



DEMOGRAPHIC AND ATTITUDINAL DIFFERENCES BETWEEN  
BANGKOKIANS ACTIVE AND INACTIVE CREDIT CARDHOLDERS

By

TRAN TRONG NGHIA

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

October 2004

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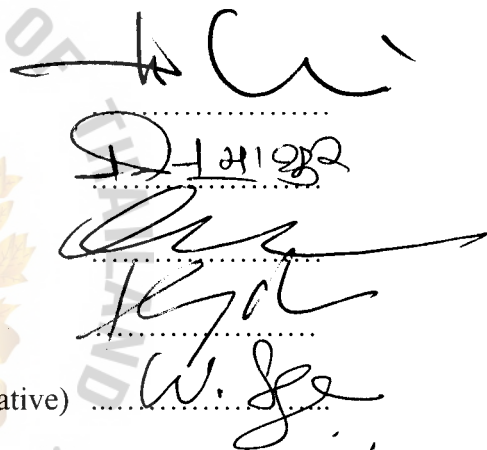
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Bangkok, 01 November, 2004

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## **Abstract of Research**

The study surveyed 310 respondents at several major shopping malls around Bangkok. It is aimed to examine the demographic and attitudinal differences between inactive and active bank credit cardholders in Bangkok. By focusing on relevant attributes that have been identified, it is believed that credit card issuing banks can position themselves effectively via their marketing strategies to activate their existing cardholders' usage rate as well as to attract new active cardholders. Ten important attributes were used to measure credit cardholders' attitude. These attributes include acceptance level, credit limit, interest-free repayment period, annual fee, handling of cardholders' complaints, ease of bill payment, issuing bank image, gift/bonus to new applicants, card design, and advertising by the issuing bank.

Large credit limit, design of the card, ease of bill payment, free annual fee, long interest free repayment period, attractive incentive to credit card users and effective handling of cardholders' complaints were found to be the most important attributes that influenced cardholders' attitudes in distinguishing active from inactive cardholders. Gender, income and occupational levels are found to be related to the credit card usage level of cardholders. Based on the results of the study, several recommendations are suggested to credit card issuing banks for their marketing and business strategies plan.

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# **Chapter 1**

## **Introduction**

### **1.1 Background of the Study**

The importance of credit cards, both as a payment instrument and short-term financing medium to today's consumers, is no longer debatable (Chakravorti and Emmons, 2003; Chakravorti and To, 2003) despite it has been considered as the most expensive instrument of all the available payment means (Lietaer, 2002).

Credit card has been integrated into Thai people's daily life, especially of the new generation with higher income. Thai consumers are increasingly turning to credit cards as tools for leveraging their purchasing power (Global Consumption Trends, 2003). At the end of 2003, a total of 4.2 million credit cards were in circulation, 3.39 of which issued by Thai commercial banks, up 23% from the year before. Outstanding credit card loans were 76.2 billion baht, up 31% from the previous year (Darana, 2004b). The credit card business in Thailand appears to get more intensely competitive with more credit issuers, bank and non-bank, are now entering the fray.

Along with the momentous growth within financial cards in Thailand, particularly for credit and debit cards in 2003, the issue of credit risk has also been raised as a possible negative repercussion of increased card circulation. The situation became worrisome enough for the government to issue several new regulatory measures that have also intensified the competitive pressure among financial card issuers to become sustainable and profitable player.

Credit card issuers are labouring in an environment of rising delinquencies, possible interest rate increases, strong price competition, likely industry consolidation, and heightened regulatory demands. These forces are generating strong pressure for finding the better way of achieving the profitable growth rate. In view of this

intensifying competition, existing issuers have to fine-tune their marketing efforts should they wish to maintain their previous growth records. In this respect, issuers first need to explore new niches and continue converting non-cardholders into cardholders and change inactive users to active users.

There are several researchers to study about the attitude of credit cardholders in line with their usage and acceptance of credit card (Kaynak and Harcar, 2001; Chien and Devany, 2001; Warwick and Mansfield, 2000; Chan, 1997; Kara *et al.*, 1994; Crook *et al.*, 1992; Brobeck, 1992). However, it is difficult to find related published studies which focus specifically on identify the attitude of “active users” and “inactive user”, especially study supported by evidence from Thailand. These issues form the core of the study.

## **Overview of credit card market in Thailand**

### **1.1.1 Number of Cards**

During pre-crisis period, number of credit cards increased from 1.4 millions in 1993 to 1.9 millions in 1995 and peaked at 2.0 millions in 1997 with 111 billion Baht total spending of Thai people. By the end of 1997, outstanding credits were 45.5 billion Baht. However number of credit cards declined during 1998 – 1999 with 2.19 millions at January 1998 declined to 1.63 millions at December 1999, and started to pick up to 1.77 millions at December 2000 (Bank of Thailand, 2004a; NESDB, 2002).

There has been strong growth in the number of credit cards in circulation in Thailand over the last two years; however this growth is occurring off a relatively low base as shown in Figure 1-1 (Bank of Thailand, 2004a). At the end of 2003, the total amount of credit cards in use was 6.7 million, with 4.2 million issued by banks and 2.5 by non-banks (Parista, 2004).

During Q4 2003, on average one in every 4.4 Thai households had a credit card compared with one in every 6.9 Thai households two years ago (National Statistical Office of Thailand Q4, 2003).

Visa brand credit cards accounted for 81% of credit cards in Thailand as at the end of Q4, 2003 (Visa International, 2004).

### **1.1.2 Number of accounts**

Credit cardholders typically manage their credit card spend and debt on an account rather than on a card basis. A credit account is set up in order to record the value and date of credit card transactions, details about the merchant who has accepted the credit card transaction, the value of the outstanding balance, and any financial charges imposed on holders of the account.

There is no published data about account level from Bank of Thailand for the overall credit card market. Visa collects information about the number of Visa credit card account as well as the number of cards in circulation. The number of Visa credit accounts increased by 23% to 3.22 million in the year to Q4, 2003, on average there were 1.06 Visa credit cards in circulation per account as shown in Figure 1-2 (Visa International, 2004).

### **1.1.3 Credit card use in Thailand**

The increase in credit card use reflects some fundamental changes in shopping habits. Foremost among these is a shift from buying in local “mom and pop” stores to regional hypermarkets. Hungry for imported consumer goods, Thais find that they are best able to leverage their earnings by seeking discounts at hypermarkets and paying with their credit cards.

There has been strong growth in the frequency of credit card use in Thailand in terms of the number of credit card transactions. As the Bank of Thailand did not



report national transaction data, Visa data only was used to draw in the Figure 1-3. It is reported that while Visa credit card transaction increased by 18.6% during the year to Q4 2003 to 26.8 million, the average number of transactions per Visa account fell by 3.4% (Visa International, 2004).

