is important to distinguish between purchase and consumption for three reasons. First, the product may be purchased by one person and consumed by another. The consumer, not the purchaser, determines product satisfaction. Second, the purchase depends on consumer expectations of the degree to which brands are likely to satisfy needs. Consumption determines whether these expectations are confirmed. Third, a consumer's post-purchase evaluation determines whether the brand is likely to be repurchased. It is unlikely that any brand can survive over time without some degree of loyalty. The consumer's dissatisfaction will lead to no further purchases, negative word-of mouth communication about the brand, and lost sales (Assael, 1998).

Satisfaction versus Dissatisfaction

Satisfaction occurs when consumer expectations are met or exceeded and the purchase decision is reinforced. Such reinforcement is represented in Figure 2.7 as feedback from postpurchase evaluation. Satisfaction reinforces positive attitudes toward the brand, leading to a greater likelihood that the consumer will repurchase the same brand. Dissatisfaction results when consumer expectations are not met. Such disconfirmation or expectation is

likely to lead to negative brand attitudes and lessens the likelihood that the consumer will buy the same brand again (Assael, 1998).

Postpurchase Dissonance

In many cases, a decision involves two or more close alternatives and could go either way. Having made their decisions, consumers may feel insecure, particularly if substantial financial or social risks are involved. Any negative information about the chosen product causes post-purchase dissonance, that is, conflict resulting from two contradictory beliefs. There are also the social risks of buying a car that may not conform to the norms of friends and neighbors, and there is the psychological risk that the wrong decision may have been made. Therefore, the tendency in order to reduce doubt by confirming the purchase. Consumers do this in several ways:

1. By ignoring the dissonant information.
2. By selectively interpreting the information, saying, for example, that any brand will have an occasional lemon.
3. By lowering the level of expectations, saying that even if there are a few problems with the car, it still is an acceptable choice.
4. By seeking positive information about the brand.
5. By convincing others they made a good choice, and in doing so convincing themselves.

In each case, dissonance is reduced (Lehmann, 1995).

CHAPTER THREE

RESEARCH FRAMEWORK

Selecting a used vehicle can be a daunting experience. Whether choosing from the crowd of new vehicle models featured in slick print ads and enticing television commercials or slow circling dozens of used-car ads in the classified section of the daily paper, the task involves extensive research and a commitment to a rational decision.

Buying a used car takes more time than buying a new car. Both processes begin with a detailed assessment of transportation needs—how the car will be used, who will drive it and where, what features best suit these needs, and other pieces of information that will help in the purchase of the correct vehicle. This analysis is important in any vehicle purchase. With a used car, it is a bit more complicated and even more important than with the purchase of a new vehicle.

A vehicle purchase is a major expense to be taken very seriously. Therefore, it is the process of high-involvement purchase—which is important to the consumer, such purchases are closely tied to the consumer's ego and self-image and involve some financial, social, or personal risk. In such cases, it is worth the consumer's time and energies to consider product alternatives carefully (Assael, 1998). Further, the time spent analyzing vehicle needs, not only helps overcome buying anxiety, it creates a decision that can be lived with for the next several years.

Consumers decision process can be characterized as a form of problem solving. When consumer perceive a difference between an actual state of affairs and a desired or ideal state of affairs, problem recognition arises. Individuals then become involved in a problem-solving

process. This process entails a sequence of activities designed to arrive at a decision leading to a satisfactory solution to the perceived problem.

Sheth (1998), identified five stages in problem solving in a slightly modified and adapted form, they are as follows:

1. Problem recognition
2. Information search
3. Alternative evaluation
4. Purchase
5. Post-purchase experience

Figure 3.1 Stages of the consumer decision process



Source: Jagdish N. Sheth, Banwari Mittal, Bruce I. Newman (1998), *Customer Behavior: consumer behavior and beyond*, The Dryden Press, p. 520.

In the problem-recognition stage, marketers attempt to establish conscious awareness of a problem. If consumers become cognizant of a problem that can be lessened or eliminated through purchase behavior, the second stage—search activity—begins. Search can be either internal (consumers draw from information stored in memory) or external (consumers visiting stores, speaking to salespersons, reading promotional materials and package information).

Several factors influence the extent of search activity, such as consumers' learning style, product involvement, experience, and risk perception.

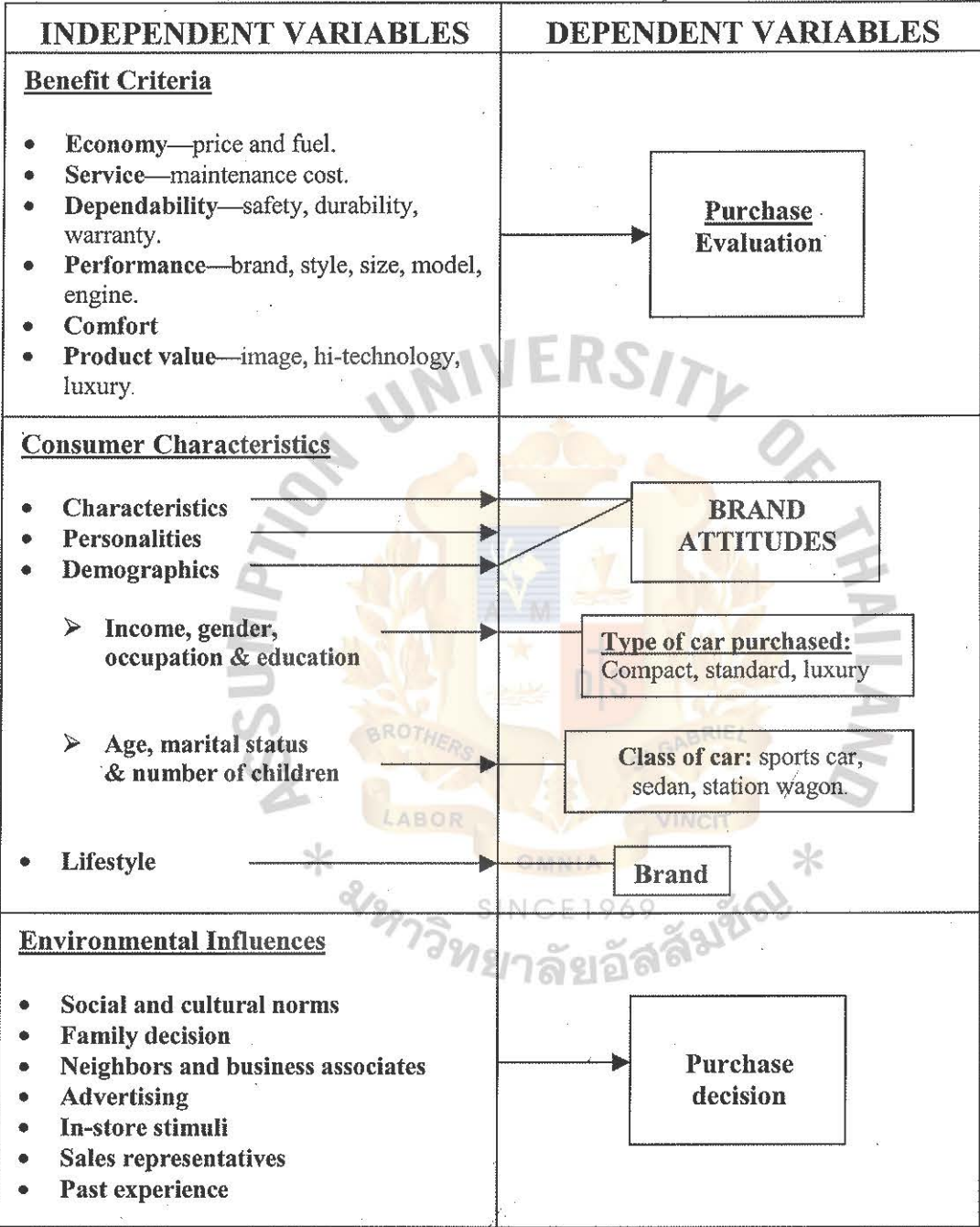
Once consumers acquire needed information, the evaluation stage emerges. Consumers narrow down the number of product alternatives they actually consider to a manageable number. Various heuristics or simple rules of thumb may be used to reduce the effort one expends. Consumers may evaluate the attributes of each alternative under serious consideration. For example the customers buying cars may focus on a performance quality for the first factor, then consider for price, durability, after-sales service, style, level of fuel consumption, safety, comfort, and country of origin. They may also contemplate the potential outcome (positiveness or negativeness) of selecting a particular option.

In the process of choosing a particular alternative, consumers may apply various compensatory and noncompensatory decision rules by which they compare alternatives and arrive at a selection. The act of committing to a particular alternative—purchasing—does not terminate the decision making process, because post-purchase considerations arise. The satisfaction or dissatisfaction consumers experience from their product choice largely relates to the product's instrumental or expressive performance, the amount of effort or resources consumers expend to obtain the product, and consumers' level of product expectations.

(Hanna and Wozniak, 2000).

Based on the literature reviewed in Chapter 2, the following is a theoretical framework for the study

Figure 3.2: The Theoretical Framework of the Study



Source: Modified from various authors.

The framework above depicts a customer decision process in the purchase of a car. Once the customer is going to buy a used car, he or she needs to consider various factors. In this study, we set up a framework consisting of three parts, which are: benefit criteria, consumer characteristics and environmental influences. The three factors or the independent variables all affect the brand attitudes, type of car purchased, class of car, and finally, the brand decision, which is the dependent variable.

Assael (1998), explained that in evaluating benefit criteria for purchasing a car is not like purchasing a toothpaste, therefore, a customer needs to consider carefully as it contains a high level of involvement. Hence, a customer has to place more importance on economy (price & fuel), service (maintenance cost), dependability (safety, durability & warranty), performance (brand, style, size, model & engine), comfort and product value (image, hi-technology & luxury).

As we can see, a customer considers economy, service and dependability, as the first three factors. Then, the performance, comfort and value of a car follows. The reason is a customer who wants to buy a used car invariably has less money than a customer who can afford a new car model, therefore, price is of more importance than the performance and comfort of a car, in many instances.

However, consumer characteristics are more likely to affect various kinds of purchasing process. For example, consumer characteristics, personalities and demographics do have an effect on the brand attitudes. Income may affect the type of car purchased—compact, standard, or luxury. Age, marital status, and number of children may affect the class of car—sports car, sedan, or station wagon. Lifestyle may affect the make of the car.

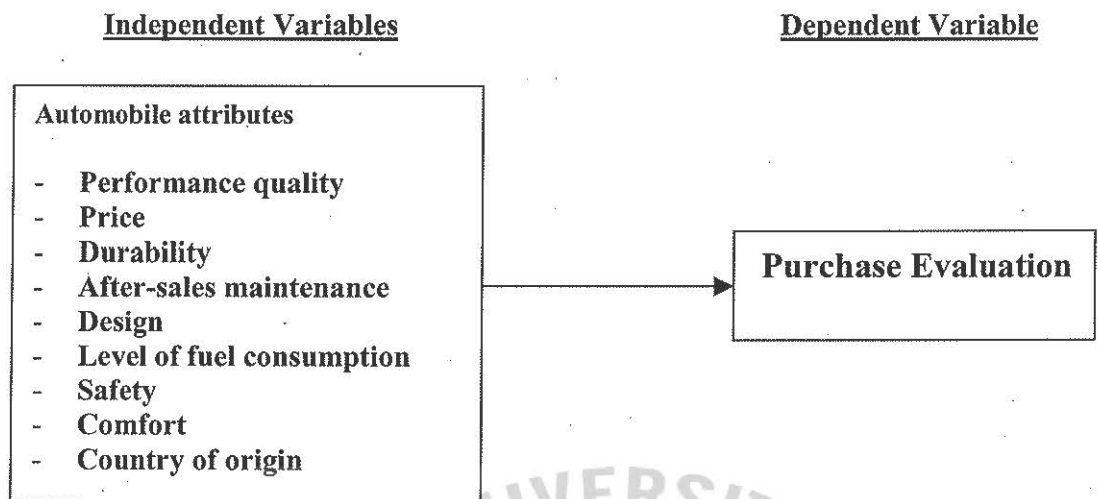
Moreover, environmental influences have an impact in terms of purchasing evaluation as consumers purchase and use many products in a social setting. The purchase of a car is frequently a family decision, and each member of the family influences the decision. Neighbors and business associates may also be important sources of information and influence (Hanna and Wozniak, 2000).

A car is also a symbol as well as a means of transport. As a result, social and cultural norms influence the purchase of a car and the way it is used. Teenagers are more likely to use a car as a means of socialization, adults as a symbol of socioeconomic status (Assael, 1998).

Past information about brand characteristics and prices will also affect consumers' needs. Consumers obtain such information from advertising, in-store stimuli, and sales representatives while they are looking for the information in terms of buying a new product. Those consumers who are looking for the high level of involvement product need to consider information carefully. Therefore, sales representative, in-store stimuli and advertising, all have much influence on customers as they need someone or some sources that they can get information or rely on, in an effective way.

Based on the concepts reviewed in Chapter II, the researcher has set up the following conceptual framework for this study:

Figure 3.3: Conceptual Framework



The following hypotheses were tested in this study:

Hypotheses Statements

Hypothesis 1:

Ho1: There is no relationship between automobile attributes and purchase evaluation

Ha1: There is a relationship between automobile attributes and purchase evaluation

Hypothesis 2:

Ho2: There is no relationship between performance quality and purchase evaluation

Ha2: There is a relationship between performance quality and purchase evaluation

Hypothesis 3:

Ho3: There is no relationship between price and purchase evaluation

Ha3: There is a relationship between price and purchase evaluation

Hypothesis 4:

Ho4: There is no relationship between durability and purchase evaluation

Ha4: There is a relationship between durability and purchase evaluation

Hypothesis 5:

Ho5: There is no relationship between after-sales maintenance and purchase evaluation

Ha5: There is a relationship between after-sales maintenance and purchase evaluation

Hypothesis 6:

Ho6: There is no relationship between design and purchase evaluation

Ha6: There is a relationship between design and purchase evaluation

Hypothesis 7:

Ho7: There is no relationship between fuel consumption and purchase evaluation

Ha7: There is a relationship between fuel consumption and purchase evaluation

Hypothesis 8:

Ho8: There is no relationship between safety and purchase evaluation

Ha8: There is a relationship between safety and purchase evaluation.

Hypothesis 9:

Ho9: There is no relationship between comfort and purchase evaluation

Ha9: There is a relationship between comfort and purchase evaluation

Hypothesis 10:

Ho10: There is no relationship between country of origin and purchase evaluation

Ha10: There is a relationship between country of origin and purchase evaluation

In the conceptual framework set up for the study, there are nine attributes which were studied to see whether they have a connection with brand decision. The attributes relating to factors in the purchase evaluation of a used car takes into account the following attributes:

Performance quality

Price:

Durability

After-sales service

Style

Level of fuel consumption

Safety Comfort

Country of origin

Performance Quality

Performance quality refers to the level at which the primary characteristics of the product operate. The premium quality allows firms to charge a premium price; these firms benefit from more repeat purchasing, consumer loyalty, and positive word of mouth. However, the manufacturer must design a performance level appropriate to the target market and competitors' performance levels. A person who drives 10 blocks to work each day does not need a Rolls-Royce (Kotler, 1997).

Performance is one of the attributes of the vehicle, which consumers consider when purchasing an automobile (Srikantharajah, 1994). Pornprasertsakul (1981) in her study, measured the performance of cars based on many factors including engine capacity (horse power), maximum speed, acceleration, and driving system.

Price

Price is one of the most important attributes evaluated by consumers. Marketers need to be aware of its role in the formation of consumer's attitudes. In some instances consumers are highly price sensitive, so that high price relative to competitors may eliminate the product from consideration (Mowen, & Minor, 1998).

In other cases, however, price can be used as a surrogate indicator of product quality, with the result that a higher price is viewed positively by certain segments of the market. Product price can be either positive or negative influence on consumers (Mowen, & Minor, 1998).

Sermasaksasithorn (2000) identified price as an important attribute, which includes retail price, interest rate financing, repair & maintenance cost and spare part cost.

Durability

Durability is a very important product attribute to most car buyers. It can be measured through the product's expected operating life under natural and/or stressful conditions. Buyers are willing to generally pay extra for products that have more durability.

Teepapal (1991) has explained that durability is one factor in the buying evaluation. He gives an example, comparing cars from Europe and Japan. He surveys that people mostly like to use cars from Europe because of the belief in durability of raw materials, more than that of Japanese cars.

After-sales maintenance

Service is any act of performance that one party can offer to another that is essentially intangible and does not result in the ownership of anything. Automobile manufacture is classified into *tangible good with accompanying service*. This consists of a tangible good accompanied by one or more services to enhance its consumer appeal (Kotler, 1997).

In general, buyers are looking for good service before and after they make their purchase selections. In case of used cars, very often the original after-sales guarantee or warranty has expired. Hence the buyer needs to take into consideration the garages that are available to repair or service specific brands of cars, as well as the cost needed for such maintenance. In addition, they want their purchase to be convenient, not time consuming and in a time and place that fits their schedule. Customers receive service value during pre-purchase and post-purchase phases of product acquisition. This service value accrues in as much as it enables the user to derive the maximum utility from the product or service. Two specific avenues are available to marketers for this service: product-use advice and product maintenance (Sheth, Banwari and Bruce, 1999).

Design

Design describes the product's looks and feel to the buyer. Normally, buyers are willing to pay a premium for product, which is attractively styled. Many car buyers pay a premium for Jaguar automobiles because of their extraordinary look, although Jaguar has a poor record of reliability. Design has the advantage of creating product distinctiveness that is difficult to copy (Kotler, 1997).

Design can provide the characteristic of car showing how it looks like such as luxury or sporty. It includes interior design and decoration, beauty, and shape (Pornprasertsakul, 1981).

Level of fuel consumption

Level of fuel consumption is one attribute that most buyers of cars consider. It is measured by distance by kilometer per litre/mile. This attribute also affects the price of car (Laohawilaik, 1990).

Because of modern technology, most new vehicles are very economical in the sense of fuel consumption than very old vehicles. At the same time, as the age of the automobile increases, the fuel consumption increases. In addition, it is noticed that most of the passenger cars operated by diesel are running more distance per one liter of fuel than other types of automobiles. However, new cars are mostly operated by unleaded fuel because of environmental consideration (Srikantharajah, 1994).

Safety

On the whole, it has been proven that most customers have a tendency to consider *safety*, economy and overall quality performance of car before making a decision to purchase (Formula, 2002)

Pornprasertsakul (1981) defined the safety of car as including factors, such as visibility and braking system. Laohawilai (1990) has mentioned that the reason why people

make a decision to buy a car may be safety attributes, which includes a central locking system and ABS.

Comfort

Comfort is an attribute that many car buyers consider when buying a car. Laohawilai (1990) measured the characteristics of comfort by evaluating comfortable driving (automatic transmission, steering power, suspension system, and parking assistance) and comfortable seats (electronic adjusted seats, wide inside car space etc.).

Pornprosertsakul (1981) measured comfortable car through steering system, suspension system, wide head and leg room, and accessories (air condition and tape/radio).

Country of Origin

Country of origin denotes the country with which a firm is associated. Typically, this is the home country for a company. Country of origin is inherent in certain brands, for example, IBM and Sony imply U.S. and Japanese origins respectively (Chandarapratin, 1995)

Country Image refers to the picture, the reputation, and the stereotype that consumers attach to products of a specific country. This image is created by such variables as representative products, national characteristics, economic and political background, history and traditions (Nagashima, 1970). Where the country has a positive image, the origin of the product or company can be exploited (Hennessy, 1992). Consumers use the country's reputation to predict the quality of the products they are evaluating (Hong, and Wyer, 1990).

One particular country-specific advantage is the so-called country-of-origin effect. Roth & Romeo (1992) had given the meaning of country-of-origin effect as referring to how consumers perceive products emanating from a particular country.

The country of origin effect tends to be either a strength or drawback, depending on how the consumer views the country. Products from countries with a positive image tend to be favorably evaluated, while products from less positively perceived countries tend to be downgraded (Johnasson, 2000).

Brand

Brand is a name, symbol, or other distinguishing feature that serves to identify the goods or services of one seller and to set them apart from those of competitors (Mason, Hazel, 1987)

Most products in the marketplace are branded, they have a name and/or symbol that is identified with the product (Assael, 1998).

- *Brand name* is a part of a brand consisting of words or letters that comprise a name used to identify and distinguish the firm's offerings from competitor such as Coca-Cola. The name is among the most powerful sources of identity that might influence a product's selection (Assael, 1998).
- *Brand symbols* can be as important as a brand name in establishing product association. It shows brand characteristics (Assael, 1998).

Primary purpose of brands is to provide for the user a symbolic meaning, which assists the user in the recognition and decision-making process. Thus, Mercedes suggests expensive, high prestige, well engineered, durable, and so on. As consumers may not be able to process all available product attribute information, they may utilize extrinsic cues to develop their product quality expectations. One key extrinsic cue is the product's brand (Grewal, 1995).



The Operational Definitions of Influencing Variables are as follows:

Table 3.1: Operational Definition of Influencing Variables

Conceptual label	Concept Definition	Operational Components	Level of measurement
1. Performance quality	The level at which the primary characteristics of the product operate.	-Acceleration -Maximum speed -Driving system -Horse power	Ordinal
2. Price	Amount of money paid in order to buy goods or service.	-Retail price of car -Interest rate financing -Repair & Maintenance cost -Cost of Spare parts	Ordinal
3. Durability	A measure of the product's expected operating life under natural and/or stressful condition.	-Operational life usage under natural conditions -Operational life usage under stressful conditions	Ordinal
4. After-sales service	All assistance that the marketer can provide to maintain the product ready-used.	-Warranty fulfillment -Availability of spare parts -Responsiveness and courtesy of service provider -Reliable and fast maintenance and repair service	Ordinal
5. Style	Describe product looks and feel to buyer.	-Luxury -Interior design and decoration -Beauty and shape	Ordinal
6. Level of fuel consumption	Ratio of distance per unit of fuel.	Distance measured by kilometer per litre	Ordinal
7. Safety	A device designed to prevent or save from accidents.	-Equipment for <i>preventive safety</i> -Equipment for <i>crisis safety</i>	Ordinal
8. Comfort	A condition or feeling of pleasurable ease, well being, and contentment.	-System for comfortable driving; e.g. automatic transmission, steering power, suspension system etc. -Comfortable seats (electronic) adjusted seats, wide inside car space	Ordinal
9. Country of Origin	Country which a consumer associates with a certain product as being its county of origin no matter where the product is produced.	-Sentiment regarding the notion of "Country of Origin" ; image, reputation and stereotype	Ordinal
10. Brand decision	Focus at evaluation brand selection criteria at purchase stage	-Brand purchased	Nominal

Primary purpose of brands is to provide for the user a symbolic meaning, which assists the user in the recognition and decision-making process. Thus, Mercedes suggests expensive, high prestige, well engineered, durable, and so on. As consumers may not be able to process all available product attribute information, they may utilize extrinsic cues to develop their product quality expectations. One key extrinsic cue is the product's brand (Grewal, 1995).



CHAPTER 4

RESEARCH METHODOLOGY

Method of Research Used

This study was envisaged as a descriptive one, which required that data be gathered from both primary and secondary sources. For the primary data collection, survey questionnaires were used for describing and analyzing data, whereas, the secondary data collection came from several previous relevant published reviews and research results.

A sample survey is defined as a research technique in which information is gathered from a sample of people by use of a questionnaire, a method of data collection based on communication with a representative sample of target population (Zikmund, 1997).

Survey research is the research in which an interviewer interacts with respondents to obtain facts, opinions, and attitudes (McDaniel and Gates, 1999). Survey questions can obtain inquiry about the subject that is exclusively internal to the respondents which is appropriate for consumer's attitudes.

Survey also allows researchers to study and describe massive populations, in both efficient and economical fashion, meaning that the survey provides relatively low costs, minimal time and accurate means of assessing information about the population (Zikmund, 1997).

Research Instrument

A self-administered questionnaire was used in this research to gather information from samples. Self-administered questionnaire is a questionnaire that is filled in by the respondents rather than an interviewer. It can be distributed to respondent in many ways such as inserted in packages and magazines or located questionnaires at points of purchase or high-traffic locations (Zikmund, 1997).

Sampling Plan

Definition of Target Population

The target population of this study refers to only individual buyers who bought a used car, from one of the 9 tents operated by I.S Auto Port Group. Corporate customers and fleet buyers are not included in this study.

Sampling Method

The sampling design used in this research is non-probability sampling. In non-probability sampling, the probability of any particular member of the population being chosen is unknown (Zikmund, 1997). The element in the population do not have any probability attached to their being chosen as sample subjects.

Unit of analysis

The sampling unit is a single element or a group of element subject to selection in a sample (Zikmund, 1997). The sampling unit of this research was the individual respondent.

Determining Sampling Size

Information from Thai Autobiz magazine showed that the number of people who bought used cars was approximately 800,000 people in 2002. Therefore, based on Anderson's table, (Table 4.1), the sample size is 384 (Thai Autobiz, January, 28th, 2003).

Table 4.1: Theoretical Sample Sizes for Different Sizes of Population and a 95 Percent Level of Certainty

Population	Required sample for tolerable error			
	5%	4%	3%	2%
100	79	85	91	96
500	217	272	340	413
1,000	277	375	516	705
5,000	356	535	897	1,622
50,000	381	593	1,044	2,290
100,000	382	596	1,055	2,344
1,000,000	384	599	1,065	2,344
25,000,000	384	600	1,067	2,400

Source: Anderson, G. (1996), *Fundamentals of Education Research*, pp. 202.