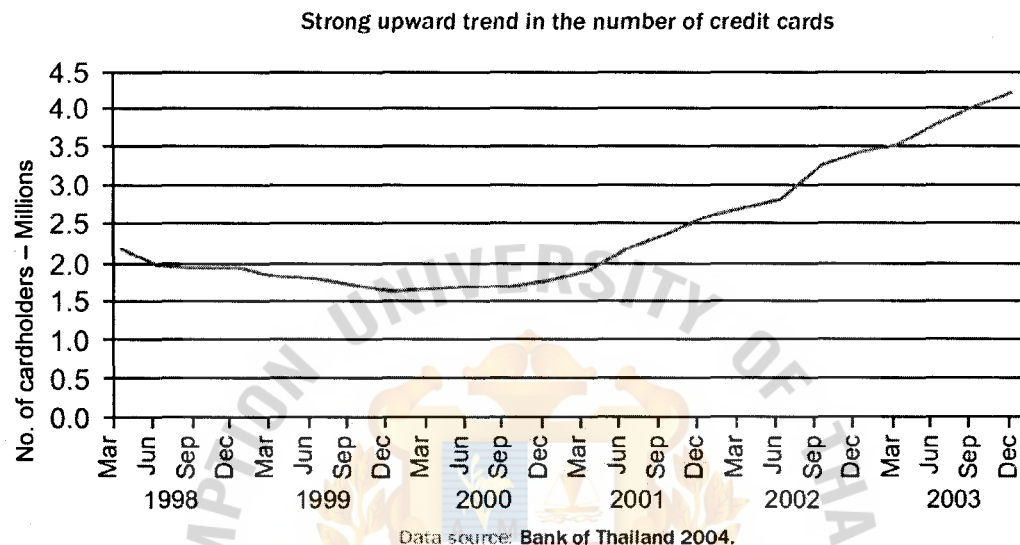


Figure 1-1: Number of Credit Cards in Thailand

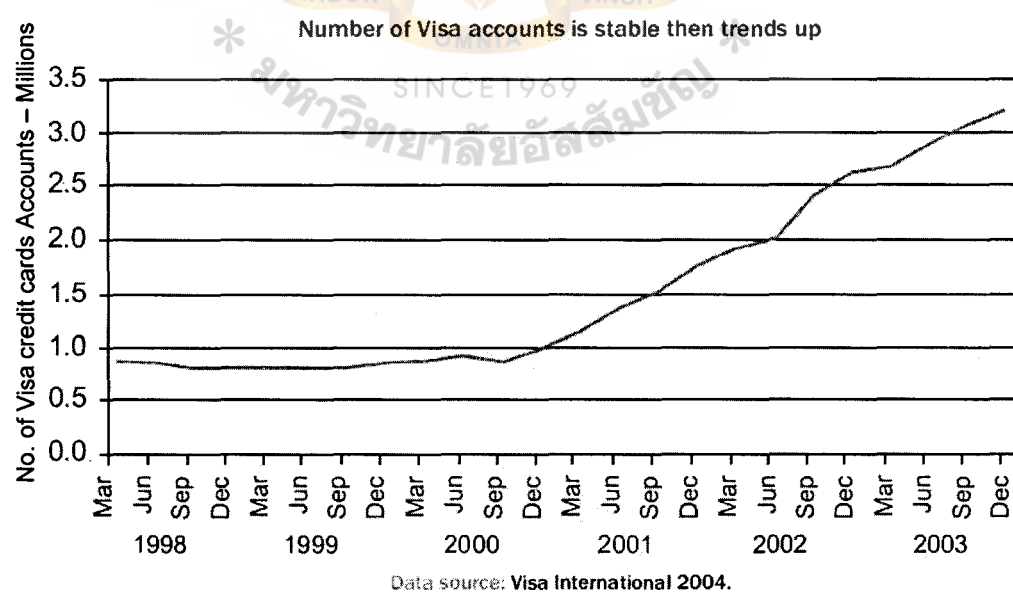
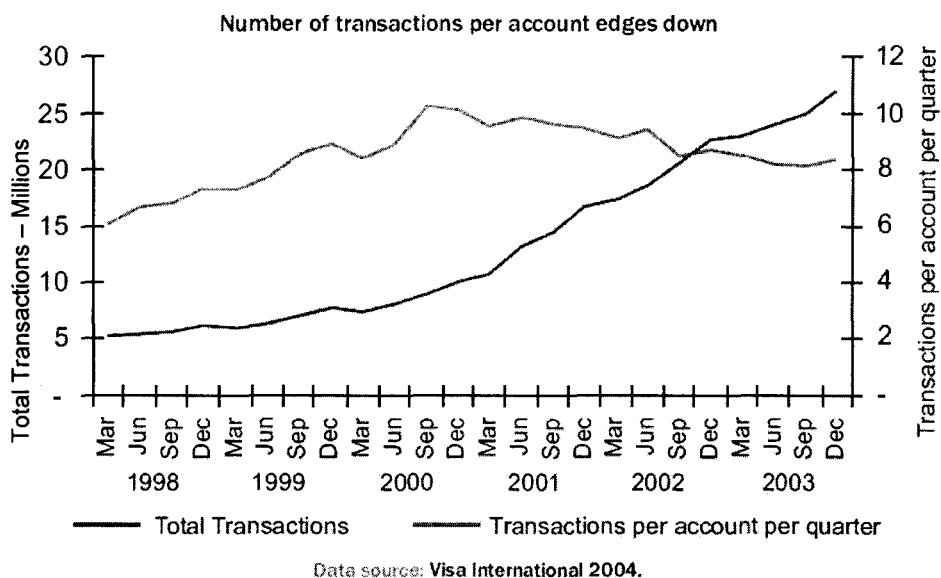


Figure 1-2: Number of Visa Credit Cards account in Thailand



**Figure 1-3: Visa Credit Cards accounts per quarter**

#### **1.1.4 Regulatory control by BOT increases competitive pressure**

In 2002, the minimum income restriction to obtain a credit card in Thailand was relaxed to a monthly income of Bt 7,500 (USD 182), down from the initial income threshold of Bt 15,000 (USD 364). This has led to a drastic increase in the number of consumers who are eligible for credit card ownership. Double-digit growth in the credit card market, spurred by economic growth and low interest rates since the economy exploded into life in 2003, has raised fears of a potential consumer credit bubble among some analysts.

The Bank of Thailand has been again selectively tightening regulations in recent months to help curb overspending, particularly at the lower end of the market. This measure will help slow more wasteful consumer spending, protect consumers from incurring mounting debt and protect credit card issuers. On March 29, 2004 the central bank put in place the regulations as follows:

- (1) Cardholder must earn Bt 15,000 (USD 364) monthly or Bt 180,000 (USD 4369) annually otherwise the person must have regular cash flows for at least six months consecutively.

- (2) The minimum monthly payments are also lifted from 5% to 10% of outstanding debt. This new minimum payments requirement will be immediately effective for new subscriber and will be applied to existing cardholders by 2007.
- (3) The outstanding limits must not be higher than five times' monthly income or cash flow. This is immediately effective for new subscriber, whereas existing cardholders will have one more year to prepare themselves.
- (4) The new rules also said the cards of those who failed to pay the required amount three months in a row must be canceled by the card issuers.
- (5) From now on card issuers can only make their selling to potential customers between 8am – 8pm on weekdays and 8am to 6pm on weekends and holidays; and they can offer some gifts, which is a popular marketing strategy, to their customers only after the customers have already used the card in one credit period.
- (6) However, the new rules still allow card renewal for existing cardholders with income less than the requirements if they appeared to have a good payment record.

With this new imposition, competitive pressures among existing industry players has increased radically, as a level-playing field has been created for all issuers. The tightened rules on credit card would limit credit access of low income people. Credit card issuers have no a free hand to do anymore. They have now been stopped short in a fierce battle for months to lure consumers with new promotions, retailer tie-ins, fee discounts and loyalty points programmes.

These factors prompt the Thai bank card issuers to finding the new ways to draw more revenue from existing card users.

## 1.2 Statement of the Problem

Credit card issuers are labouring in an environment of rising delinquencies, possible interest rate increases, strong price competition, likely industry consolidation, restrained by government's regulation in acquiring new customers and changing consumer demographics and attitudes.

These forces are generating strong pressure for finding the better way of achieving the profitable growth rate, innovative with the credit card products it offers. In this respect, card issuers thus need more effective means to retain customers and explore new ways to sell multiple products. They explore new niches and continue converting non-cardholders into cardholders and in particular for the existing customers they need to stimulate inactive users to active users. More than ever the information about cardholders' attitudes toward credit card and demographic factors that affect to their usage of cards has become very important to marketing managers. Once card issuers know more about their customer, differentiated services through targeted marketing can be provided and their high-value customers can be retained and remain profitable. Those have formed the core for directing of the present study in which the following question is raised:

**What are the differences between active and inactive cardholders in terms of demographic and attitudinal perspective?**

## 1.3 Research Objectives

The objectives of the thesis are to serve as a working guideline in order to identify criteria that help credit card issuer to understand more about his cardholders. Its intention is to

- (1) examine the demographic characteristics difference between inactive and active credit cardholders based on their usage level; and

(2) examine the attitudinal differences between inactive and active credit cardholders based on their usage level.

#### **1.4 Research Scope**

The research is looking at the demographic, attitude towards credit card and credit card usage of the bank cardholders who are Bangkok resident.

The demographic and attitude of cardholders that make the difference between active or inactive cardholders will be examined. The study will identify the most influenced attribute on the difference between these twos.

Data was collected on the first week of September, 2004. The collected duration was five days.

#### **1.5 Limitation**

The focused group of research is Bangkok residents collected from several main shopping malls in Bangkok area. The implication for the result may refer only to the communities which are similar to demographic pattern as discussed in the later chapter. The result of examination may not represent for more general population.

The figure of credit card usage which was used to identify “active cardholder” and “inactive cardholder” was based on the reference from one bank card issuer only not from the entire credit card industry.

The “active cardholders” perspective is measured as single dimensions. It is not classified more into “non-interest paying card holders” and “interest paying card holders” as in the study of Hamilton and Khan (2001).

This research is also limited at identifying the demographic and attitude of a general “active cardholder” not of “the most profitable cardholders to the card issuers” as proposed by Hamilton and Khan (2001)



The study also excludes the time factor of customer's behavior whereas the period of time can be divided into heavy and lighter periods of spending (e.g. Christmas, birthdays, and summer holidays).

## 1.6 Significance

The paper can offer useful information for card issuers to explore new niches and continue encouraging non-cardholders to change into cardholder.

It can be used as reference for marketing managers to design appropriate promotion programs and more innovative products or offerings to convert their "light users" into "heavy users".

As far as demography is concerned, income was found to be the single most important variable influencing the card usage rate (Chan, 1997). This statement can be rechecked for Bangkok residents then find out what are the next most important factors that influence the card usage rate of card users.

## 1.7 Glossary:

- Active cardholder** Credit cardholders those whose monthly card usage rate was over ten times (Chan, 1997).
- Affinity credit card** a credit card offered by a financial institution to members or supporters of specific organisations, which are as diverse as football clubs, political parties and charities (Steve, 2001).
- Attitude** a learned predisposition to behave in a consistently favourable or unfavourable way with respect to a given object" Schiffman and Kanuk (2004)
- Attribute** An attribute is a single characteristic or fundamental feature of an object, person, situation or issue (Zikmund, 2003).

- Balances** the amount owing on a credit card at the end of a billing cycle, both interest and non-interest-bearing. This is the balance outstanding from the previous billing cycle plus total charges on a credit card during a billing cycle less repayments within the billing cycle (Visa International Report, 2004).
- Co-branded cards** represent a collaboration between a credit card issuer and a commercial organisation, such as an airline, retailer, or motor manufacturer (Steve, 2001).
- Credit card account** an account held with the card issuer to which one or more credit cards are linked (Visa International Report, 2004).
- Credit card spend** Credit card spend includes all amounts spent on bank-issued credit cards during the quarter. This includes transactions on accounts with and without an interest-free period. This includes cash advances and payments for goods and services (Visa International Report, 2004).
- Credit card transaction** All transactions made using a credit card including cash advances and others payment for goods and services. This does not cover charge cards (Visa International Report, 2004).
- Credit card** A plastic payment card that can be used at a wide variety of merchants to make purchases and which offers a wide range of credit facilities and other benefits to cardholders. The card usually offers an interest-free period and a revolving line of credit (Visa International Report, 2004).
- Credit limit** the maximum amount of credit that a bank or other lender will extend to a customer (Visa International Report, 2004).

39922 e.1

**Household expenditure** All forms of expenditure by households as recorded in National Statistical Office of Thailand household surveys (Visa International Report, 2004).

**Inactive cardholder** were those whose monthly card usage rate was below ten times (Chan, 1997).

**Interest** the fee charged by a lender to a borrower for the use of borrowed money, usually expressed as an annual percentage of the principal; the rate is dependent upon the time value of money, the credit risk of the borrower, and the inflation rate. Here, interest per year divided by principal amount, expressed as a percentage also called interest rate.

([www.investorwords.com](http://www.investorwords.com))

**Visa Card** credit card issued by Visa International an organisation of over 22,000 financial institution members. It creates and operates regulations and by-laws; provides a world-wide electronic clearing system which authorises transactions and transmits clearing and settlement data; and offers a global network of cash dispensers (Steve, 2001).

**Master Card** credit card issued by MasterCard International

## Chapter 2

### Literature Review

This chapter presents a review of the literature and research related to the study. The literature review supporting the theoretical framework in Chapter 3 will be discussed under Section one.

Section two discusses about literature to support the methodology and section three is the empirical findings.

#### 2.1 Literature to support the framework

##### 2.1.1 Defining attitude

There are many different definitions of 'attitude', the definition of attitude that advanced by Schiffman and Kanuk (2004) contains most of the major concepts: "an attitude is a learned predisposition to behave in a consistently favourable or unfavourable way with respect to a given object". The main characteristics of attitudes are indicated by the key words in the definition: learned, predisposition and behave.

Attitudes occur within a situation and the situation can, and will, influence the relationship between attitude and behaviour. A consumer can have different attitudes towards the same product depending on the situation.

The main characteristics of attitudes are shown as follows:

- (1) Attitudes are **learned** from personal experience, information provided by others, and market controlled sources, in particular exposure to mass media.
- (2) Attitudes are **predispositions**. A predisposition is an inclination or tendency towards something; attitudes have motivational qualities.

- (3) Attitudes have a relationship with **behaviour**. For marketers, the behaviour of primary interest is product purchase. Remember that they are not suggested or assumed a causal relationship.
- (4) Attitudes are **consistent**. However, this does not necessarily mean that they are permanent; attitudes can change.
- (5) Attitudes are directed towards an **object** and are very specific reactions to that object. For example, you like 'x' but you don't like 'y'. The term "object" includes specific consumption – or marketing – related concepts, such as product, product category, brand, service, possessions, product use, causes or issues, people, advertisement, internet site, price, medium, or retailer (Schiffman and Kanuk, 2004).

What is not obvious from the definition is the fact that attitudes may be situational determined. For example, people may really like to see a movie at weekend, but they would not want to go to the movies on weekdays.

### **2.1.2 Relationship between Attitude and Behavior and Attitude Model**

According to social psychology, explaining human behavior in all its complexity is a difficult task. It can be approached at many levels, from concern with physiological processes at one extreme to concentration on social institutions at the other (Ajzen, 1991).

Attitudes direct behaviour and lead to consistent responses (Schiffman and Kanuk, 2004). 'If I have an unfavourable attitude towards credit card, I will not apply for it, utilize it or concern with it, ever.' Until the attitude is changed, the behaviour will be consistent - avoidance of being a cardholder.

Attitudes can be situation specific (Schiffman and Kanuk, 2004). For example, people may consider it appropriate to use a credit card to purchase or pay everything



for personal consumption even a low cost item for collecting bonus point rewards, but may not use that same routine behavior if their purchased items required an interest or charged fee when using cards instead of cash. Even though the attitude may change between situations, it is still consistent within the situation. 'I always use credit cards for any payment when there is no additional charge for collecting bonus point award.'

As suggested earlier, there is a relationship between attitude and behavior. It is understood that attitude is positively related to behavior. That is, an unfavorable attitude toward a specific behavior should lead to unlikely occurrences of that behavior.

Chien and Devany (2001) summarized literature review about the relationship between attitude and behavior reported that there are appearing some evidence for weak relation between attitude and behavior; and that weak empirical relationship partly because of differences in definition and measurement of attitude. That weak relationship might be due to the overall evaluation of product not tied to situational factors while behaviors, in contrast, always occur in a situational context or are highly influenced by the environment. The authors also pointed out that although attitude is generally considered as a predictor of behavior, it is possible that behavior may predict attitude under some circumstances. In other words, he concluded that although a more favorable attitude toward using credit can lead to a higher likelihood of using credit, a higher likelihood of using credit may also induce a more favorable attitude toward using credit.

Various theoretical frameworks have been proposed to deal with the psychological processes involved. There are at least four different kinds of attitude theories, and each of them proposes a different relationship between attitude and behavior.

The tri-component attitude model which portrays attitudes as having three component parts consisting of cognitive (I think/know/believe), affective (I feel), and conative (I do/intend to do). A consumer belief is a psychological association of a product or brand and an attribute or feature of that product or brand. Affective, a physiological or emotional component, is the way that consumer feels in response to marketplace stimuli. Affect is feeling (emotive), belief is thinking (cognitive) in nature. Affect is made up of beliefs plus the way in which consumer feel about or evaluate those beliefs. Conative component is treated as consumer's intention to buy. The tri-component attitude model considers all three components to be present in an attitude, with each component playing an important role in attitude formation and having the potential to influence the overall attitude (Schiffman and Kanuk, 2004).

The multi-attribute attitude models, in particular the models advanced by Fishbein (1986), as a function of consumer's perception and assessment of the key attributes or beliefs held with regard to the particular attitude object. The attitude-towards-object model looks at both the cognitive and affective components. The attitude-towards-behavior model looks at behavioral intent, the conative component, as well as the affective component. Theory of Reasoned Action Model combines all three components (Schiffman and Kanuk, 2004).

Another theory is the cognitive dissonance theory. Cognitive dissonance is an uncomfortable situation in which people have conflicting thoughts, such as "I don't like my job, but I stay on it." It proposes that to reduce cognitive dissonance occurring when people's belief and their behavior are not consistent, they may change one or both cognitions to make them consistent. So, they may change or modify their attitudes to make them consistent with their behaviors. In this case, the formation of

attitude or belief is based on behavior (Schiffman and Kanuk, 2004; Chien and Devany, 2001).

In the “Hierarchy of effects” (Salomon, 2002) people form attitudes toward products, brands, advertisements, stores, themselves, and other people based on four reasons: utilitarian function (based on rewards and punishments), value expressive function (consumer’s central values or self-concept), ego-defensive function (serves to protect the person from internal feelings of threat), and knowledge function (need for order, meaning, and structure). The dimensions of attitude include: affect (feelings), behaviour (do), and cognitions (learning and beliefs). These dimensions can be combined into three hierarchies of effects models, which try to explain a different kind of consumer decision-making process.

- (1) The Standard Hierarchy or High Involvement Hierarchy perceives the consumer as a rational problem solver and suggests the following order of consumer responses: cognition, affect, and behaviour (learn- feel-do).
- (2) The Low-Involvement Hierarchy applies to low-involvement purchase situations where both motivation and risk are low and suggests the order of consumer responses as following: cognition, behaviour, and affect (learn-do-feel).
- (3) The Experiential Hierarchy highlights the importance of consumers’ emotions (impulse purchases) and situations in which consumer are highly involved with outcome and suggests the following order of consumer responses: affect, behaviour, and cognition (feel-do-learn).

### 2.1.3 Multi-attribute attitude models

Wilkie and Pessemier (1986) found that the potential advantage of multi-attribute models over the simpler “overall affect” approach is in gaining understanding of attitude structure. The marketers can diagnose of brand strengths and weaknesses on relevant product attributes can then be used to suggest specific changes in a brand and its marketing support.

Ajzen (1991) stated that there is plenty of evidence for significant relations between behavioral beliefs and attitudes toward the behavior and between control beliefs and perceptions of behavioral control. The most widely accepted view, which describes the nature of the relations in terms of expectancy-value models, has received some support.

Follow Wilkie and Pessemier (1986), Fishbein model directly relates consumer beliefs with affective response which is made up of two factors: the strength or weakness of a consumer’s beliefs and the consumer’s evaluation of or feelings toward those product/brand attributes.

According to this model, attitudes develop reasonably from the beliefs people hold about the object of the attitude. The beliefs about an object are formed by associating it with certain attributes (with other objects, characteristics, or events). A basic MAA model or Fishbein’s attitude-towards-object model comprised of three important elements:

- (1) Attribute (salient belief): provide the basic dimensionality of the model.

The attribute reflect consumer perceptual dimensions rather than product characteristics directly measurable and controllable by the marketing managers. Only a small number of beliefs are significant enough to an

individual consumer to be used in forming the attitude. These are referred to as salient beliefs.

- (2) Belief ( $B_i$ ): consumer belief to the extend to which attribute “ $i$ ” is offered.

This establishes the linkage consumers perceive between the product and the attribute: the degree to which consumers believe that the product has the attribute.

- (3) Importance weight ( $I_i$ ): the importance weight on attribute “ $i$ ” given by consumer. This determines if the consumers believe that having the attribute is favourable or unfavourable, good or bad.

A consumer's overall attitude ( $A_0$ ) toward an object (consumer's attitude score) can be computed by combining these elements using the following formula

$$A_0 = \sum_{i=1}^n B_i I_i$$

When compared with the approach of simply asking consumers to express their overall feeling about a product (i.e. uni-dimensional approach), this multi-attribute approach is considered to be superior as it can provide marketers with insight on why consumers feel a certain way about a product and how their feelings can be changed (Wilkie and Pessemier, 1986).

## 2.2 Literature to support methodology

In the works of Chan (1997) and Ramayah *et al.* (2002) examined the demographic and attitudinal differences between inactive and active bank credit cardholders in Hong Kong and Malaysia respectively. They identified the total of 13 salient attributes relating to credit cards as wide acceptance, large credit limit, ease of bill payment, long interest-free repayment period, low annual fee, short application approval period, ancillary functions, effective handling of cardholders' complaints, image of the issuing bank, gifts/bonus to cardholders, design of the card, detailed



leaflet to describe the card, and heavy advertising by the issuing bank. The credit card usage level was measured by the average monthly usage frequency. The figure of ten times of monthly usage was used as a cut in point to distinguish between active and inactive cardholders – active cardholder (monthly credit card usages were 10 times or above) and inactive cardholder (monthly credit card usages were less than 10 times). T-test analysis was used to discern the possible differences between inactive and active cardholders in terms of the overall attitude scores towards bank credit cards, perceived importance of card attribute and evaluation of their credit cards against attribute scores. The authors used the chi-square test to detect whether any significant demographic differences existed between inactive and active cardholders' demographic characteristics (identified by gender, marital status, occupation, age, education and income).

In the other view about the measurement of credit card usage in the research about credit card, Chien and Devany (2001) measured credit use in two ways: the amount of installment loans and the amount of credit card debt. Installment loans included loans for education, cars, household appliances, hobby or recreational equipment, medical bills, property, home additions or improvements, loans from friends or relatives, loans for a business or investment, and other consumer loans. Credit card debt was the total outstanding balance on the credit cards that respondents were currently holding. The study analyzed the relationship between the demographic and economic characteristics of the households and general attitude and specific attitude toward using credit cards by using ANOVA to analyze the mean differences, and Chi-square was used to analyze the percentage difference. In which, the demographic factors included age, household size, ethnicity, marital status, professional status, and education. General attitude included three categories:

favorable, neutral, and unfavorable by asking respondents the following: "Do you think it is a good idea or a bad idea for people to buy things on the installment plan?" Specific attitude was measured by using respondents' responses to five questions about their approval of borrowing money for someone like themselves for the following: a vacation trip, living expenses, fur coat or jewelry (used as a proxy for luxury goods), a car, and education expenses.