Data Collection and Analysis

Data was collected from all 9 tents owned by I.S Auto Port Group. These tents are scattered in different areas of Bangkok, three in Srinakarin Road, five in Rachadapisek Road,

and the one most recently opened on Lardprao Road. The researcher spent approximately three months (October, 2002-January, 2003) collecting data from all nine tents. The following is a breakdown of the questionnaires collected from the 3 zones:

Ratchadapisek Road (5 tents)	152 sets
Srinakarin Road (3 tents)	114 sets
Lardprao Road (new tent)	106 sets
Total	372 sets

Although 372 sets of questionnaires were collected, 6 had to be discarded because of incomplete information. Therefore, the study employed 367 sets as valid and these were used in the analysis.

Data Analysis

Data was analyzed and summarized in a readable and easily interpretable form. The Statistical Package for Social Sciences (SPSS) was utilized to summarize the data where needed. All statistical manipulations of the data follow commonly accepted research practices. The form of data presentation from these procedures are also presented in an easily interpreted format.

In this research, Pearsons correlation coefficient was used as the statistical tool to test all hypotheses. Pearson correlation coefficient tests the magnitude and direction of relationships. The *magnitude* is the degree to which variables move in unison or opposition. The coefficient's sign signifies the *direction* of the relationship. Direction tells us whether large values on one variable are associated with large values on the other (and small values

with small values). When the values correspond in this way, the two variables have a positive relationship: As one increases, the other also increases. (Cooper, 2000). Family or personnel income, for example, is positively related to used car brand decision. As the more money you have, the more better car you can buy. Other variables are inversely related. Large values on the first variable are associated with small values on the second (and vice versa). The prices of products and services are inversely related to their scarcity. In general, as products decrease in available quantity, their prices rise. The absence of a relationship is expressed by a coefficient of approximately zero (Cooper, 2000).

Pre-testing the Questionnaire

In order to avoid respondents' misunderstanding the questions, pre-testing of the questionnaire must be conducted before the actual questionnaires are used (Zikmund, 1997). Thirty used car prospects were randomly selected as actual respondents for testing to evaluate and refine the measuring instrument. These respondents were selected from 2 used car tents located on Ramkhamhaeng Road, owned by the researcher's friend. Mistakes were corrected and adjusted in terms of sequencing, wording, and structure before the final questionnaires were distributed to respondents.

Table 4.2: Reliability Test of Pre-testing Questionnaire

Determinants	Independent Variable	Cronbach's α
1. Performance quality	<ul style="list-style-type: none"> - Acceleration - Maximum speed - Horse power 	0.8548
2. Price	<ul style="list-style-type: none"> - Price of used car - Interest rate financing - Repair and maintenance cost 	0.7484
3. Durability	<ul style="list-style-type: none"> - Operational life usage under natural condition - Operational life usage under stressful condition 	0.7602
4. After-sale service	<ul style="list-style-type: none"> - Warranty fulfillment - The ease in finding spare parts - Responsiveness and courtesy of service provider 	0.6134
5. Style	<ul style="list-style-type: none"> - Luxurious - Beauty and attractiveness of exterior design 	0.8917
6. Safety	<ul style="list-style-type: none"> - Equipment for preventive safety - Equipment for crisis safety 	0.8927
7. Comfort	<ul style="list-style-type: none"> - Driving comfort - Comfortable seat/ passenger room 	0.6040
8. Brand	<ul style="list-style-type: none"> - Brand name - Symbol 	0.6097

The results of reliability test as they appear in Table 4.2, show that Cronbach's alpha value for all eight concepts are greater than 0.6. It means that all measurement scales used in the questionnaire were relatively reliable.

CHAPTER 5

RESEARCH FINDINGS AND ANALYSIS

This chapter shows the findings and analysis obtained from the survey in order to answer the research questions and hypotheses indicated in the previous chapters.

The researcher distributed a total of 372 questionnaires, in all 9 tents to those who had purchased sedan cars. Six questionnaires had to be rejected because they were incomplete, therefore, the researcher performed the data analysis based on the number of questionnaires considered valid, 367 sets.

Demographic profile

A total of 367 respondents filled in the questionnaires, so, the researcher used them to analyze the findings.

This section provides 6 themes concerning respondents' demographic profile i.e. gender, age, marital status, income, education, and career. The demographic profiles are displayed through the use of frequency distribution and percentage as follows:

Gender

From the following table, the gender of respondents was principally male; there were 204 respondents or 55.6%, who were male, whereas, there were 163 respondents, or 44.4% of the total respondents, who were female.

Table 5.1: Frequency Distribution by Gender

Gender	Frequency	Percent
Male	204	55.6
Female	163	44.4
<i>Total</i>	<i>367</i>	<i>100.0</i>

Age

Age of the respondents was divided into 6 groups. There were 173 respondents or 47.1% of all respondents whose ages were in the 20-30 years old range. This range forms the largest portion of the population.

Table 5.2: Frequency Distribution by Age

Age	Frequency	Percent
Lower than 20 years	1	.3
20-30 years old	173	47.1
31-40 years old	115	31.3
41-50 years old	54	14.7
51-60 years old	18	4.9
61 or above	6	1.6
<i>Total</i>	<i>367</i>	<i>100.0</i>

A total of 115 respondents, or 31.3% were in the 31-40 years old range, followed by 54 respondents whose ages were 41-50 years old, amounting to 14.7%. The minority group was the group of a respondents whose ages was lower than 20 years representing a mere 0.3% of the total.

Marital Status

From the total respondents of this study, there were 188 respondents who were married representing the largest part at 51.2%, followed by 172 respondents, or 46.9% of all survey respondents, who were single. The minority group of the population was 7 respondents who were divorced, amounting to 1.9%.

Table 5.3: Frequency Distribution by Marital Status

Marital Status	Frequency	Percent
Single	172	46.9
Married	188	51.2
Divorced	7	1.9
<i>Total</i>	<i>367</i>	<i>100.0</i>

Income

Most respondents had incomes in the range of Baht10,001-20,000. A total of 154 respondents, or 42.0%, was in this range, followed by 106 respondents, or 28.9%, who had incomes of between Baht 20,001-30,000. In contrast, 10 respondents, or 2.7% of all respondents had incomes over Baht 50,001, and these formed the minority group.

Table 5.4: Frequency Distribution by Income

Income	Frequency	Percent
Baht 0-10,000	55	15.0
Baht 10,001-20,000	154	42.0
Baht 20,001-30,000	106	28.9
Baht 30,001-40,000	25	6.8

Baht 40,001-50,000	17	4.6
Over Baht 50,001	10	2.7
Total	367	100.0

Education

The majority group of population was 204 respondents, or 55.6%, who had Bachelor's Degrees. There were 118 respondents, or 32.2%, who had graduated high school or from vocational college. While, 41 and 3 respondents, or 11.2% and 0.8% of all surveyed respondents, had an education lower than high school and other levels respectively. The minority group of population was a respondent who had graduated with a Master's Degree, amounting to 0.3%.

Table 5.5: Frequency Distribution by Education

Education		Percent
lower than high school	41	11.2
high school or vocation	118	32.2
Bachelor degree	204	55.6
Master degree	1	.3
others	3	.8
Total	367	100.0

Career

From the total respondents of this study, there were 128 respondents who had been working for private companies, representing the largest part at 34.9%, followed by 112 respondents, or 30.5% of all surveyed respondents, who were owners of business. There were

67, and 33 respondents who were government officers and in other careers, amounting to 18.3% and 9% respectively. The minority group of the population was 27 respondents who were students, amounting to 7.4%.

Table 5.6: Frequency Distribution by Career

Career	Frequency	Percent
Government Officer	67	18.3
Private Company Employee	128	34.9
Own Business	112	30.5
Student	27	7.4
Others	33	9.0
<i>Total</i>	<i>367</i>	<i>100.0</i>

Testing Relationship between Automobile Attributes and Brand Decision

This section was established to find out the relationship between automobile attributes and brand decision and to answer all the research questions stated in Chapter I. The Bivariate Correlation Test (Pearson Correlation) was brought into use for proving the hypotheses. In this study, the level of significance was set at 0.05 and the correlation results were interpreted according to Correlation Coefficient Range as follows:

Correlation Coefficients

-1.00

- 0.95

- 0.50

- 0.10

0.00

+0.10

Correlation Level

Perfect negative correlation

Strong negative correlation

Moderate negative correlation

Weak negative correlation

No correlation

Weak positive correlation

+0.50	Moderate positive correlation
+0.95	Strong positive correlation
+1.00	Perfect positive correlation

The null hypothesis was rejected when Sig. (2-tailed) or p-value was less than α .

Relationship between Automobile Attributes and Brand Decision

Hypothesis 1

Ho1: There is no relationship between automobile attributes and brand decision.

Ha1: There is a relationship between automobile attributes and brand decision.

Overall, the correlation coefficient between automobile attributes and brand decision equaled 0.465, and the p-value was 0.000, which was less than the level of significance of 0.05. Thus, the null hypothesis was rejected. This implied that there was a moderate positive correlation between automobile attributes and brand decision.

Table 5.7: Correlation Coefficients of Automobile Attributes and Brand Decision

*		*	
Automobile Attributes	Pearson Correlation	.465	
	Sig. (2-tailed)	.000	

Hypothesis 2

This section was set to find out the relationship between performance quality and brand decision to answer the 2nd research question stated in the Chapter I. The Bivariate Correlation Test (Pearson Correlation) was used in proving this hypothesis, and the 0.05 level

of significance was used in this study. The null hypothesis would be rejected when Sig. (2-tailed) or p-value was less than α or 0.05.

Ho2: There is no relationship between performance quality and brand decision.

Ha2: There is a relationship between performance quality and brand decision.

From the results displayed in Table 5.8, the correlation coefficient between performance quality and brand decision was 0.175, and the p-value was 0.001, which was less than the level of significance of 0.05. Therefore, the null hypothesis was rejected. It implied that there was a significant relationship between performance quality and brand decision.

Table 5.8: Correlation Coefficients of Performance Quality and Brand Decision

Performance Quality	Pearson Correlation	.175
	Sig. (2-tailed)	.001

Hypothesis 3

This section was set to find out the relationship between price and brand decision to answer the 3rd research question stated in Chapter 1. The Bivariate Correlation Test (Pearson Correlation) was used in proving this hypothesis, and the 0.05 level of significance was used.

Ho3: There is no relationship between price and brand decision.

Ha3: There is a relationship between price and brand decision.

From Table 5.9, the p-value equaled 0.041 which was less than the 0.05 level of significance, thus, the null hypothesis was rejected. This meant that there was a significant relationship between price and brand decision. Moreover, the correlation coefficient of these two variables equaled 0.107, which fell in the weak positive correlation level. Thus it was concluded that higher price could slightly increase the level of brand decision.

Table 5.9: Correlation Coefficients of Price and Brand Decision

Price	Pearson Correlation	.107
	Sig. (2-tailed)	.041

Hypothesis 4

This section was set to find out the relationship between durability and brand decision and to answer the 4th research question stated in Chapter 1. The Bivariate Correlation Test (Pearson Correlation) was again used in proving this set of hypotheses, and the 0.05 level of significance was used.

Ho4: There is no relationship between durability and brand decision.

Ha4: There is a relationship between durability and brand decision.

Since the p-value equaled to 0.010 which was less than the 0.05 significance level, the null hypothesis was rejected. It implied that there was a significant relationship between durability and brand decision. Since the correlation coefficient of these two factors equaled 0.135 which fell in the weak positive correlation, it meant that higher durability had a slight impact on brand decision.

Table 5.10: Correlation Coefficients of Durability and Brand Decision

Durability	Pearson Correlation	.135
	Sig. (2-tailed)	.010

Hypothesis 5

This section was set to find out the relationship between after-sales maintenance and brand decision, and to answer the 5th research question stated in the Chapter 1. The Bivariate Correlation Test (Pearson Correlation) was used in proving this set of hypotheses, and the 0.05 level of significance was used in this study.

Ho5: There is no relationship between after-sales maintenance and brand decision.

Ha5: There is a relationship between after-sales maintenance and brand decision.

As shown in Table 5.11, the correlation coefficient between after-sales service and brand decision was 0.214, and its p-value was 0.000, which was less than the level of significance of 0.05. Therefore, the null hypothesis was rejected. It is implied that there was a significant relationship between after-sales services and brand decision factor.

Table 5.11: Correlation Coefficients of After-Sales Service and Brand Decision

After-Sales Service	Pearson Correlation	.214
	Sig. (2-tailed)	.000

Hypothesis 6

The Bivariate Correlation (Pearson Correlation) test was used in proving whether there was a significant relationship between design and brand decision factors and to answer the 6th research question posed in Chapter 1. The correlation coefficient result acquired from this test was also interpreted according to Correlation Coefficient Range.