Descriptive statistics were used by most of the studies about credit card use and attitude toward credit card to provide an overview of the participants in the studies (Chien and Devany, 2001; Hayhoe *et al.*, 2000; Warwick and Mansfield, 2000)

## **2.3 Empirical Finding**

### **2.3.1 Relationship between Attitudes and Credit Card Usage**

Kaynak and Hancar (2001) investigated consumer attitudes and intentions towards credit card ownership and usage from 673 credit card holders and non-holders in the largest Turkish city of Istanbul with a total population of over ten million. Knowledge structures, beliefs, likes and dislikes as well as attitudes of credit card owners in the possession and use of credit cards were investigated. The finding of the study showed that 'interest rate', 'credit limit', 'procedures required to obtain a credit card', 'the number of retailers that accept credit cards' and 'credit cards brought privilege in shopping' are major factors that consumers to take into account when using the credit card.

Chien and Devany (2001) found that the higher the specific attitude index, the higher would be the outstanding credit balances, the more favourable one's general attitude towards using credit, and the higher would be the installment debt.

Warwick and Mansfield (2000) found that college students when acquiring credit cards did not actively seek them out but were aggressively pursued through the promotion of credit card issuers in term of mails and on-campus. Although the majority of students reported that they did not know their credit limit or credit balance, they did appear to be more knowledgeable about the credit limit amount than the interest rate on their credit card. And the feeling “good if used correctly” of students about credit cards were widely perceived.

In an empirical study on the same purposes of this paper about credit cardholders, Chan (1997) compared inactive and active bank credit cardholders in Hong Kong. This study confirmed a positive relationship between attitude and usage rate among credit card users. And both inactive and active cardholders highly perceived the attributes of “long interest-free repayment period”, “low annual fee” as important attributes of a credit card. The attributes of “wide acceptance” and “detailed leaflet to describe the cards” were weighted as important by active cardholders while “design of the card” was assigned significantly greater important by inactive card users. It is also found that active cardholders rated the performance of their cards as more satisfactory in most of the card attributes than inactive cardholders. And inactive cardholders were significantly less satisfied with “wide acceptance”, “large credit limit” and “low annual fee” than active cardholders.

Kara *et al.* (1994) studied on perceptions of the college students towards the credit cards indicated that the interest rate and the type of the payment are the two most important factors for the college students.

To distinguish between those who hold and use bank credit cards (users) and those who hold but do not use them (non-users), Crook *et al.* (1992) applied the discriminant analysis to a sample of 825 holders of a bank credit card in the UK. They

draw a conclusion that “lower fixed subscription” and “lower interest rate” can be seen as factors that credit card issuers might consider if they wish to attract users and non-users, respectively, of their credit cards. The attitude of credit card users also showed clearly at the perceived benefit in using credit card. Credit cards could be seen as “a reserve source of immediate finance” and “the convenience with which credit card can be extended”.

In the report summarized the findings of a national survey of consumer attitudes toward credit cards – their importance, costs, concerns about payment, and desire for related information, Brobeck (1992) showed that only a small minority of consumers said that they need credit cards for financial survival, more than fifty percent were concerned about “credit card monthly payment”, and majority of them very much concern about “credit card rate”. The survey was conducted by phone on a sample of 1006 adults, comprising a representative sample of the United State’s adult population.

### **2.3.2 Relationship between Demographic and Credit Card Usage**

Kaynak and Harcar (2001) discovered several demographic variables that have been found significant in describing consumer practice in the use of credit cards: education, income and age. Higher education and higher income groups' percentages are greater than those of the lower education and lower income groups' in terms of holding and using credit cards. The results of their study indicated that there was no significant difference between Turkish male and female groups' ownership of credit cards. It also suggested that the middle age group (namely people between 36 and 45 year old) is the most likely to hold and use credit cards.

In examining the impact of gender on types of credit card purchases of the sample of 480 college students, Hayhoe *et al.* (2000) recognized the significant

gender differences for the purchasing of clothes, electronics, entertainment, and food away from home. In which female students used their credit cards more than male students to purchase clothes, the males used their cards more for electronics, entertainment, and food away from home. The research also indicated that gender is not the only variable affecting what credit cards are used to purchase and that affective credit attitude also must be examined.

Chan (1997) detect whether any significant demographic differences existed between inactive and active cardholders' demographic characteristics (gender, marital status, occupation, age, education and income). He found that within the age range of 50-59, there were significantly more active cardholders than inactive cardholders. Income was the other salient finding in which the Hong Kong inactive cardholders earn less than their active counterparts in an oriental culture. Income was found to be the single most important variable that influences the card usage rate.

Kaynak. *et al.* (1995) used mail survey method based on 263 usable questionnaire from Eskisehir (Turkey) respondents. The result showed that females, higher educated people and the higher income groups use their credit cards more often than do their counterparts. Age and employment do not play a statistically significant role on the frequency of the usage of credit cards in Turkey whereas the middle-age credit cardholders group seems to be the heaviest user of credit cards.

In the study of Crook *et al.* (1992), age and income were found as among the factors affected to the credit card usage. Younger rather than older card holders are more likely to use their card, with the most likely users falling into the 30-40 age bracket. The least likely users are those aged 60 or over. For applicant's income, the most likely users are to be found in the highest income band and the least likely in the least income band.



**Table 2-1: Summary of Finding from Literature**

Authors	Dependent Variables	Independent Variables	Statistic Techniques	Finding
Chien and Devany (2001)	Credit use measured in two ways: the amount of installment loans and the amount of credit card debt.	<ul style="list-style-type: none"> <li>Demographic: age, household size, ethnicity, marital status, professional status, and education.</li> <li>Economic factors included home ownership, the total annual income of the household and liquid assets.</li> <li>Attitude factors.</li> </ul>	<ul style="list-style-type: none"> <li>Stepwise regression.</li> <li>Tobit regression.</li> <li>ANOVA.</li> <li>Chi-square.</li> <li>Descriptive statistics.</li> </ul>	<ul style="list-style-type: none"> <li>The more favourable one's general attitude towards using credit, and the higher would be the installment debt.</li> <li>Households headed by someone who was married, who was in a professional or managerial occupation, with more education, with a larger household, with lower income, and favorable specific attitudes toward credit were more likely to have higher outstanding credit card balances.</li> </ul>
Kaynak and Harcar	<ul style="list-style-type: none"> <li>Credit card usage.</li> <li>Credit attitude</li> </ul>	<ul style="list-style-type: none"> <li>Demographic: education, gender, age, and income.</li> </ul>	<ul style="list-style-type: none"> <li>Chi-square.</li> <li>T-test.</li> </ul>	<ul style="list-style-type: none"> <li>'Interest rate', 'credit limit', 'the number of retailers that accept credit cards' and 'credit</li> </ul>

**Table 2-1:**

**Summary of Finding from Literature (cont.)**

(2001)	index.	<ul style="list-style-type: none"> <li>• Card ownership</li> </ul>	<ul style="list-style-type: none"> <li>• ANOVA.</li> </ul>	<p>cards brought privilege in shopping' are major factors that consumers to take into account when using the credit card.</p> <ul style="list-style-type: none"> <li>• Education, income and age were found significant in describing consumer practice in the use of credit cards.</li> </ul>
Warwick and Mansfield (2000)	Possession of credit card.	<ul style="list-style-type: none"> <li>• Demographic: gender, age, and class standing.</li> <li>• Students' attitude toward credit cards.</li> <li>• Students' knowledge of their credit cards.</li> </ul>	<ul style="list-style-type: none"> <li>• T-test.</li> <li>• Chi-square.</li> <li>• Descriptive statistics.</li> </ul>	<ul style="list-style-type: none"> <li>• College students when acquiring credit cards were aggressively pursued through the promotion of credit card issuers in term of mails and on-campus.</li> </ul>
Hayhoe <i>et al.</i> (2000)	<ul style="list-style-type: none"> <li>• Credit card purchasing behavior.</li> </ul>	<ul style="list-style-type: none"> <li>• Demographic: income, age, residence, marital status and gender.</li> </ul>	<ul style="list-style-type: none"> <li>• Descriptive statistics.</li> <li>• Logistic regression analysis.</li> </ul>	<ul style="list-style-type: none"> <li>• Gender is not the only variable affecting what credit cards are used to purchase and that affective credit attitude also must be</li> </ul>

**Table 2-1: Summary of Finding from Literature (cont.)**

		<ul style="list-style-type: none"> <li>• Affective credit attitude.</li> <li>• Number of credit cards</li> </ul>	<ul style="list-style-type: none"> <li>• OLS regression analysis.</li> </ul>	examined.
Chan (1997)	<ul style="list-style-type: none"> <li>• The credit card usage level was measured by the average monthly usage frequency</li> </ul>	<ul style="list-style-type: none"> <li>• Demographic: gender, marital status, occupation, age, education and income.</li> <li>• Overall attitude scores towards bank credit cards.</li> <li>• Perceived importance of card attribute against attribute scores.</li> <li>• Evaluation of their credit cards against attribute scores.</li> </ul>	<ul style="list-style-type: none"> <li>• T-test.</li> <li>• Chi-square.</li> <li>• Descriptive statistics.</li> </ul>	<ul style="list-style-type: none"> <li>• Confirmed a positive relationship between attitude and usage rate among credit card users. Active cardholders rated the performance of their cards as more satisfactory in most of the card attributes than inactive cardholders.</li> <li>• Gender, marital status, occupation, age, education and income</li> </ul>
Kaynak <i>et al</i> (1995)	Credit card acceptance and	<ul style="list-style-type: none"> <li>• Demographic: gender, age, income, employment, and</li> </ul>	<ul style="list-style-type: none"> <li>• Test of differences.</li> </ul>	<ul style="list-style-type: none"> <li>• There are differences between gender, education and income in using the credit</li> </ul>