Ho6: There is no relationship between design and brand decision.

Ha6: There is a relationship between design and brand decision.

From the result stated in Table 5.12, the p-value equaled to 0.000, which was less than the 0.05 significance level, so, the null hypothesis was rejected. It implied that there was a significant relationship between design and brand decision.

Table 5.12: Correlation Coefficients of Design and Brand Decision

Design	Pearson Correlation	.431
	Sig. (2-tailed)	.000

Hypothesis 7

The Bivariate Correlation (Pearson Correlation) test was used in proving whether there was a significant relationship between fuel consumption and brand decision factor and to answer the 7th research question posed in Chapter 1.

Ho7: There is no relationship between fuel consumption and brand decision.

Ha7: There is a relationship between fuel consumption and brand decision.

Since the p-value equaled to 0.000 which was less than the 0.05 significance level, the null hypothesis was rejected. It implied that there was a significant relationship between level of fuel consumption and brand decision.

Table 5.13: Correlation Coefficients of Level of Fuel Consumption and Brand Decision

Level of Fuel Consumption	Pearson Correlation	.204
	Sig. (2-tailed)	.000

Hypothesis 8

This section was established to find out the relationship between safety and brand decision, and to answer the 8th research question stated in Chapter I. The Bivariate Correlation Test (Pearson Correlation) was used in proving this set of hypotheses, and the 0.05 level of significance was used in this study.

Ho8: There is no relationship between safety and brand decision.

Ha8: There is a relationship between safety and brand decision.

From Table 5.14, it can be observed that the p-value equaled to 0.006 which was less than the 0.05 level of significance, thus, the null hypothesis was rejected. This meant that there was a significant relationship between safety and brand decision.

Table 5.14: Correlation Coefficients of Safety and Brand

Safety	Pearson Correlation	.144
	Sig. (2-tailed)	.006

Hypothesis 9

This section was established to find out the relationship between comfort and brand decision, and to answer the 9th research question stated in Chapter I. The Bivariate Correlation Test (Pearson Correlation) was used in proving this set of hypotheses, and the 0.05 level of significance was used in this study.

Ho9: There is no relationship between comfort and brand decision.

Ha9: There is a relationship between comfort and brand decision.

Since the p-value equaled to 0.000, which was less than the 0.05 significance level, thus, the null hypothesis was rejected. It was implied that there was a significant relationship between comfort and brand decision.

Table 5.15: Correlation Coefficients of Comfort and Brand Decision

Comfort	Pearson Correlation	.202
	Sig. (2-tailed)	.000

Hypothesis 10

This section was established to find out the relationship between country of origin and brand decision, and to answer the 10th research question stated in Chapter I. The Bivariate Correlation Test (Pearson Correlation) was used in proving this set of hypotheses, and the 0.05 level of significance was used in this study.

Ho10: There is no relationship between country of origin and brand decision.

Ha10: There is a relationship between country of origin and brand decision.

Since the p-value equaled 0.000 that was less than the 0.05 significance level, the null hypothesis was rejected. It implied that there was a significant relationship between country of origin and brand decision. And the correlation coefficient of these two factors equaled to 0.564, which implied a moderate positive correlation between country of origin and respondents' brand decision.

Table 5.16: Correlation Coefficients of Country of Origin and Brand Decision

Country of Origin Pearson Correlation	.564
Sig. (2-tailed)	.000

Perception of Respondents toward Automobile Attributes

This section was established to find out the respondents' attitudes toward each brand attribute, i.e. quality, price, durability, after-sales service, style, safety, comfort, country of origin, and level of fuel consumption. Descriptive statistics were brought into use to reveal

the respondents' rating of each brand as per the attributes mentioned. The Arbitrary Level given below and Descriptive Rating were used in defining responses into levels:

<u>Arbitrary Level</u>	<u>Descriptive Rating</u>
4.20 - 5.00	Strongly Agree (SA)
3.40 - 4.19	Agree (A)
2.60 - 3.39	Neutral (N)
1.80 - 2.59	Disagree (DA)
1.00 - 1.79	Strongly Disagree (SD)

Perception of Respondents toward Overall Attributes of Each Brand

In this study, there were 22 brands of automobile considered by the respondents, and the perceptions of respondents toward each automobile brands' attributes are displayed as follows:

Table 5.17: Perception of Respondents toward Overall Automobile Attributes of Each Brand

Brand	Mean of Attributes	Rating
Mitsubishi	3.9931	A
Nissan	3.9012	A
Honda	4.0029	A
Volvo	4.0339	A
Mazda	3.8450	A
Audi	4.0031	A
Toyota	4.0831	A
Isuzu	3.9912	A
Subaru	4.2870	SA
Chrysler	4.0648	A
BMW	4.1997	A
Renault	4.0648	A
Benz	4.2809	SA
Hyundai	3.9892	A

Volkswagen	4.2407	SA
Suzuki	3.5787	A
Fiat	4.1852	A
Peugeot	3.9870	A
Opel	4.1389	A
Ford	3.7994	A
GIA	3.9954	A
Chevrolet	4.3241	SA

Table 5.17 shows that there were 4 automobile brands with attributes that respondents perceived as better than others and which fell in the strongly agreed level. These were Subaru, Benz, Volkswagen, and Chevrolet. Chevrolet was the brand, which scored the highest mean, amounting to 4.3241. Whereas, the remaining brands were rated in the agreed level, with means that ranged from 3.5787 to 4.1997. And the brand that was rated at the lowest level mean was Suzuki, the mean of which equaled to 3.5787.

Perception of Respondents toward Mitsubishi Attributes

Table 5.18 shows that Mitsubishi's price and durability were rated in the strongly agreed level with means of 4.2188 and 4.3659 respectively. This meant that the majority of respondents accepted the price level and durability of Mitsubishi. Its other attributes, performance quality, after-sales service, style, safety, comfort, country of origin, and level of fuel consumption, were also rated in the agreed level. Nevertheless, the country of origin attribute was rated at the lowest mean, 3.5122.

Table 5.18: Perception of Respondents toward Mitsubishi Attributes

Automobile Attributes	Mean	Rating
Performance Quality	3.8833	A

Price	4.2188	SA
Durability	4.3659	SA
After-Sales Service	4.1057	A
Style	3.5610	A
Safety	4.1951	A
Comfort	4.0366	A
Country of Origin	3.5122	A
Level of Fuel Consumption	4.1220	A

Perception of Respondents toward Nissan Attributes

Table 5.19 shows that Nissan price, durability, and level of fuel consumption, were rated at strongly agreed level with mean values of 4.25, 4.2727, and 4.4242 respectively. This implied that the outstanding features of Nissan, i.e., price, durability, and level of fuel consumption, were accepted by the respondents. Nissan's other attributes of performance quality, after-sales service, style, safety, comfort, and country of origin, were rated in the agreed level. Once again, country of origin scored the lowest at 3.09.

Table 5.19: Perception of Respondents toward Nissan Attributes

Automobile Attributes	Mean	Rating
Performance Quality	3.6465	A
Price	4.2500	SA
Durability	4.2727	SA
After-Sales Service	3.9798	A
Style	3.5000	A
Safety	4.1970	A
Comfort	3.8939	A
Country of Origin	3.0909	A
Level of Fuel Consumption	4.4242	SA

Perception of Respondents toward Honda Attributes

For Honda, the best points were price, safety, and level of fuel consumption attributes, which were rated at strongly agreed level (means were rated at 4.2778, 4.2654, and 4.3580 respectively). While, the remaining attributes were still rated in the agreed level. Once again, the country of origin attributes had the lowest mean value, 3.4321.

Table 5.20: Perception of Respondents toward Honda Attributes

Car Attributes		Rating
Performance Quality	3.7625	A
Price	4.2778	SA
Durability	4.1728	A
After-Sales Service	4.1893	A
Style	3.6605	A
Safety	4.2654	SA
Comfort	4.1049	A
Country of Origin	3.4321	A
Level of Fuel Consumption	4.3580	SA

Perception of Respondents toward Volvo Attributes

There were 4 attributes of Volvo that were rated in the strongly agreed level, which were price, durability, safety, and comfort. And the safety attribute was rated at the highest mean, 4.4375. Whereas, the country of origin attribute was rated at undecided level, meaning that the respondents could not decide whether the country of origin was acceptable or not. Other attributes, such as performance quality, after-sales service, style, and level of fuel consumption were still rated in the agreed level, which meant that these attribute were still acceptable to used car buyers.

Table 5.21: Perception of Respondents toward Volvo Attributes

	Mean	Rating
Performance Quality	3.9167	A
Price	4.2813	SA
Durability	4.5000	SA
After-Sales Service	3.7917	A
Style	3.9375	A
Safety	4.4375	SA
Comfort	4.3125	SA
Country of Origin	2.7500	UND
Level of Fuel Consumption	3.8750	A

Perception of Respondents toward Mazda Attributes

Table 5.22 shows that there were 2 Mazda attributes that were rated in the strongly agree level (means equaled to 4.25 and 4.20), they were price and level of fuel consumption. This meant that the respondents were satisfied with the price level and level of fuel consumption provided by Mazda brand. The other attributes, performance quality, durability, after-sales service, safety, comfort, country of origin, and level of fuel consumption, were accepted in the agreed level. In contrast, style attribute was the only factor that was rated in the undecided level, which mean equaled 3.10.

Table 5.22: Perception of Respondents toward Mazda Attributes

Automobile Attributes	Mean	Rating
Performance Quality	3.9333	A
Price	4.2500	SA
Durability	4.1333	A
After-Sales Service	3.7111	A
Style	3.1000	UND
Safety	3.9000	A

Comfort	4.0667	A
Country of Origin	2.8667	A
Level of Fuel Consumption	4.2000	SA

Perception of Respondents toward Audi Attributes

There was only one attribute of Audi that was rated in the strongly agreed level, it was safety attribute (mean equaled to 4.3333). Attributes such as performance quality, price, durability, after-sales service, style, comfort, and country of origin were rated in the agreed level, whereas, the level of fuel consumption attribute was rated in the undecided level, mean equaled to 3.3333. This meant that the respondents were not clear whether the fuel consumption level was acceptable or not.

Table 5.23: Perception of Respondents toward Audi Attributes

Automobile Attributes	Mean	Rating
Performance Quality	3.8889	A
Price	4.1667	A
Durability	4.0000	A
After-Sales Service	3.7778	A
Style	4.1667	A
Safety	4.3333	SA
Comfort	4.0000	A
Country of Origin	3.6667	A
Level of Fuel Consumption	3.3333	UND

Perception of Respondents toward Toyota Attributes

There were 4 attributes of Toyota that were rated in the strongly agreed level, which were price, durability, safety, and level of fuel consumption. The safety attribute was rated at the highest mean, 4.4722, whereas, the country of origin attribute was rated in the undecided level, meaning that the respondents could not decide on their perception of country of origin. Other factors, such as performance quality, after-sales service, style, and comfort were rated in the agreed level which implied that these attribute were still acceptable to user car buyers.

Table 5.24: Perception of Respondents toward Toyota Attributes

Automobile Attributes	Mean	Rating
Performance Quality	3.7859	A
Price	4.3879	SA
Durability	4.2269	SA
After-Sales Service	4.1774	A
Style	3.7615	A
Safety	4.4722	SA
Comfort	4.1468	A
Country of Origin	3.5046	A
Level of Fuel Consumption	4.4128	SA

Perception of Respondents toward Isuzu Attributes

Table 5.25 shows that there were 5 Isuzu attributes that were rated in the strongly agree level, which were composed of price, durability, safety, comfort, and level of fuel consumption attributes. This meant that the respondents could mostly accept the price level, durability, safety, comfort, and level of fuel consumption pertaining to the Isuzu brand. The

other attributes, performance quality, durability, after-sales service, and country of origin, were accepted in the agreed level. In contrast, style was only factor that was rated in the undecided level, the mean of which was 3.3714.

Table 5.25: Perception of Respondents toward Isuzu Attributes

Automobile Attributes	Mean	Rating
Performance Quality	3.7810	A
Price	4.3235	SA
Durability	4.2000	SA
After-Sales Service	3.9714	A
Style	3.3714	UND
Safety	4.2429	SA
Comfort	4.2000	SA
Country of Origin	3.4286	A
Level of Fuel Consumption	4.3714	SA

Perception of Respondents toward Subaru Attributes

Table 5.26 showed that Subaru performance quality, price, after-sales service, style, and comfort attributes were rated in the strongly agreed level with mean values of 5.00, 4.25, 4.3333, 4.50, and 4.50 respectively. This implied that the most outstanding attributes of Subaru were performance quality, price, after-sales service, style, and comfort attributes, as perceived by the respondents. The remaining attributes, i.e., durability, safety, and country of origin, were rated in the agreed level.

Table 5.26: Perception of Respondents toward Subaru Attributes

Car Attributes	Mean	Rating
Performance Quality	5.0000	SA
Price	4.2500	SA
Durability	4.0000	A
After-Sales Service	4.3333	SA
Style	4.5000	SA
Safety	4.0000	A
Comfort	4.5000	SA
Country of Origin	4.0000	A
Level of Fuel Consumption	4.0000	A

Perception of Respondents toward Chrysler Attributes

There were 4 attributes of Chrysler that were rated in the strongly agreed level, which were price, after-sales service, comfort, and level of fuel consumption. Nonetheless, the level of fuel consumption attribute was rated at the highest mean of 5.00. The performance quality attribute was rated in the undecided level, meaning that the respondents could not decide on whether the performance quality of Chrysler was acceptable or not. In addition, durability, style, safety, and country of origin were rated at agreed level, which meant that these attributes were still acceptable.

Table 5.27: Perception of Respondents toward Chrysler Attributes

Automobile Attributes	Mean	Rating
Performance Quality	3.0000	UND
Price	4.2500	SA

Durability	4.0000	A
After-Sales Service	4.3333	SA
Style	3.5000	A
Safety	4.0000	A
Comfort	4.5000	SA
Country of Origin	4.0000	A
Level of Fuel Consumption	5.0000	SA

Perception of Respondents toward BMW Attributes

Table 5.28 showed that BMW price, durability, style, safety, and comfort attributes were rated in the strongly agreed level with mean values of 4.3214, 4.2143, 4.2857, 4.4286, and 4.500 respectively. This implied that the most outstanding features of BMW were price, durability, style, safety, and comfort, as perceived by the respondents. The remaining attributes, composing of performance quality, after-sales service, country of origin, and level of fuel consumption, were rated in the agree level.

Table 5.28: Perception of Respondents toward BMW Attributes

Automobile Attributes	Mean	Rating
Performance Quality	4.1429	A
Price	4.3214	SA
Durability	4.2143	SA
After-Sales Service	4.1905	A
Style	4.2857	SA
Safety	4.4286	SA
Comfort	4.5000	SA
Country of Origin	3.7143	A
Level of Fuel Consumption	4.0000	A

Perception of Respondents toward Renault Attributes

There were 3 attributes of Renault that were rated at the strongly agreed level, which were price, durability, and after-sales service. And the durability attribute was rated at the highest mean, 5.00, while, performance quality, style, safety, comfort, country of origin, and level of fuel consumption were rated in the agree level, which meant that these attributes were perceived positively by respondents.

Table 5.29: Perception of Respondents toward Renault Attributes

Automobile Attributes	Mean	Rating
Performance Quality	4.0000	A
Price	4.2500	SA
Durability	5.0000	SA
After-Sales Service	4.3333	SA
Style	3.5000	A
Safety	4.0000	A
Comfort	3.5000	A
Country of Origin	4.0000	A
Level of Fuel Consumption	4.0000	A

Perception of Respondents toward Mercedes Benz Attributes

Table 5.30 shows that Benz' durability, after-sales service, style, comfort, country of origin, and level of fuel consumption attributes were rated in the strongly agreed level with mean values of 4.6667, 4.3333, 4.3333, 4.6667, 4.3333, and 4.3333 respectively. This implied that the most outstanding attributes of Benz were durability, after-sales service, style, comfort, country of origin, and level of fuel consumption attributes, all of which were

perceived positively by the respondents. Its other attributes, such as performance quality, price, and safety, were also rated in the agreed level.

Table 5.30: Perception of Respondents toward Benz Attributes

Automobile Attributes	Mean	Rating
Performance Quality	4.1111	A
Price	3.9167	A
Durability	4.6667	SA
After-Sales Service	4.3333	SA
Style	4.3333	SA
Safety	3.8333	A
Comfort	4.6667	SA
Country of Origin	4.3333	SA
Level of Fuel Consumption	4.3333	SA

Perception of Respondents toward Hyundai Attributes

There were 4 attributes of Hyundai that were accepted by the respondents, and rated at the strongly agreed level. These were price, durability, safety, and level of fuel consumption with the latter rated at the highest mean, 4.6667. Whereas, the country of origin attribute was rated at undecided level, meaning that the respondents could not decide whether the country of origin of Hyundai was acceptable or not. The performance quality, after-sales service, style, and comfort were rated in the agree level.

Table 5.31: Perception of Respondents toward Hyundai Attributes

Automobile Attributes	Mean	Rating
Performance Quality	3.6667	A
Price	4.4583	SA

Durability	4.2500	SA
After-Sales Service	3.9444	A
Style	3.4167	A
Safety	4.2500	SA
Comfort	4.0833	A
Country of Origin	3.1667	UND
Level of Fuel Consumption	4.6667	SA

Perception of Respondent toward Volkswagen Attributes

Table 5.32 shows that there were 5 attributes of Volkswagen that were rated at the strongly agree level, they were performance quality, durability, after-sales service, safety, and level of fuel consumption (means equaled to 4.3333, 4.50, 4.3333, 5.00, and 5.00 respectively). The other attributes, i.e., price, style, comfort, and country of origin, fell in the agree level.

Table 5.32: Perception of Respondents toward Volkswagen Attributes

Automobile Attributes	Mean	Rating
Performance Quality	4.3333	SA
Price	4.0000	A
Durability	4.5000	SA
After-Sales Service	4.3333	SA
Style	3.5000	A
Safety	5.0000	SA
Comfort	3.5000	A
Country of Origin	4.0000	A
Level of Fuel Consumption	5.0000	SA

Perception of Respondents toward Suzuki Attributes

There was only one Suzuki attribute that was rated in the strongly agreed level, which was durability. The value of mean was rated at the highest level, 4.25. Whereas, there were 4 attributes, composed of performance quality, after-sales service, style, and country of origin, which were rated as undecided, meaning that the respondents were uncertain about these attributes. The remaining four attributes, i.e., price, safety, comfort, and level of fuel consumption were rated in the agree level.

Table 5.33: Perception of Respondents toward Suzuki Attributes

Automobile Attributes	Mean	Rating
Performance Quality	3.1667	UND
Price	4.1250	A
Durability	4.2500	SA
After-Sales Service	3.1667	UND
Style	3.2500	UND
Safety	3.7500	A
Comfort	3.5000	A
Country of Origin	3.0000	UND
Level of Fuel Consumption	4.0000	A

Perception of Respondents toward Fiat Attributes

There were 3 attributes of Fiat that were accepted by the respondents and which were rated in the strongly agreed level. These were price, after-sales service, and level of fuel consumption. And after-sales service and level of fuel consumption attributes were rated at the same highest mean, 5.00, whereas, the country of origin attribute was rated in the disagree level, meaning that the country of origin of Fiat was negatively perceived by the respondents.

By the way, performance quality, durability, style, safety, and comfort were still rated in the agree level, meaning that these attributes were still acceptable to buyers of used cars.

Table 5.34: Perception of Respondents toward Fiat Attributes

Automobile Attributes	Mean	Rating
Performance Quality	3.6667	A
Price	4.5000	SA
Durability	4.0000	A
After-Sales Service	5.0000	SA
Style	3.5000	A
Safety	5.0000	A
Comfort	5.0000	A
Country of Origin	2.0000	DA
Level of Fuel Consumption	5.0000	SA

Perception of Respondent toward Peugeot Attributes

The Table 5.35 shows that there were 4 attributes that were rated in the strongly agree level, they were durability, safety, comfort, and level of fuel consumption (means equaled to 4.30, 4.20, 4.20, and 4.20 respectively). This meant that the respondents held positive perceptions of these attributes as provided by the Peugeot brand. The remaining attributes, performance quality, price, after-sales service, style, and country of origin, were fell within the agreed level.

Table 5.35: Perception of Respondents toward Peugeot Attributes

Automobile Attributes	Mean	Rating
Performance Quality	3.6000	A
Price	4.1500	A

Durability	4.3000	SA
After-Sales Service	3.7333	A
Style	3.7000	A
Safety	4.2000	SA
Comfort	4.2000	SA
Country of Origin	3.8000	A
Level of Fuel Consumption	4.2000	SA

Perception of Respondents toward Opel Attributes

There were 5 attributes of Opel that were accepted by the respondents, which were rated in the strongly agree level. These were price, after-sales service, safety, country of origin, and level of fuel consumption. And country of origin and level of fuel consumption attributes were rated at the same highest mean of 5.00. Whereas, the style attribute was rated in the undecided level, meaning that the respondents could not decide whether the style of Opel was acceptable or not. The other factors of performance quality, durability, and comfort were rated in the agree level.

Table 5.36: Perception of Respondents toward Opel Attributes

Opel Attributes	Mean	Rating
Performance Quality	3.6667	A
Price	4.2500	SA
Durability	4.0000	A
After-Sales Service	4.3333	SA
Style	3.0000	UND
Safety	4.5000	SA
Comfort	3.5000	A
Country of Origin	5.0000	SA
Level of Fuel Consumption	5.0000	SA

Perception of Respondents toward Ford Attributes

There were 3 attributes of Ford that were accepted by the respondents, which were rated in the strongly agreed level, i.e., price, durability, and safety. And price and durability attributes were rated at the same highest mean, 4.3333. Whereas, the country of origin attribute was rated in the disagree level, meaning that the country of origin of Ford was negatively perceived by the respondents. The remaining factors of performance quality, after-sales service, style, comfort, and level of fuel consumption were rated in the agree level.

Table 5.37: Perception of Respondents toward Ford Attributes

Automobile Attributes	Mean	Rating
Performance Quality	3.5556	A
Price	4.3333	SA
Durability	4.3333	SA
After-Sales Service	4.0556	A
Style	3.4167	A
Safety	4.2500	SA
Comfort	3.9167	A
Country of Origin	2.3333	DA
Level of Fuel Consumption	4.0000	A

Perception of Respondents toward GIA Attributes

There were 3 attributes of GIA that were accepted by the respondents and which were rated in the strongly agreed level, they were durability, style, and level of fuel consumption. Style and level of fuel consumption attributes were rated at the same highest mean, 4.50, whereas, country of origin attribute was rated in the undecided level, meaning that the respondents could not decide whether the country of origin was acceptable or not. Other

attributes of performance quality, price, after-sales service, safety, and comfort were rated in the agree level, which meant that these attributes were also acceptable to used car buyers.

Table 5.38: Perception of Respondents toward GIA Attributes

Car Attributes	Mean	Rating
Performance Quality	3.6667	A
Price	4.1250	A
Durability	4.2500	SA
After-Sales Service	4.1667	A
Style	4.5000	SA
Safety	3.7500	A
Comfort	4.0000	A
Country of Origin	3.0000	UND
Level of Fuel Consumption	4.5000	SA

Perception of Respondent toward Chevrolet Attributes

Table 5.39 shows that there were 5 attributes that were rated in the strongly agree level, i.e., price, durability, after-sales service, safety, and comfort (means equaled to 4.25, 5.00, 4.6667, 5.00, and 4.50 respectively). The other attributes, performance quality, style, country of origin and level of fuel consumption, fell within the agree level.