**Table 2-1: Summary of Finding from Literature (cont.)**

	frequency of usage	education.		cards.
				<ul style="list-style-type: none"> <li>Age and employment do not play a statistically significant role on the frequency of the usage of credit cards in Turkey.</li> </ul>
Kara <i>et al.</i> (1994)	<ul style="list-style-type: none"> <li>Perceptions of college students towards the credit cards</li> </ul>	<ul style="list-style-type: none"> <li>Brand.</li> <li>Credit line.</li> <li>Type of cards.</li> <li>Annual fee</li> <li>Interest rate</li> <li>Payment type.</li> </ul>	<ul style="list-style-type: none"> <li>Conjoint analysis.</li> </ul>	<ul style="list-style-type: none"> <li>The interest rate and the type of the payment are the two most important factors for the college students.</li> </ul>
Crook <i>et al.</i> (1992)	<ul style="list-style-type: none"> <li>Distinguish between those who hold and use bank credit card and those hold</li> </ul>	<ul style="list-style-type: none"> <li>Age.</li> <li>Income.</li> <li>Number of children.</li> <li>Cardholder lives.</li> <li>Years for which an account</li> </ul>	<ul style="list-style-type: none"> <li>Discriminant analysis</li> </ul>	<ul style="list-style-type: none"> <li>“Lower interest rate” can be factors that credit card issuers might consider if they wish to attract users and non-users of their credit cards. The attitude of credit card users showed clearly at the perceived benefit in</li> </ul>

**Table 2-1: Summary of Finding from Literature (cont.)**

	but do not use them	has been held at the issuing bank. • Years at present address and residential status.		using credit card.  • Age and income were found as among the factors affected to the credit card usage
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## Chapter 3

### Research Framework

This chapter focuses on the framework of the research. This chapter includes four sections. Section one discusses the diagram of framework of the study. Section two explains the definition of variables. Section three explains all hypothesis statements that will be tested in this study. Section four explains expected outcome of this study.

#### 3.1 Diagram of framework

The theoretical framework is the foundation on which the entire research project is based. It is a logically developed, described and elaborated network of associations among the variables deemed relevant to the problem situation and identified through interviews, observations or literature review. (Sekaran, 2003)

Since the expectancy value approach to attitude structure and dynamics and behavior prediction has been widely recognised by academics (Cohen *et al.*, 1986; Schmidt and Wilson, 1986). And the multi-attribute attitude (MAA) model yields attitude scores which are significantly related to measures of purchase or purchase predisposition (Wilkie and Pessemier, 1986), researcher decides to use this model to assess cardholders' attitudes in the current paper.

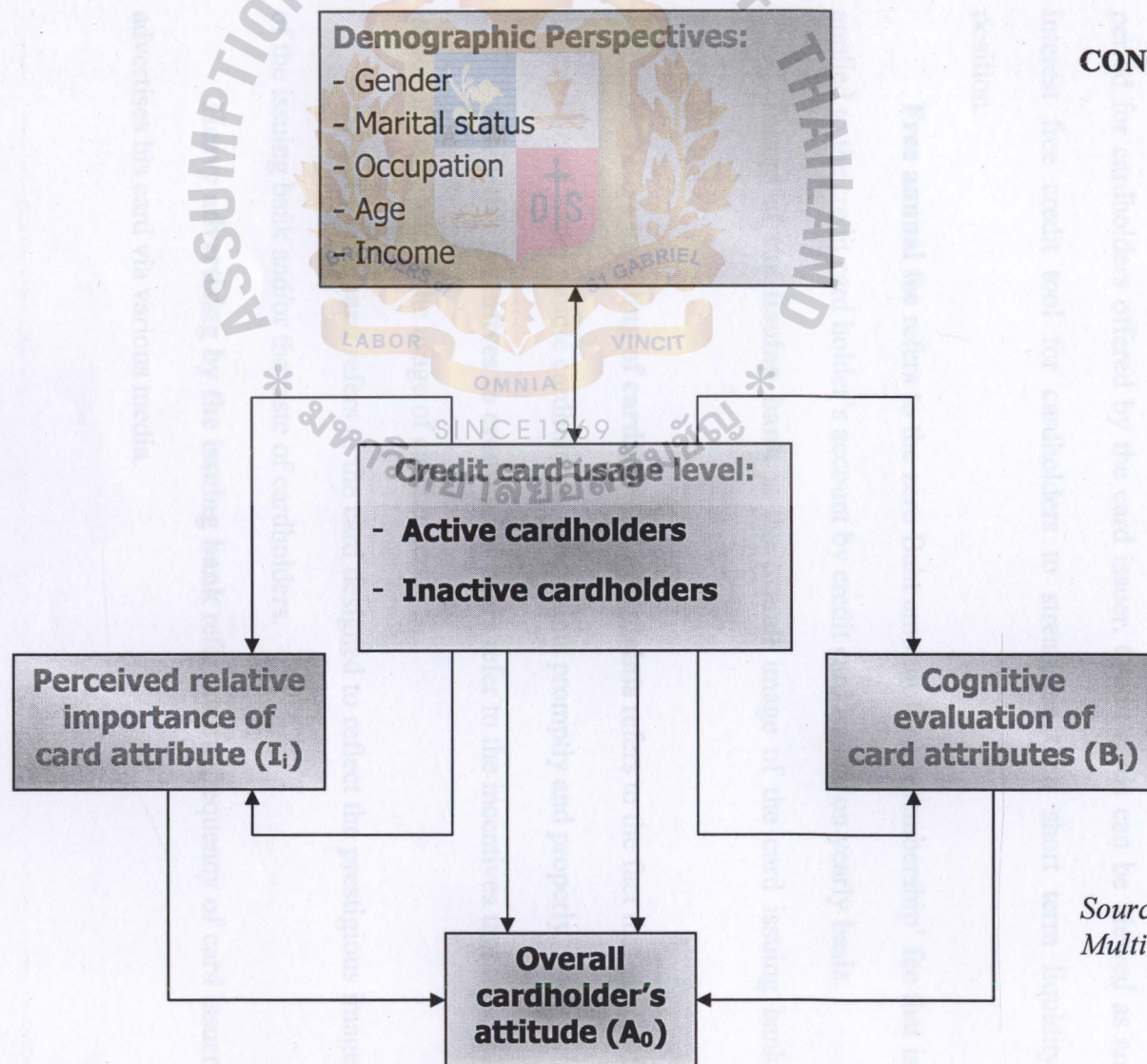
A conceptual model was applied. It tested for how demographic and the overall attitudes toward credit cards differentiate active and inactive cardholders based on their credit card usage. Furthermore, based on the concept of the multi-attribute model, the overall attitude of credit card was summated from multiplicative fashion of perception on relative importance and cognitive evaluation over salient attributes of credit cards. With this theoretical support, researcher was able to check further in details for the differences between active cardholders and inactive

cardholders in terms of perception on relative importance and cognitive evaluation of cardholders on the given credit card's attributes. The outcome of the later test could be more useful for reader who would apply in practice than the result from the test on an overall attitude which can only show a very broadly pictures.

For more clarity of the theoretical framework Figure 3.1 shows an integrated conceptual framework of variables, which have detailed in the literature review.

The general framework for this study is diagrammed as Figure 3-1 shown on page 31:





## CONCEPTUAL MODEL OF THIS STUDY

Source: Developed from "Issue in Marketing's use of Multi Attribute model" (Wilkie and Pessemier, 1986).

### 3.2 Definition of variables

**Card usage rate** is the average monthly usage frequency of a cardholder.

**Wide acceptance** refers to the fact that the card is widely accepted by various kinds of retailers.

**Large credit limit** is the maximum amount of available credit a cardholder may access on a credit card.

**Ease of bill payment** refers to the ease of settle the credit card bill via convenient payment methods such as auto-payment and telephone settlement.

**Long interest free repayment period** refers to a long interest-free repayment period for cardholders offered by the card issuer. Credit cards can be viewed as an interest free credit tool for cardholders to streamline their short term liquidity position.

**Free annual fee** refers to the zero Baht amount for a 'membership' fee that is applied to the credit card holder's account by credit card issuers on yearly basis.

**Image of the issuing bank** is the overall image of the card issuing bank among the public.

**Effective handling of cardholders' complaints** refers to the fact that staffs of the credit card issuer handle cardholders' complaints promptly and properly.

**Attractive incentives to credit card users** refer to the incentives that the card issuer offers to attract the usage of cardholders.

**Design of the card** refers to the card designed to reflect the prestigious image of the issuing bank and/or the taste of cardholders.

**Heavy advertising by the issuing bank** refers to the frequency of card issuer advertises his card via various media.



### 3.3 Hypothesis

A hypothesis can be defined as a logically conjectured relationship between two or more variables in the form of a testable statement. It is the next step after theory formulation (Sekaran, 2003). Based on the above conceptual framework with conformed to the objective of the study, the null and alternate hypothesis statement are set as follow:

#### ***(1) Demographic interdependency toward credit card usage level:***

- H1<sub>0</sub>: Gender of credit cardholders and their credit card usage level are not dependent.
- H1: Gender of credit cardholders and their credit card usage level are dependent.
- H2<sub>0</sub>: Marital status of credit cardholders and their credit card usage level are not dependent.
- H2: Marital status of credit cardholders and their credit card usage level are dependent.
- H3<sub>0</sub>: Occupation of credit cardholders and their credit card usage level are not dependent.
- H3: Occupation of credit cardholders and their credit card usage level are dependent.
- H4<sub>0</sub>: Age of credit cardholders and their credit card usage level are not dependent.
- H4: Age of credit cardholders and their credit card usage level are dependent.



- H5<sub>0</sub>: Monthly income of credit cardholders and their credit card usage level are not dependent.
- H5: Monthly income of credit cardholders and their credit card usage level are dependent.

**(2) Differences in overall attitude toward credit card ( $A_0$ ) between inactive and active cardholders**

- H6<sub>0</sub>: There are no differences in overall attitude toward attributes of credit card between active and inactive cardholders.
- H6: There are differences in overall attitude toward attributes of credit card between active and inactive cardholders.

**(3) Differences in perceived importance (Ii) about attributes of credit card between inactive and active cardholders**

- H7<sub>0</sub>: There are no differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of “wide acceptance”.
- H7: There are differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of “wide acceptance”.
- H8<sub>0</sub>: There are no differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of “large credit limit”.
- H8: There are differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of “large credit limit”.