Table 5.39: Perception of Respondents toward Chevrolet Attributes

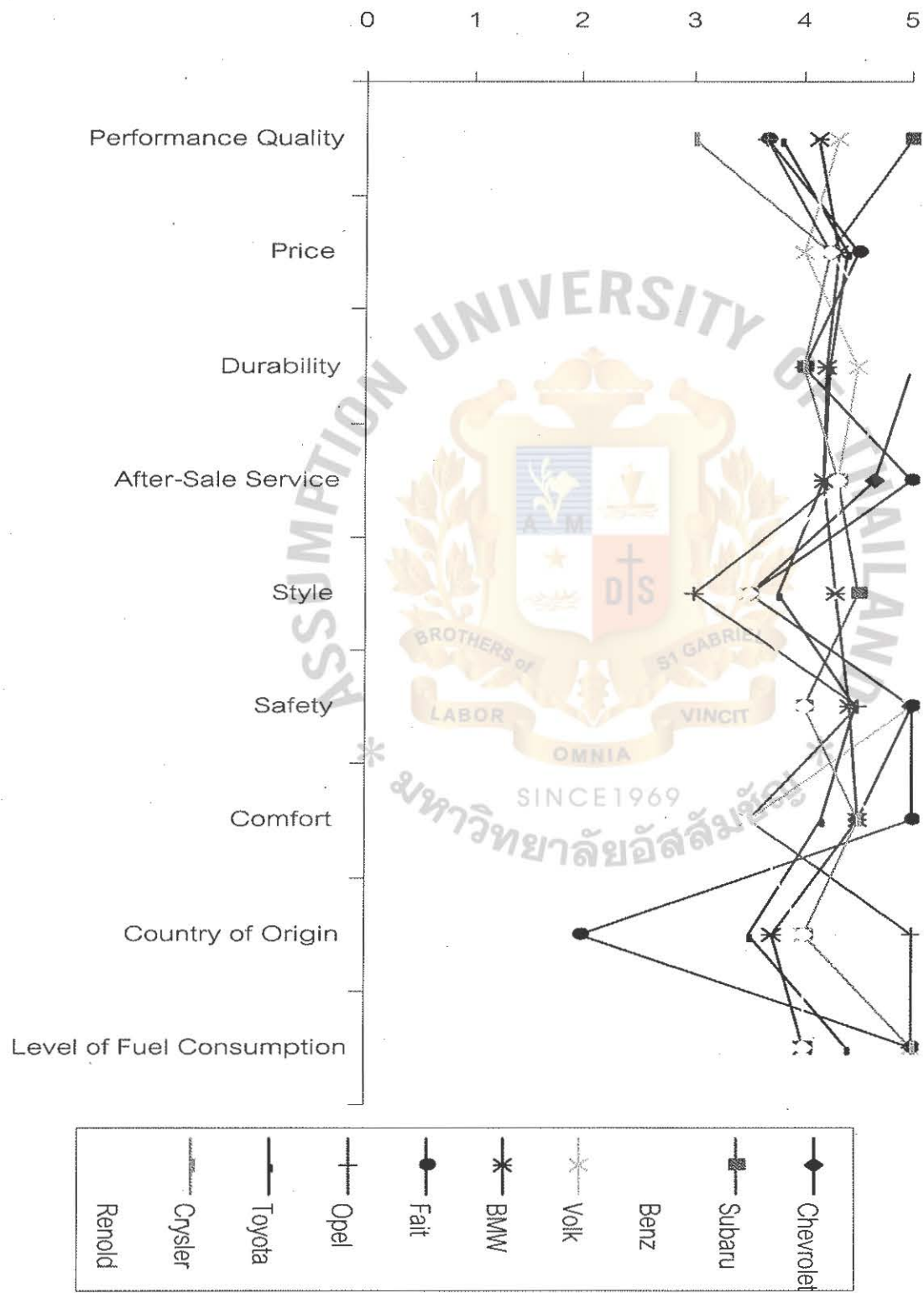
Automobile Attributes	Mean	Rating
Performance Quality	4.0000	A
Price	4.2500	SA
Durability	5.0000	SA
After-Sales Service	4.6667	SA
Style	3.5000	A
Safety	5.0000	SA

Comfort	4.5000	SA
Country of Origin	4.0000	A
Level of Fuel Consumption	4.0000	A

Table 5.40: Perception of Respondents toward Overall Automobile Attributes of Top**Ten Brands**

Brand	Mean of Attributes	Rating
1.Subaru	4.2870	SA
2.Benz	4.2809	SA
3.Chevrolet	4.3241	SA
4.Volkswagen	4.2047	SA
5.Fiat	4.1852	A
6.Opel	4.1389	A
7.Toyota	4.0831	A
8.Chrysler	4.0648	A
8.Renault	4.0648	A
9.Volvo	4.0339	A
10.Audi	4.0031	A

Table 5.41: Bipolar scale of Top Brands Sold



CHAPTER 6

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

The final chapter of this study is divided into three sections. In the first section, the researcher provides a summary of the results, as well as the tests of hypotheses. The second section consists of recommendations which evolve from the findings. The study concludes with suggestions for further research.

The questionnaires were distributed to a total of 372 used car buyers in nine tents located in three areas in Bangkok. A total of 367 questionnaires were considered valid and this number was used for the data analysis. The collected data was analyzed by using the Statistical Package for Social Science (SPSS), the statistics that were used were Average weighted mean, Pearsons Correlation Coefficient, and the t-Test.

6.1 Findings of the Study:

1. Demographic Profiles of Respondents: The findings showed that 55.6% of respondents were male and 44.4% were female. A total of 173 respondents or 47.1% were in the 21-30 years range and these made up the majority. A total of 115 respondents or 31.3%, formed the second group and were in the 31-40 years range. The minority group was composed of 1 respondent who was lower than 20 years of age, amounting to a mere .3 % of the total respondents.

From the survey data, there were 204 respondents who had bachelor's degree which formed the majority at 55.6%. On the other hand, 118, or 32.2 % respondents had high school certificates. A total of 41 respondents, or 11.2% had education at less than high school level, with just one or 0.3%, who had graduated with a Masters Degree.

In terms of careers, the largest group, 128 or 34.9% of respondents worked in private firms. The second largest group of 112 or 30.5% had their own businesses and the third group were 67 or 18.3% who worked for government organizations. The minority group was students who numbered 27 or 7.4%.

In terms of income, the majority of respondents, 154 or 42% earned incomes of between 10,001-20,000 baht per month. This was followed by 106 or 28% of respondents who earned between 20,001-30,000 baht per month. The minority group, 10 or 2.7% of respondents earned over Baht 50,000 per month.

6.2 The Major Research Question Posed in the Study

As this research study focused on investigating the relationship between various automobile attributes and brand decision of buyers of used cars in Bangkok, the major question that was posed was “*Do automobile attributes have an effect on the purchase evaluation of consumers buying used cars?*” In this study, nine automobile attributes (nine hypotheses), were tested to measure this relationship.

From the tests of hypotheses, it can be concluded that all nine automobile attributes do have an effect on the brand decision of consumers buying used cars in Bangkok.

Furthermore, the data analysis also showed that design and country of origin are the two most dominant attributes that had the most important effect on brand decision (See Table 6.1 below). This means that there is a distinct change in consumer behavior as compared to the past when most Thais bought cars by focusing on performance, price, durability, safety, fuel of consumption, after-sales service and comfort, more than on design or country of origin.

Table 6.1: Correlation Coefficients of Automobile Attributes and Correlation Level

Automobile Attributes	Correlation Coefficients	Correlation Level
1. Performance Quality	0.175	Weak positive correlation
2. Price	0.107	Weak positive correlation
3. Durability	0.135	Weak positive correlation
4. After-sales service	0.214	Weak positive correlation
5. Design	0.431	Moderate positive correlation
6. Fuel consumption	0.204	Weak positive correlation
7. Safety	0.144	Weak positive correlation
8. Comfort	0.202	Weak positive correlation
9. Country of origin	0.564	Moderate positive correlation

The table above shows significant correlations between automobile attributes and brand decision, with the two dominant attributes, i.e., design, and country of origin demonstrating moderate positive correlations. If however, the overall nine attributes are linked to brand decision, the correlation coefficient is 0.465, which falls in the moderate positive level (See Table 6.2 below).

Table 6.2: Correlation Coefficients of Nine Automobile Attributes and Brand Decision

Automobile Attributes	Correlation Coefficient	Correlation Level
Nine Automobile Attributes	0.465	Moderate positive correlation

Discussion:

Motor vehicle sales, once an index of the supercharged economic growth and rising affluence in Thailand, registered a sharp fall in 1997-8, especially in luxury sedans. However, six years later, it is now believed that the Thai economy is firmly on the path to recovery, with government stimulus measures helping spur consumer spending. An economic report published in the Bangkok Post stated that lower interest rates, regulatory support for the leasing industry, and the rapid growth of the user car auto segment would support business expansion through 2003 (Bangkok Post, Business Section, 3 December, 2002).

Chinprapinporn (2002) argued that title transfers for used cars now averaged around 70,000 to 80,000 units per month, more than double the number of new car registrations. He also argued that margins for leasing firms for used cars were also generally better than for new car financing. With new car prices starting at around 500,000 baht, many middle class buyers cannot afford them; used cars therefore represented a good option.

When discussing the findings of this study, it is not surprising that more used car buyers are male. Nonetheless, what is interesting to the researcher is the number of female buyers has increased considerably over the past two years, and is now slowly catching up with male buyers. That 20-30 year buyers form the majority of used car buyers, is also not surprising if one considers the recent economic recession, as well as the fact that younger

buyers in this age group are mostly on their first job after graduating. This group will generally buy second hand cars first, before investing in new cars. The income level of the majority of used car buyers fell in the Baht 10,000-20,000 level, and this figure can explain why used cars are affordable choices for this group, rather than new cars which require quite large sums for down-payment as well as monthly installments.

Research into purchasing patterns of automobiles indicates that it is not the objective features (tangible or technical attributes) themselves, but rather the subjective perception of these that determines consumer choice (McFadden, 1986). The findings of this study showed that respondents paid more attention to design and country of origin than the other seven other automobile attributes. This demonstrates that there exist differences in specificity among individual consumers.

Specificity may depend largely on how buyers discriminate between "essential" and "special need" in importance, in other words, needs and wants. If some buyers regard importance as meaning essential, then all requisite features of the cars, such as maximum speed, acceleration rate, horse power, and engine size become very important. On the other hand, if buyers perceive importance as a special need, then some features may not be anticipated. For example, if the used car buyer is interested in the country of origin of the brand (German for example), then the technical characteristics will not be important. When customers seek to purchase a product, they pay attention to whether the product will satisfy basic needs and desires in their lives.

The researcher believes that there exists a big difference between older and younger used car buyers. The relatively younger age of the respondents in this study might help

explain why design and country and origin were chosen as major attributes. Younger consumers are also more likely to access mass media, especially car magazines, which emphasize design and country of origin to attract buyers. Whereas older consumers still emphasize safety and durability, and expect high standards for both these attributes, it is not surprising to see younger buyers ask many questions on horsepower, racing features, and power steering. The researcher noticed a marked difference when parents accompanied their children, mostly students, to the tents to buy cars, and when the young consumers came on their own or with friends. In the former case, the parents inquired about safety and durability and the decision was made more in terms of these two attributes. From conversations with younger buyers, the researcher noted that they do not look for durability mainly because they perceived a second-hand car as something they would use for a few years and then trade in for a more updated model.

Country of Origin is another factor that Thai buyers have started to pay extra attention to. In a survey taken at the Annual Bangkok Motor Show last year, using a sample of 550 visitors, the majority perceived European cars as best, American made cars as second, Japanese cars third, with cars made in Korea, obtaining the lowest scores (The Nation, 29 April, 2002, p.8B).

Similar findings are evident in this study. The top scores were seen mostly for cars whose country of origin was Europe (Audi 5 (German); Benz 4.33 (German); with equal score of 4 observed in (Renault (France); Volkswagen (German); Chevrolet (USA); Chrysler (USA); and Subaru (Japan). Volvo, a car noted for its safety features scored very low on country of origin at 2.75, which might be explained by the fact that Volvo is not a popular

brand, especially for used cars, they are seen as having rather archaic designs, and are expensive in terms of spare parts and repair costs.

The car with the lowest score in terms of country of origin was Fiat - this brand was popular in the late 1970s and early 80s and has now almost disappeared from the Thai market. Only one Korean car was mentioned by respondents, Hyundai, which scored 3.17.

It is possible that an attitude can be developed based on prior information without experience, as when consumers develop preferences or biases for or against automobile brands based on the brands' image in the marketplace. This also depends largely on purchasing power of individual customers. Customers may have a favorable attitude toward some manufacturers' luxury cars, but may lack the ability due to insufficient purchasing power. Customers with low to medium income may still anticipate the quality of smaller cars, especially those of Japanese origin, as these cars are affordable to them. Japanese car makers, i.e., Toyota, Honda, and Nissan, try to develop their marketing research teams in order to collect useful information from customers. They know that people need something exciting in their lives, and they provide this excitement by changing car styles or designs often. Hence, we notice that these three car brands from Japan try to launch new car models once a year. The latest Vios from Toyota, new Honda city, and Sunny Neo from Nissan, are examples of such innovations. Besides, the cheaper maintenance, spare parts, and fuel consumption, make these models attractive to younger buyers.

For older Thai buyers, country of origin also implies trust. Most published studies on country of origin discover that country stereotypes have some impact on product evaluations and purchase decisions (Haubl, 1996). Among the new registrations of cars in Thailand

between 1995-2000, the sales figures show that Germany was the main country of origin. Audi, BMW, and Mercedes Benz are the luxury top brands in Thailand, with Mercedes Benz being traditionally more popular in Thailand. In fact, Thailand has been the country where Mercedes Benz has the largest market share outside Germany (MIRA, 2000:235).

Older buyers trust brands especially automobiles from Germany, such as Mercedes Benz, and BMW. They have different perception from younger buyers in terms of the prestige of the brand, its durability, and the fact that they are not variety-oriented consumers but rather brand-loyal ones. These older, affluent consumers are more oriented to fame and success and to preserve the status quo. Thus, they seek non-product related attributes (price, design, service, etc.) to ascribe symbolic benefits in order to display their social position, prestige, and status in Thai society. Only a radically improved or revolutionary product would entice such a conservative segment to alter their purchase intention. In this respect, Mercedes Benz highlights the uniqueness of association in social-material terms and has become the brand as icon of 'luxury, quality, and status' which self expresses the symbolic properties of 'luxury' in Thai society.

It is also a well-known fact in Thailand, that country of origin is important when buyers want to trade-in or upgrade their cars. Toyota, Honda, and Nissan, are among brands seen as fetching a good resale price by Thai consumers. The large number of buyers looking for second-hand cars of these three brands also makes it faster to dispose of one's old car.

Recommendations:

Different perceptions of used car brands are directly related to different types of customers because cognition, feelings, and responses of customers are organized into a set of 'patterned emotional reactions' (Markin, 1969). This may be due to differences described as demographic, geographic, psychographic, or lifestyle. Like other products, used car tents also need to focus on 'who buys' or 'type of customers' to segment their cars.

All car marketers need to respect the fact that people and society can change over time. In the early 1980s, consumers were not very knowledgeable about a number of products, especially automobiles, hence they did not know what to expect from products. In the 2000s, it is the era of 'value driven' customers and suppliers. Consumers are exposed to a great deal of mass media. Hence, consumers have become more experienced and their ability to distinguish between brands is sharpened. In this age of cut-throat competition between used car tents, media has become a tool to differentiate one marketer from the next. The myriad car magazines and websites that advertise used cars might be a useful tool for used car marketers to reach their audiences.

As mentioned earlier, many Thai consumers perceive attributes in a symbolic sense. Whereas prestige and status are the strength of brand association, some variables may be almost neglected by Thai customers. For example, performance and handling are not seen as necessary for Thai customers due to the environmental influences. Thailand has some of the world's most congested road networks in and around Bangkok, which accounts for over 10% of the country's population and is one of the most densely crowded cities in the world.

Consequently, it might be more useful for used car marketers to employ symbolic benefits in their promotional materials rather than merely functional benefits.

Finally, this study did not include buyers' evaluation of used car tents and sales personnel. It is common knowledge that trust is the implicit factor when people buy a used car and the reputation of the tent is also an important factor. For instance, when a person buys a car from a tent and the experience is good, he/she will tend to use the tent for a second car, the next time. It is important that this variable be put into the buying equation.

Suggestions for Further Research

This study only investigated significant relationship between various automobile attributes and brand decision of consumers buying used cars. However, there are still many interesting points that need investigation in the purchase stage, such as time decision, quantity decision and payment method decision. Therefore, further research should be aimed at these issues.

It might also be useful to link lifestyle research, i.e., VALS typology to match customers with brands. For example, in the US, the need-driven (11% of the population) purchase used cars. This allows marketers to communicate more effectively with core customers and leads to efforts to position used cars based on lifestyle segments, rather than only using demographics as a base.

Finally, this study focused only on used cars. Future research should investigate other types of second hand products such as homes, motorcycles, mobile phones, and other accessories, in order to study the attributes that impact the buying decisions for such products.

Further studies also need to be conducted on different brands of used cars and their utility after consumers have purchased them from used car tents. Most studies concentrate only on new cars and after sales service, however there needs to be similar studies conducted on used cars as well.



Bibliography

- Anderson, G. (1996), *Fundamentals of Education Research*, pp. 202.
- Anonymous; (1991-1992), *Used Cars in Japan: Young Bangers*, *Economist*; Dec 21, 1991-Jan 3, 1992: Vol: 321, No: 7738; pp. 85-87.
- Assael, Henry (1998), *"Consumer behavior and marketing action"*, Sixth edition, New York, South-Western College Publishing, p. 266-274.
- Beatty, S. E., & Smith, S. (1987), *"External Search Effort: An Investigation Across Several Product Categories,"* *Journal of Consumer Research* 14, pp. 83-95.
- Becker S.A., & Cunningham Barbara C., *Why would I buy from you*, [www. kcsmallbiz.com](http://www.kcsmallbiz.com).
- Bettman, J. R., & Park, C. W. (1980), *"Effects of Prior Knowledge and Experience and Phase of Choice Process on Consumer Decision Processes: A Protocol Analysis,"* *Journal of Consumer Research* 7, pp. 234-48.
- Bob, S. *Buying used VS. New: Woman Motorist used car buying guide*, www.womanmotorist.com.
- Boulding, W., & Purohit, D. (1996), *The Price of Safety*, *Journal of Consumer Research*, Vol.23, June, pp. 12-25.
- Brim, O. (1962), *Personality and Decision Processes* (Stanford, Calif.: Stanford University Press).
- Chad, R. (1996), *"Buying a car: What a pain"*, *Marketing News*, Vol: 30, No: 7, Mar 25, 1996, pp.4.
- Chandarapratin, S. (1995), *Country of Origin Effects on Product Evaluation and Decision Process: an Integrative Framework*, *สุทธิปริทัศน์*, Vol. 9, No. 27, pp. 93-104.
- Celsi, R. L., & Olson, J. C. (1988), *"The Role of Involvement in Attention and Comprehension Processes,"* *Journal of Consumer Research* 15, pp. 210-224.
- Chinprapinporn, V.(2002) Ratchathani to hold IPO next week, Bangkok Post, Business, 3 December, 2002.
- Cobb, C. J., & Hoyer, W. D. (fall 1985), *"Direct Observation of Search Behavior,"* *Psychology Marketing* 2, pp. 161-79.
- Cooper, D. R., & Schindler, P. S. (2000), *Business research methods*, Seventh edition, McGraw-Hill, Inc., pp. 411, 513-533, 552-553.
- Cummings, W. H., & Venkatesan, M. (1975), *"Cognitive Dissonance and Consumer Behavior: A Review of the Evidence."* In Mary Jane Schlinger, ed., *Advances in Consumer Research*, Vol. 2 (Ann Arbor: Association for Consumer Research), pp. 21-31.

- Dauids, M. (1997), Journal of Business Strategy, Jul/Aug 1997, Vol: 18, No: 4, pp. 22-28.
- Dhruv, G. (1995), *Product Quality Expectations: Towards an Understanding of Their Antecedents and Consequences*, Journal of Business and Psychology, Vol. 9, 3 (Spring).
- Dickson, P. R., & Sawyer, A. G. (1990), "*The Price Knowledge and Search of Supermarket Shoppers*," Journal of Marketing 54, pp. 42-53.
- Dover, P. A., & Olsen, J. C. (1997) "*Dynamic Changes in an Expectancy-Value Attitude Model as a Function of Multiple Exposures to Product Information*," in Barnett A. Greenberg and Danny N. Bellenger (eds.), Contemporary Marketing Thought (Chicago: American Marketing Association), pp. 455-60.
- Edgerton, Jerry (1995), "*Getting a great deal in today's market*", Money ; Mar 1995, Vol: 24, No: 3, pp. 140-142.
- Eisenberg, Bryan (2001), *Buying: The Flip Side of Selling*, www.clickz.com.
- Evans, J. R., & Berman, B. (1992), Marketing, Fifth Edition, U.S.A: Macmillan Publishing Company, pp. 155-162.
- Fost, D. (1998), "*How To Think About the Future*," American Demographics, pp. 6-11.
- Formula Magazine*, February 2002, pp. 76-77.
- Gensch, D., & Javalgi, R. G. (1987), "*The Influence of Involvement on Disaggregate Attribute Choice Models*," Journal of Consumer Research 14, pp. 71-82
- Greenleaf, E. A., & Lehmann, D. R. (1995), "*Reasons for Substantial Delay in Consumer Decision Making*," Journal of Consumer Research 22, pp. 186-199.
- "*Families Have Changed But Tupperware Keeps Holding Its Parties*," The Wall Street Journal (1992), pp. A1, A4.
- Haubl, G. (1996) *A cross-national investigation of the effects of country of origin and brand name on the evaluation of a new car*. International Marketing Review, 13, 5, p. 76-97.
- Hennessy, J. (1992), *Global Marketing Strategies*, Second Edition, pp. 96.
- Hong, S.T. and Wyer, R.S. Jr. (1989), *Effects of Country of Origin and Product Attribute Information on Product Evaluation: An Information Processing Perspective*, Journal of Consumer Research, Vol. 16, No. 2, pp. 175-187.
- Houston, M. J., & Rothschild, M. L. (1978), "*Conceptual and Methodological Perspectives on Involvement*." In Subhash C. Jain, ed., 1978 Educators' Proceedings (Chicago: American Marketing Association), pp. 184-187.
- IRVINE (2001), *Opinion Research Poll Illuminates Marded Shift in Futomotive Consumer Priorities Toward Research, Fuel Economy and Safety*, www.findarticles.com.

- Jacoby, J. (1975), "**Pre-Purchase Information Acquisition.**" In Beverlee B. Anderson, ed., *Advances in Consumer Research*, Vol. 3 (Atlanta: Association for Consumer Research), pp. 306-314.
- Jacoby, J., Chestnut, W., & Fisher, W. (1978), "**A Behavioral Process Approach to Information Acquisition in Nondurable Purchasing,**" *Journal of Marketing Research* 15, pp. 532-44.
- Johansson, J.K. (2000), *Global Marketing: Foreign Entry, Local Marketing, Global Management*, Second Edition, Mc Graw Hill, pp. 38-39, 356.
- Kapferer, J. N. & Laurent, G. (1985-1986), "**Consumer Involvement Profiles: A New Practical Approach to Consumer Involvement,**" *Journal of Advertising Research* 25, pp. 48-56.
- Keating, Peter (2001), "**The new used car**", *Money*, Dec 2001, Vol: 30, No: 13, pp. 194-196.
- Klewin, Bill (2001), "**Used cars are fueling auto-loan portfolios this year**", *Credit Union Magazine*, Oct 2001, Vol: 67, No: 10, pp. 62.
- Kotler, Philip (1997), *Marketing Management: Analysis, Planning, Implementation, Control*, Ninth edition, New Jersey: Prentice-Hall, Inc., pp. 192-198.
- Krungthebturakit Newspaper (หนังสือพิมพ์กรุงเทพธุรกิจ), (2001, December 25).
- Laurent, G., & Kapferer, J. N. (1985), "**Measuring Consumer Involvement Profiles,**" *Journal of Marketing Research* 22, pp. 41-53.
- Lavidge, R., & Steiner, G. A. (1961), "**A Model for Predictive Measurements of Advertising Effectiveness,**" *Journal of Marketing* 25, pp. 59-62.
- Markin, r. (1969) *The Psychology of Consumer Behavior*. New Jersey: Prentice-Hall.
- Maslow, A. H. (1954), *Motivation and Personality* (New York: Harper & Row).
- Mason, J.B. & Hazel, F.E. (1987), *Marketing: Principle and Strategy*, Business Publication Inc., p. 358.
- McEachem, Carla & Nykamp, M. (2000), *Customer Relationship Report: Understanding the customer experience cycle*, www.datawarehouse.com.
- McFadden, D. (1986), *The choice theory approach to market research*, *Marketing Science*, 5, 4, p. 275-297.
- Midgley, D. F. (1983), "**Patterns of Interpersonal Information Seeking for the Purchase of a Symbolic Product,**" *Journal of Marketing Research* 20, pp. 74-83
- Moore, W. L., & Lehmann, D. R. (1980), "**Individual Differences in Search Behavior for a Nondurable,**" *Journal of Consumer Research* 7, pp. 296-307.

Motor Industry and Research Association (MIRA) (2001), *The Emerging Asian Auto Markets*, UK: Hobbs The Printers, p. 325-333.

Mowen, C.J. & Minor, M. (1998), *Consumer Behavior*, Fifth Edition, New Jersey: Prentice-Hall Int. Inc.

Nagashima, A. (1970), *A comparison of Japanese and U.S. Attitudes Toward Foreign Products*, Journal of Marketing, Vol. 34, January, pp. 68-74.

Nebenzahl, I. D., Jaffe, E. D., & Shlomo, L. I. (1997), *Towards a Theory of Country Image Effect on Product Evaluation*, Management International Review, Vol.37, No.1, pp. 27-49.

Nessim H., Woaniak, R. (2000), *Consumer behavior: an applied approach*, Prentice Hall. Upper Saddle River, new Jersey.

Newman, J. W., & Staelin, R. (1972), *"Prepurchase Information Seeking for New Cars and Major Household Appliances,"* Journal of Marketing Research 9, pp. 249-257.

Polkuamdee, N. (2002) Ratchathani to hold IPO next week, Bangkok Post, Business, 3 December, 2002.

Pornprasertsakul, Ampai (1981), *Consumers' Perception toward car models in Thailand*, Thesis for the Degree of Master of Science, Asian Institute of Technology.

Prachachatturakit Newspaper, (ประชาชาติธุรกิจ), (2001, February 29).

Ray, M. L. (1973), *"Marketing Communication and the Hierarchy of Effects."* In P. Clarke, ed., *New Models for Mass Communication Research* (Beverly Hills, Calif.: Sage Publications), pp. 147-175.

Reed, Philip (2002), *Car refinancing, auto loans at Edmunds*, www.edmunds.com.

Reed, Philip & DiPietro, John (2001), *How to get a used car bargain: Part Two: Locating and Test-Driving Your Target Cars*, www.edmunds.com.

Robbins, Steven (2002), *Determining Your Competition*, www.celcee.edu/newadd/c20021169.html.