- H9<sub>0</sub>: There are no differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of “design of the card”.
- H9: There are differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of “design of the card”.
- H10<sub>0</sub>: There are no differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of “ease of bill payment”.
- H10: There are differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of “ease of bill payment”.
- H11<sub>0</sub>: There are no differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of “free annual fee”.
- H11: There are differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of “free annual fee”.
- H12<sub>0</sub>: There are no differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of “image of issuing bank”.
- H12: There are differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of “image of issuing bank”.

- H13<sub>0</sub>: There are no differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of “heavy advertising by issuing bank”.
- H13: There are differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of “heavy advertising by issuing bank”.
- H14<sub>0</sub>: There are no differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of “effective handling of cardholders’ complaints”.
- H14: There are differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of “effective handling of cardholders’ complaints”.
- H15<sub>0</sub>: There are no differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of “attractive incentive to credit card users”.
- H15: There are differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of “attractive incentive to credit card users”.
- H16<sub>0</sub>: There are no differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of “long interest-free repayment period”.
- H16: There are differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of “long interest-free repayment period”.

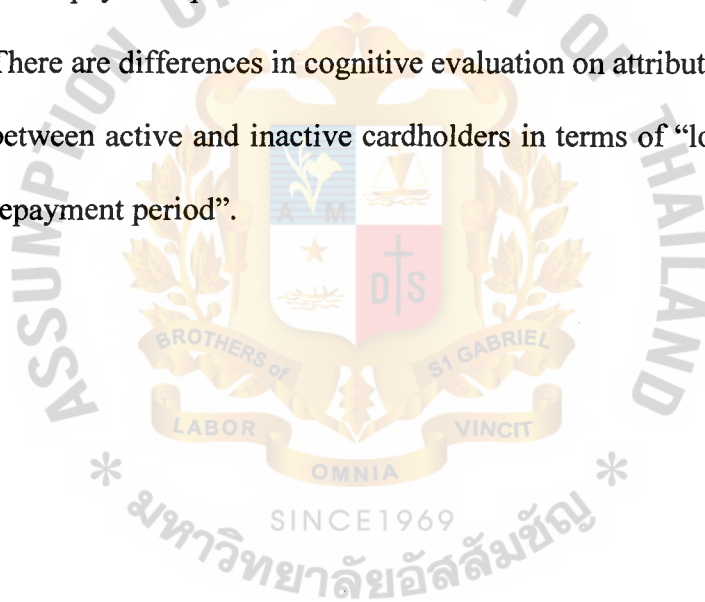
***(4) Differences in cognitive evaluation (Bi) on attributes of credit card between inactive and active cardholders***

- H17<sub>0</sub>: There are no differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of “wide acceptance”.
- H17: There are differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of “wide acceptance”.
- H18<sub>0</sub>: There are no differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of “large credit limit”.
- H18: There are differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of “large credit limit”.
- H19<sub>0</sub>: There are no differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of “design of the card”.
- H19: There are differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of “design of the card”.
- H20<sub>0</sub>: There are no differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of “ease of bill payment”.
- H20: There are differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of “ease of bill payment”.

- H21<sub>0</sub>: There are no differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of “free annual fee”.
- H21: There are differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of “free annual fee”.
- H22<sub>0</sub>: There are no differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of “image of issuing bank”.
- H22: There are differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of “image of issuing bank”.
- H23<sub>0</sub>: There are no differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of “heavy advertising by issuing bank”.
- H23: There are differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of “heavy advertising by issuing bank”.
- H24<sub>0</sub>: There are no differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of “effective handling of cardholders’ complaints”.
- H24: There are differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of “effective handling of cardholders’ complaints”.



- H25<sub>0</sub>: There are no differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of “attractive incentive to credit card users”.
- H25: There are differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of “attractive incentive to credit card users”.
- H26<sub>0</sub>: There are no differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of “long interest-free repayment period”.
- H26: There are differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of “long interest-free repayment period”.



## **Chapter 4**

### **Research Methodology**

The purpose of this chapter is to provide an overview of methodology that will be used in this research. Section one and two identifies type of research, and type of data respectively. Section three explores the sources of data; section four explains the methods of collecting the data. Data measurement is explained in section five, Data analysis will be mentioned in the last section.

#### **4.1 Types of Research**

There are three types of research outlined by Ghauri and Gronhaug (2002), these are exploratory, descriptive and causal research.

Exploratory research is used when the problem is badly understood and leads to an unstructured problem design. This kind of research helps to increase the familiarity with the researched area. During exploratory research, new findings and information are discovered, so the researcher must be flexible and prepared for possible changes in the research direction. The key requirements for this type of research are ability to observe, find information and be able to explain the findings.

Descriptive research is used when the problem is well structured and understood; the task to solve is clear. The researchers should focus on the structure of the research, precise rules and procedures, since the ability to make good measurements is crucial for this type of research.

Causal research is used when the problem(s) under research are structured. The main tasks in causal research are to isolate cause(s), and to tell whether and to what extent 'cause(s)' result(s) in effect(s). Both descriptive and causal research use structured problems (Ghauri and Gronhaug, 2002).

In relation to different research types, a descriptive research is applied in this study. The research problem is well structured and the involvement of marketing researchers in summative attitude models proposed by Rosenberg and Fishbein is well understood in the academic. (Wilkie and Pessemier, 1986).

#### **4.2 Types of Data**

One can make a distinction about the type of data collected. It can either be qualitative or quantitative. The former describes data which is nominal and the latter, numerical data. Another distinction can be made between secondary and primary data.

Quantitative or numerical data research is “objective in nature and concentrates on measuring phenomena”. For example, statistical tests can be used to analyse data collected from a questionnaire with closed-end questions. This quantitative approach might present data in tables, charts and graphs, to summarize the data collected in a way that the reader can get an idea of the situation being studied. Different statistical relationships may also be explored in order to try to identify patterns or hypotheses. This type of data research may sound complex due to all the possible statistical tests involved, but one advantage is that it is structured.

Qualitative data, on the other hand, is “more subjective in nature and involves examining and reflecting on perceptions in order to gain understanding of social and human activities”. This type of data may be gathered from interviews or secondary data sources. However, it may be even more difficult to collect and analyse than quantitative data.

These two types of research data are not mutually exclusive. Qualitative data can also be quantified to a certain extent, e.g. the frequency of a certain ‘qualitative’ event may be quantified. Qualitative data may also be used in order to give further insight into numerical methods. In this way, each type can complement the other.

### **4.3 Data Source**

#### **4.3.1 Target Population**

That is the completed group of specific population elements relevant to the research project (Zikmund, 2003).

In keeping with the objectives of the study, the credit cardholders who currently possess at least one usable credit card (bank card) living in Bangkok are selected as target population.

#### **4.3.2 Sampling Frame**

The sampling frame is a listing of all the elements in the population from which the sample is drawn (Churchill and Iacobucci, 2002).

The credit card issuers all have their own customer list including contact address and phone number. However, due to business confidentiality and the risk of violating the privacy data, all Thai card issuers were unwilling to provide the researcher with their cardholders' contact addresses. As a result the sampling frame is not available for the study.

#### **4.3.3 Sampling Method**

Due to the constraint of unable to obtain the list of credit cardholders and their contact detail, the probability sampling method seemed to be so difficult to apply in the case. Researcher selected to use non-probability convenience sampling method refers to sampling by obtaining people who are most conveniently available.

Researchers generally use convenience samples to obtain a large number of completed questionnaires quickly and economically. This method is used in exploratory research where the researcher is interested in getting an inexpensive approximation of the truth. This non-probability method is often used during

preliminary research efforts to get a gross estimate of the results, without incurring the cost or time required to select a random sample. (Zikmund, 2003)

#### 4.3.4 Sampling Unit

Sampling unit and population element of this study is the same since the target population is the ultimate individual.

#### 4.3.5 Sample Size

The statistical determination of sample size requires knowledge of (1) the variance of population, (2) the magnitude of acceptable level of sampling error and (3) the confidence level (Zikmund, 2003). Several computational formulas are available are available for determining sample size. Further, a number of easy to use tables have been compiled to help researchers calculate the sample size.

**Table 4-1: Sample size for a 95% confidence level**

Size of population	Reliability			
	±1% Point	±2% Point	±3% Point	±5% Point
1,000	a	a	353	235
2,000	a	760	428	266
3,000	a	890	461	278
4,000	a	938	479	284
5,000	a	984	491	289
10,000	3,288	1,091	516	297
20,000	3,935	1,154	530	302
50,000	4,461	1,195	538	304
100,000	4,669	1,210	541	305
500,000 – ∞	4,850	1,222	544	306
a In these cases more than 50% of the population is required in the sample. Since the normal approximation of the hyper-geometric distribution is a poor distribution in such instance, no sample value is given				

Source: Business Research Method (Zikmund, 2003)



According to the large size of target population at a total of 4.2 million credit card users at the end of 2003 (Darana, 2004a), researcher subjectively determines sample size with no more than 5 percent error and 95 percent confident level as 306 samples. The researcher distributed the 310 sets questionnaire for minimize errors and to achieve accuracy.

#### **4.4 Data Collection**

##### **4.4.1 Research instruments**

In this study, the researcher used mall intercept structured interview survey research. It is a research technique in which information is gathered from personal interview conducted in shopping malls. The surveys can provide a quick, inexpensive, efficient and accurate means of assessing information about a population (Zikmund, 2003).

The researcher adopted the mall intercepts over other methods of administration such as telephone interviews or mail surveys due to the unavailability of the sampling frame. Furthermore, in view of the length and complexity of the questionnaire involved, personal interview can handle best, next by written format (mail, Web, fax and email), and least well by telephone interview (Churchill and Iacobucci, 2002). And it is generally believed that mall intercepts affords the most sample control in terms of obtaining co-operation from designated respondents (Churchill, 1996).

The survey instrument was divided into four sections. The first section consists of screening questions to identify whether respondents are bank credit cardholders who confine most of (at least 75%) their card purchases to a single card. The card usage level was accounted on this stage. The second and third section asked the evaluation and expectation of cardholders about the provided card attributes

respectively. Final part of the questionnaire explored respondents' demographics factors (identified by gender, status, occupation, age, education, and income).

The questionnaire was written in English and translated to Thai and back to English to check for language nuances.