Robertson, T. S. (1976), *"Low-Commitment Consumer Behavior,"* Journal of Advertising Research 16, p. 20.

Roth, M.S. and Romeo, J.B. (1992), *Matching Product Category and Country Image Perceptions: A Framework for Managing Country of Origin Effects*, Journal of International Consumer Marketing, Vol. 23, No. 3, pp. 477-497.

Sauer, P.L. Yong, M.A., & Unnava, H.R. (1991), *An Experimental Investigation of the Processes Behind the Country of Origin Effect*, Journal of International Consumer Marketing, Vol.3, No.2, pp. 29-59.

Schiffman, L. G., & Kanuk, L. (1978), *Consumer Behavior* (Englewood Cliffs, N.J.: Prentice Hall), pp. 150-154.

Sermasaksasithon, Chumpol (2000), *Factors Considered by Consumers in Car Purchase*, Thesis for the degree of Master of Arts, NIDA.

Sheth, J. N., Banwari, M., Newman, B. (1998), *Customer Behavior: Consumer behavior and beyond*, The Dryden Press, pp. 520-554.

Siamturakit Newspaper, (สยามธุรกิจ), (2001, December 17).

Sproles, E. K., & Sproles, G. B. (1990), "*Consumer Decision Making Styles as a Function of Individual Learning Styles*," The Journal of Consumer Affairs 24, No.1, p. 145.

Srikantharajah, Balasubramaniam (1994), *The Analysis of Automobile Ownership Behavior of Household in Bangkok*, Thesis for the Degree of Master of Business Administration, Asian Institute of Technology, p.34.

Teepapal, Piboon (1991), *Marketing*, Bangkok, Yellow Publishing.

Thai Autobiz Magazine, January 28, 2003, pp. 22-28.

Thai Rath Newspaper, (หนังสือพิมพ์ไทยรัฐ), (2002, January 1-5).

The Annual Bangkok Motor Show-an Update. The Nation, 29 April, 2002, p.8.

Venkatesan, M. (1973), "*Cognitive Consistency and Novelty Seeking*." In Scott Ward and Thomas S. Robertson, eds., *Consumer Behavior: Theoretical Sources* (Engelwood Cliffs, N.J.: Prentice-Hall), pp. 354-358

Vinson, D., Scott, J. E., & Lamont, L. M. (1997), "*The Role of Personal Values in Marketing and Consumer Behavior*," Journal of Marketing 41, pp. 44-50.

Wilkie, W. L., & Pessemier, E. A. (1973), "*Issues in Marketing's Use of Multi-Attribute Attitude Models*," Journal of Marketing Research 10, pp. 435-438.

Zaichowsky, J. L., & Sood, J. H. (1988), "*A Global Look at Consumer Involvement and Use of Products*," International Marketing Review 6, pp. 20-34.

Zikmund, G. William (1997), *Business Research Methods*, Fifth Edition, The Dryden Press: Harcourt Brace College Publishers.

http://members.tripod.com/e_r_/intro/thesis1.html

<http://dictionary.cambridge.org>

ขนาดของตลาดรถมือสอง, www.Taladrod.com

Appendix



Perception of respondent in each brand at the strongly agree & undecided stage

Brand	Automobile Attributes	Mean	Rating
1. Mitsubishi	- Price	4.2188	SA
	- Durability	4.3659	SA
2. Nissan	- Price	4.2500	SA
	- Durability	4.2727	SA
	- Level of fuel consumption	4.4242	SA
3. Honda	- Price	4.2778	SA
	- Safety	4.2654	SA
	- Level of fuel consumption	4.3580	SA
4. Volvo	- Price	4.2813	SA
	- Safety	4.5000	SA
	- Comfort	4.4375	SA
	- Country of origin	2.7500	UND
5. Mazda	- Price	4.2500	SA
	- Level of fuel consumption	4.2000	SA
	- Style	3.1000	UND
6. Audi	- Safety	4.3333	SA
	- Level of fuel consumption	3.3333	UND
7. Toyota	- Price	4.3879	SA
	- Safety	4.4722	SA
	- Level of fuel consumption	4.4128	SA
	- Country of origin	3.5046	UND
8. Isuzu	- Price	4.3235	SA
	- Durability	4.2000	SA
	- Safety	4.2429	SA
	- Comfort	4.2000	SA
	- Level of fuel consumption	4.3714	SA
9. Subaru	- Performance quality	5.0000	SA
	- Price	4.2500	SA

	- After-sales service	4.3333	SA
	- Comfort	4.5000	SA
	- Style	4.5000	SA
10. Chrysler	- Price	4.2500	SA
	- After-sales service	4.3333	SA
	- Comfort	4.5000	SA
	- Level of fuel consumption	5.0000	SA
	- Performance quality	3.0000	UND
11. BMW	- Price	4.3214	SA
	- Durability	4.2143	SA
	- Style	4.2857	SA
	- Comfort	4.5000	SA
12. Renold	- Price	4.2500	SA
	- Durability	5.0000	SA
	- After-sales service	4.3333	SA
13. Benz	- Durability	4.6667	SA
	- After-sales service	4.3333	SA
	- Style	4.3333	SA
	- Comfort	4.6667	SA
	- Country of origin	4.3333	SA
	- Level of fuel consumption	4.3333	SA
14. Hyundai	- Price	4.4583	SA
	- Durability	4.2500	SA
	- Safety	4.2500	SA
	- Level of fuel consumption	4.6667	SA
	- Country of origin	3.1667	UND
15. Volkswagen	- Performance quality	4.3333	SA
	- Durability	4.5000	SA
	- After-sales service	4.3333	SA
	- Safety	5.0000	SA
	- Level of fuel consumption	5.0000	SA
16. Suzuki	- Durability	4.2500	SA
	- After-sales service	3.1667	UND

	- Style	3.2500	UND
	- Country of origin	3.0000	UND
17. Fiat	- Price	4.5000	SA
	- After-sales service	5.0000	SA
	- Level of fuel consumption	5.0000	SA
18. Peugeot	- Durability	4.3000	SA
	- Safety	4.2000	SA
	- Comfort	4.2000	SA
	- Level of fuel consumption	4.2000	SA
19. Opel	- Price	4.2500	SA
	- After-sales service	4.3333	SA
	- Safety	4.5000	SA
	- Country of origin	5.0000	SA
	- Level of fuel consumption	5.0000	SA
	- Style	3.0000	UND
20. Ford	- Price	4.3333	SA
	- Durability	4.3333	SA
	- Safety	4.2500	SA
21. KIA	- Durability	4.2500	SA
	- Style	4.5000	SA
	- Level of fuel consumption	4.5000	SA
	- Country of origin	3.0000	UND
22. Chevrolet	- Price	4.2500	SA
	- Durability	5.0000	SA
	- After-sales service	4.6667	SA
	- Safety	5.0000	SA
	- Comfort	4.5000	SA

Questionnaire

Dear Madam/Sir,

I am Ms. Prapassorn Somnaitham, a MBA student of Assumption University, Bangkok. I am doing this research is a part of my marketing program.

The following questionnaire was design to obtain the information on “A study of Factor that affects to a customer decision who purchases a used car”. This questionnaire, was developed to collect the information to prove the hypothesis of the research study, I request you to extend your full cooperation in responding to all items in this questionnaire.

Thank you very much
Prapassorn S.

Please answer questions A and B first and read the instruction below carefully.

Instruction:

If the answer of question is “NO”, please return this questionnaire. But if the answer of is “YES”, please answer all the four following parts.

Thank you very much

Question : Have you ever bought a used car within 6 months?

_____ Yes

_____ No

PART 1

1. Please write the brand and country of origin of the used car that you have bought or participated in buying (for people who have bought or participated more than in one brand, please select only one brand that you usually use at present).

Brand of car _____

Country of origin of car _____ Europe _____ America _____ Japan _____ others

PART 2: Automobile Attributes

Questions 2-10, Please put "x" on the answer that is most applicable to your case

2. Performance quality

2.1 **Acceleration** is one important factor that you consider when buying a used car

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
[1]	[2]	[3]	[4]	[5]

2.2 **Maximum speed** is one important factor that you consider when buying a used car

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
[1]	[2]	[3]	[4]	[5]

2.3 **Driving system** is one important factor that you consider when buying a used car

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
[1]	[2]	[3]	[4]	[5]

2.4 **Horse power** is one important factor that you consider when buying a used car

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
[1]	[2]	[3]	[4]	[5]

3. Price

3.1 How do you consider **price of used car** as a factor when deciding to buy a used car

Not Important at all	Not Important	Neutral	Important	Very Important
[1]	[2]	[3]	[4]	[5]

3.2 What do you think about the importance of **interest rate financing** when considering buying a used car?

Not Important at all	Not Important	Neutral	Important	Very Important
[1]	[2]	[3]	[4]	[5]

3.3 What do you think about the importance of **repair and maintenance cost** when considering buying a used car?

Not Important at all	Not Important	Neutral	Important	Very Important
[1]	[2]	[3]	[4]	[5]

3.4 What do you think about the importance of **spare parts cost** when considering buying a used car?

Not Important at all	Not Important	Neutral	Important	Very Important
[1]	[2]	[3]	[4]	[5]

4. Durability

4.1 **Operational life usage under natural condition** is one factor that you consider when buying a used car?

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
[1]	[2]	[3]	[4]	[5]

4.2 **Operational life usage under stressful condition such as driving during heavy rain or on rugged road**, is one factor that you consider when buying a used car?

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
[1]	[2]	[3]	[4]	[5]

5. After-sales service

5.1 Is it important for you to buy a used car brand that has reliable **warranty fulfillment**?

Not Important at all	Not Important	Neutral	Important	Very Important
[1]	[2]	[3]	[4]	[5]

5.2 **The ease in finding spare parts** is one factor that you consider when buying a used car

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
[1]	[2]	[3]	[4]	[5]

5.3 You consider **responsiveness and courtesy of service provider** along with other factors when you decide to buy a used car.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
[1]	[2]	[3]	[4]	[5]

6. Style

6.1 You prefer to buy a car that looks **luxurious**.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
[1]	[2]	[3]	[4]	[5]

6.2 What do you think about the importance of **beauty and attractiveness of exterior design** combined with other factors when you decide to buy a use car?

Not Important at all	Not Important	Neutral	Important	Very Important
[1]	[2]	[3]	[4]	[5]

7. Level of fuel consumption

7.1 Is it important for you that the car you buy should have less level of fuel consumption (high ratio of kilometer per litre)?

Not Important at all	Not Important	Neutral	Important	Very Important
[1]	[2]	[3]	[4]	[5]

8. Safety

8.1 Does **equipment for preventive safety**, (increase driver ability to avoid an accident) such as anti-lock brakes, important for you when considering buying a used car?

Not Important at all	Not Important	Neutral	Important	Very Important
[1]	[2]	[3]	[4]	[5]

8.2 Does **equipment for crisis safety**, (protection against injury or death) such as front/side airbags or safety belt, important for you when considering buying a used car?

Not Important at all	Not Important	Neutral	Important	Very Important
[1]	[2]	[3]	[4]	[5]

9. Comfort

9.1 Do you think that systems helping **driving comfort** such as Automatic transmission, or Suspension systems are important for you when considering buying a used car?

Not Important at all	Not Important	Neutral	Important	Very Important
[1]	[2]	[3]	[4]	[5]

9.2 How important are **comfortable seat/passenger room** to you when considering buying a used car?

Not Important at all	Not Important	Neutral	Important	Very Important
[1]	[2]	[3]	[4]	[5]

10. Country of origin

10.1 To what extent is the importance of the term "**Country of Origin**" to you when considering buying a used car?

Not at all	Slightly	Somewhat	Very	Extremely
[1]	[2]	[3]	[4]	[5]

PART 3

11. Brand

11.1 What do you think about the importance of **brand name** when considering buying a used car?

Not Important at all	Not Important	Neutral	Important	Very Important
[1]	[2]	[3]	[4]	[5]

11.2 You always consider **symbol** or characteristic of brand such as Volvo "Safety" and Mercedes Benz "Prestige", along with other factors when you decide to buy a used car.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
[1]	[2]	[3]	[4]	[5]

PART 4: Personal Data

1. What is your Gender?

_____ Male

_____ Female

2. How old are you?

_____ Lower than 20 years old

_____ 20-30 years old

_____ 31-40 years old

_____ 41-50 years old

_____ 51-60 years old

_____ 61 or above

3. Status

_____ Single

_____ Married

_____ Divorced

4. What is your monthly salary?

_____ 0-10,000 baht

_____ 10,001-20,000 baht

_____ 20,001- 30,000 baht

_____ 30,001-40,000 baht

_____ 40,001-50,000 baht

_____ Over 50,001 baht

5. What is your education background?

_____ Lower than high school

_____ High school/College

_____ Bachelor Degree

_____ Master Degree

_____ Doctoral Degree

_____ Others _____

-----Thank you for your cooperation-----

St. Gabriel's Library, Au