#### **4.4.2 Data Collection Methods**

The survey was carried out on 11<sup>th</sup> September 2004 in shopping centres of Bangkok. Because demographic are one of the major factors that objective of the study is aimed to and the fact that each shopping mall have its own customer characteristics (Zikmund, 2003), the researcher tried to get the respondents from as many department stores or supermarkets as possible.

The totals of 350 blank questionnaire forms were prepared out of the required 304 usable papers. Three marketing undergraduates were used as interviewers. The survey was conducted on five consecutive days of a full week from 11:00 AM to 20:00 PM. No precise quota of number of shopping centers or the respondents at each site is required on each day. The interviewer will try to interview as much passer-by as possible but the team found that there were no more than 25 respondents per interviewer per day.

Interviewers were briefly trained about the questionnaires and the purpose of the study as well as how to get the required information. Interviewers were instructed to go to various shopping centres in convenience way, they could select any department store and supermarket that were most convenient for their moving and access. Inside the centres, interviewers then approached passers-by and asked if they would be willing to participate in this study. Those who were willing to be the respondents then were asked the screening questions to identify whether they were bank credit cardholders who confined most of (at least 75 per cent) their card

purchases to a single card. In view of the large number of multiple card holders in Bangkok, these screening questions could help to standardize the frame of reference for the respondent and to facilitate the examination of his attitudes toward his only credit card or, at least, his major credit card.

#### **4.4.3 Pre-testing**

To test the reliability of the questionnaire, pretest was done by interviewing to the randomly selected respondents who are cardholders. Before that researcher had asked two bankers who have been involving to credit card business for years to look for such things as with question wording, problem with leading question.

The researcher conducted a pretest with 20 respondents. Here mistakes regarding ambiguity of the questions, wording format and sequence were looked for. This is necessary to cut out any bias arising from the questionnaire. Since there is no sub-variable, it is not necessary to conduct the reliability analysis.

#### **4.4.4 Expected Outcome**

From the pre-test, most of the respondents agree with the proposed salient attributes of credit card except the three “short application approval period”, “detailed leaflet to describe the card” and “ancillary functions of the card”. For the former twos they reasoned that these two attributes much concerning on the acquire credit card but not using credit card. And the later attribute is ignored due to the respondents have no much ideas about what the function of the credit card can offer.

The result show that all hypothesizes as proposed by researcher are satisfied. In which income is found to be the single most important variable that influences the card usage rate. Therefore researcher expects that the outcome of the study when applied in the real sample size can yield the same results.

#### 4.5 Data measurement

The measurement was defined as the assignment of numbers to objects to represent quantities of attributes. The more powerful scales allow stronger comparisons and conclusions to be made (Churchill and Iacobucci, 2002).

Researchers in marketing have examined both additive and multiplicative functional forms for independent variables in the expectancy value models whereas Fishbein specify the combinational rule as multiplicative. But the multiplication of scales, in order to be logically meaningful, requires the existences of a true rational zero point. If such a zero point cannot be shown to exist, the measures are at best interval scale. (Schmidt and Wilson, 1986; Wilkie and Pessemier, 1986). In short, the best measurement scales in attitude studies using Fishbein model is ratio scale and then interval scale. Based on these reasons, researcher has applied the scale measurement as proposed by the US Bureau of the Census. A scale of subjective probabilities, ranging from 0 to 100 (Zikmund, 2003), is assigned to measure the perceived relative importance and cognitive evaluation of credit card attributes.

All researchers agree that only salient attributes should be included in the model (Wilkie and Pessemier, 1986). These salient beliefs are determined through prior research such as focus groups, unstructured lists of all knowledge of the product, and consumer rankings of pre-determined attributes. There were at least two studies (Chan, 1997 and Ramayah *et al.*, 2002) had defined the salient attributes for the credit card. They are including: Wide acceptance, Large credit limit, Design of the card, Ease of bill payment, Free annual fee, Image of the issuing bank, Heavy advertising by the issuing bank, Effective handling of cardholders' complaints, Attractive incentives to credit card users, Long interest-free repayment period, Short application approval period, Ancillary functions of the card, Detailed leaflet to describe the card.

The current research is applying these attributes which small modified based on the result of pre-testing period.

Coding of measurement of variables used in the study is summarized in the Table 4.2





**Table 4-2: Coding of Dependent and Independent Variables**

Variable	Operational Components	Source	Level of measurement
<b>Demographic perspective</b>	(1) Gender (2) Marital status (3) Education (4) Age (5) Personal income		Nominal data Nominal data Ordinal data Ordinal data Ordinal data
<b>Perceived relative importance of card attributes</b>	(1) Wide acceptance (2) Large credit limit (3) Ease of bill payment (4) Long interest-free repayment period (5) Free annual fee (6) Effective handling of cardholders' complaints (7) Image of the issuing bank (8) Offer attractive incentives based on collecting bonus point (9) Design of the card (10) Heavy advertising by the issuing bank	Ramayah <i>et al.</i> , (2002); Chan (1997)	Ratio scale 0 : Not at all important 50 : indifferent 100 : very important
<b>Cognitive evaluation of card attributes</b>	(1) Wide acceptance (2) Large credit limit (3) Ease of bill payment (4) Long interest-free repayment period	Ramayah <i>et al.</i> , (2002); Chan (1997)	Ratio scale 0 : very dissatisfy 50 : indifferent

	<p>(5) Free annual fee</p> <p>(6) Effective handling of cardholders' complaints</p> <p>(7) Image of the issuing bank</p> <p>(8) Offer attractive incentives based on collecting bonus point</p> <p>(9) Design of the card</p> <p>(10) Heavy advertising by the issuing bank</p>		100 : very satisfy
<b>Card usage rate</b>	Average monthly usage frequency of credit cardholder	Ramayah <i>et al.</i> , (2002); Chan (1997)	<p>Ordinal scale</p> <p>1 : once or none</p> <p>2 : 2-6 times</p> <p>3 : 7-10 times</p> <p>4 : 11-14 times</p> <p>5 : 15-18 times</p> <p>6: over 19 times</p>

## **4.6 Data Analysis**

After the data collection, the researcher used software of the Statistical package for the social sciences (SPSS), a widely used data analysis program to analyze the data. The form of data interpretation from these procedures is presented in easily interpretable formats. All the statistical procedures are performed by computer software package to ensure accuracy.

### **4.6.1 Descriptive statistics**

Descriptive analysis refers to the transformation of raw data into an understandable form so that their interpretation will not be difficult. Describing responses or observations are typically the first form of analysis, which is commonly done by calculating averages, frequency and percentage distributions (Zikmund, 2003).

Descriptive statistics is an efficient means of summarizing the characteristics of large sets of data, which can be presented in frequency tables, cross tabulation, data transformation, tabular and graphic methods of displaying data, bar charts, pie charts, histogram and percentages. The researcher used descriptive statistics to measure the frequency and percentages for describing the personal data of the sample, such as gender, marital status, occupational level, age and personal income.

In addition to frequency distributions, researcher used other type of statistics to describe the distribution of a variable – Measures of central tendency – statistics that summarize a distribution of scores by reporting the most typical or representative value of the distribution. There are three measures of central tendency: mean, median and mode

- (1) The mean is the arithmetic average of the scores. It is the preferred measure of central tendency for interval level variables; unless the

distribution is highly skewed (has a few unusually high or unusually low scores). For a highly skewed distribution, the median is the preferred measure of central tendency. The mean is interpreted as the average or typical score. It is not an appropriate statistic for ordinal, nominal, or dichotomous variables.

- (2) The median is the score at the mid-point of a sorted distribution of scores. Half of the scores fall above this point and half fall below this point. It is the preferred measure of central tendency for ordinal level variables, and for interval level variables that have a badly skewed distribution. The median is interpreted as the central or middle score. It can be computed for interval level variables, but is not an appropriate statistic for nominal or dichotomous variables.
- (3) The mode is the most common value in a distribution, the category of a variable that has the largest frequency. It is the preferred measure of central tendency for a nominal level variable, including a dichotomous variable. The mode is interpreted as the most common score. It can be computed for ordinal level variables, and for interval level variables that have been grouped in a frequency distribution.

The researcher ignored the “Measures of Variability” in the study. There are three measures of variability:

- (1) The standard deviation, the preferred measure for interval data,
- (2) The range, the preferred measure for ordinal data,
- (3) The index of qualitative variation, the preferred measure for nominal and dichotomous data

For all of the measures of variability, larger numerical values indicate greater variability or variability, i.e. greater difference from the measure of central tendency.

#### **4.6.2 Inferential statistics**

Zikmund, (2003) define inferential statistics as statistic used to make inferences or judgment about a population on the basic of a sample. In more detail, Sekaran (2003) refer inferential analysis as data through analysis:

1. the relationship between two variables,
2. differences in a variable among different subgroups,
3. how several independent variables might explain the variance in a dependent variable.

##### **4.6.2.1 Chi-square test of Independence:**

Chi-square test is a test that statistically determines significance in the analysis of frequency distributions Zikmund, (2003). This is an inferential statistics technique designed to test for significant relationships between two variables organized in a bivariate table. It requires no assumptions about the shape of the population distribution from which a sample is drawn. The level of measurement for the independent and the dependent variable can be any level that defines groups (dichotomous, nominal, ordinal, or grouped interval).

Chi-square test was used to test for the interdependency between demographic factors and credit card usage level.

It tests the significant differences between the observed distribution of data among categories and the expected distribution based on the null hypothesis. In the one sample case, null hypothesis is established based on the expected frequency of objects in each category. Then the deviations of the actual frequencies in each category are compared with the hypothesized frequencies. The greater the difference

between them, the less is the probability that these differences can be attributed to chance. The value of Chi-square is the measure that expresses the extent of this difference. The larger the divergence, the larger is the chi-square value.

There is a different distribution for chi-square for each number of degrees of freedom (d.f.), defined as  $(k-1)$ . The chi-square test of independence requires that the expected frequency for all cells be 5.0 or higher otherwise the chi-square statistic may lead to erroneous conclusions, then it should not be interpreted.

#### **4.6.2.2 T-test for Independent Samples:**

The t-test is the most commonly used method to evaluate the differences in means between two groups. Theoretically, the t-test can be used even if the sample sizes are very small, as long as the variables are normally distributed within each group. The normality assumption can be evaluated by looking at the distribution of the data (via histograms) or by performing a normality test. The independent samples t-test also assumes that the variance measure of variability is equal for both of the groups included in the t-test. This assumption is tested with Levene's test for Equality of Variances. The Levene test is itself a test of the null hypothesis that the variances of the two groups are equal.

The Independent Samples T-Test was used to test the differences between active and inactive cardholders in term of the overall attitude of cardholder toward credit card usage, perceived relative importance of card attributes and cognitive evaluation of card attributes. The sample was divided into two groups (active and inactive cardholders) based on the credit card usage level. The tested variables were overall attitude of cardholder toward credit card usage, perceived relative importance of card attributes and cognitive evaluation of card attributes.



To test the assumption that the tested variable is normally distributed, from SPSS researcher will check the skewness and kurtosis for these tested variables. They satisfied the criteria for a normal distribution if the skewness of their distribution was between -1.0 and +1.0 and the kurtosis of their distribution was between -1.0 and +1.0. However, if one or two these conditions were failed, the assumption of normality can be satisfied for this test by the Central Limit Theorem if both groups in the hypotheses test have 50 or more subjects.

Levene's test was used to test for the assumption that the variance measure of variability is equal for both of the groups included in the t-test. If we fail to reject the null hypothesis because the p-value or sig. for the statistic is greater than alpha (0,05 for 95% of confidence level), we satisfy the requirement for equal variances. If we reject the null hypothesis because the p-value or sig. for the statistic is less than or equal to alpha, we do not meet the requirement for equal variances.

The statistic measurements of each hypothesis are shown in the Table 4.3

**Table 4.3: Statistics Measurement of Each Hypothesis**

<b>Hypothesis</b>	<b>Statistic used</b>
<b><i>(1)Demographic interdependency towards credit card usage level</i></b> <ul style="list-style-type: none"> <li>• H1, H2, H3, H4, H5</li> </ul>	Chi-square test
<b><i>(2)Differences in overall attitude toward credit card (A<sub>0</sub>) between inactive and active cardholders</i></b> <ul style="list-style-type: none"> <li>• H6</li> </ul>	T-test analysis
<b><i>(3)Differences in perceived importance (I<sub>i</sub>) about attributes of credit card between inactive and active cardholders</i></b> <ul style="list-style-type: none"> <li>• H7, H8, H9, H10, H11, H12, H13, H14, H15, H16</li> </ul>	T-test analysis
<b><i>(4)Differences in cognitive evaluation (B<sub>i</sub>) on attributes of credit card between inactive and active cardholders</i></b> <ul style="list-style-type: none"> <li>• H17, H18, H19, H20, H21, H22, H23, H24, H25, H26</li> </ul>	T-test analysis

## **Chapter 5**

### **Data Analysis**

This chapter is the analysis of the collected data from the structured interview. The result and analysis is divided into two sections consisting of descriptive and inferential statistics. Section one describes descriptive statistics under profile of the sample. Section two describes inferential statistics under test and explanation of the hypothesis results.

#### **5.1 Descriptive Statistics – Profile of the sample**

The sample data of 310 was collected over the five-day period from Sunday 19<sup>th</sup> September to Thursday 23<sup>rd</sup> September, 2004. It was apparently found during the survey that collection of data via structured interviewed is difficultly and time consuming due to the relevant reluctance of the mall shoppers when encountered by a stranger with a questionnaire. And the fact that to find a Thai credit cardholder satisfying of holding a bank credit card which confining most of their daily transactions by a single card is not an easy task. The researcher found that it took about 8 to 12 minutes to complete an interview.

There are no missing values. The analysis of this research study has been based on 310 respondents.

##### **5.1.1 Measures of central tendency**

Since the variables of gender [gender] and marital status [marital] are nominal variables, only “mode” is a meaningful measure of central tendency. Occupational level variable [occupat] is ordinal variable so “mode” and “median” are correct application of a statistic. Whereas age [age] and income [income] variables are interval level variables in this data set, the central tendency of it can be represented by mean, median, or mode.

In the SPSS output, it is noticed that the Mode of the variable gender [gender], marital status [marital] is presented in the Statistics table (Table 5-1). Because of the corresponding category for the [gender] value of 2 is “female”, [marital] value of 1 is “married”. It is meant that most survey respondents are female and married. It is confirmed to be true by examining the frequency table of the same variable showing that the largest frequency category is 2 “female” (Table 5-2) and 1 “married” (Table 5-3) respectively.

Similarly, from Table 5-1, researcher found that the mode of [occupant] is 3, represented of “employee of private organization”. It can be interpreted that most surveyed respondents were “employee of private organization”.

**Table 5-1: Frequency Statistic table of Demographic**

		Gender	Marital status	Occupation	Age	Personal Income	Monthly credit card's
N	Valid	310	310	310	310	310	310
	Missing	0	0	0	0	0	0
Mean		1.52	1.49	3.46	2.64	2.477	3.61
Median		2.00	1.00	3.00	<b>2.50</b>	<b>2.000</b>	<b>4.00</b>
Mode		<b>2</b>	<b>1</b>	<b>3</b>	2	2.0	4
Std. Deviation		.500	.501	1.176	1.055	1.1566	1.109
Variance		.250	.251	1.382	1.113	1.338	1.230
Skewness		-.091	.052	-.406	.438	.573	-.522
Std. Error of Skewness		.138	.138	.138	.138	.138	.138
Range		1	1	5	4	4.0	5

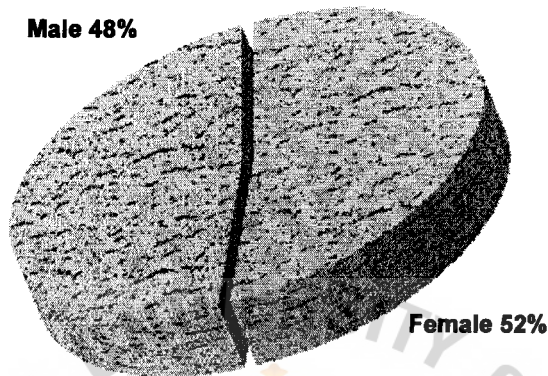
The median of the distribution for the variables of age [age] was 2.5, personal income [income] was 2 and monthly credit card’s usage [carduse] was 4. It showed that a typical survey respondent in our sample of was at of 39 years old, with personal income from 10,001 – 20,000B and used credit card 11 – 14 times per month.

### 5.1.2 Gender

The numbers of female respondents were counted more than the number of male respondents (52% versa 48%) in the study.

**Table 5-2: Frequency Statistic table of Gender**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	148	47.7	47.7	47.7
	Female	162	52.3	52.3	100.0
	Total	310	100.0	100.0	



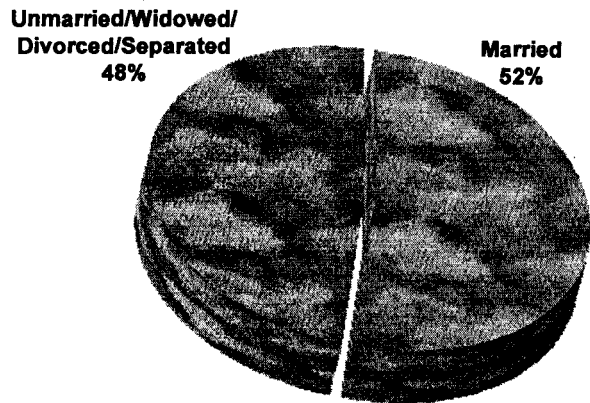
**Figure 5-1: Frequency of Gender**

**5.1.3 Marital status**

Of the 310 respondents who were surveyed, 160 cardholders (or 52%) were married and the rest 150 (48%) are single.

**Table 5-3: Frequency Statistic table of Marital status**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Married	160	51.6	51.6	51.6
	Unmarried - Widowed - Divorced - Separated	150	48.4	48.4	100.0
	Total	310	100.0	100.0	



**Figure 5-2: Frequency of Marital status**



5.1.4 Occupational level

Table 5-4: Frequency Statistic table of Occupation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Executives	25	8.1	8.1	8.1
	Middle Management/ Management	30	9.7	9.7	17.7
	Employee of private organization	101	32.6	32.6	50.3
	Government/ State enterprise officer	86	27.7	27.7	78.1
	Entrepreneur	67	21.6	21.6	99.7
	Others	1	.3	.3	100.0
	Total	310	100.0	100.0	

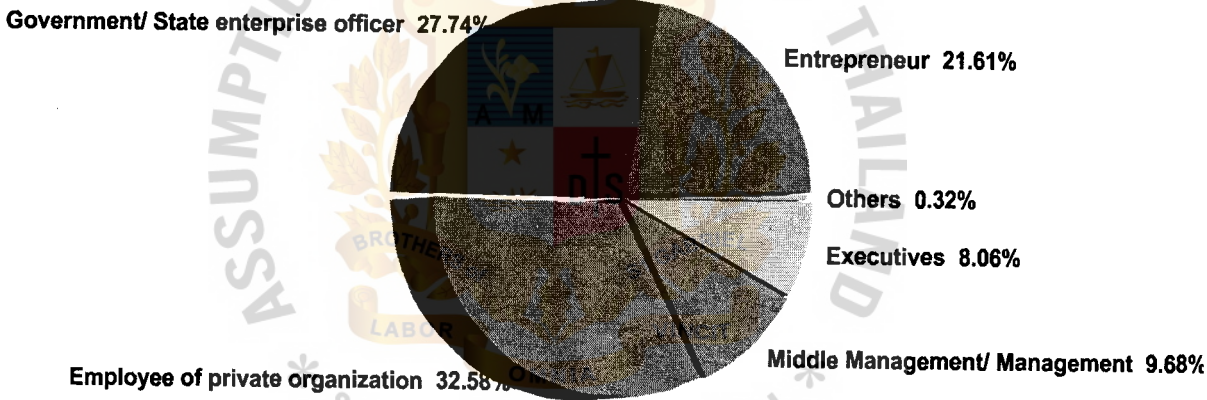


Figure 5-3: Frequency of Occupation

Employee of private organization occupied the largest portion of the study's sample with 32.6%, government/state enterprise officer stayed second with 27.7% followed by 21.6% of entrepreneur or self-employed person and the rest was accounted for 8.1% in executive level and 9.7% of middle management/ manager.

5.1.5 Age

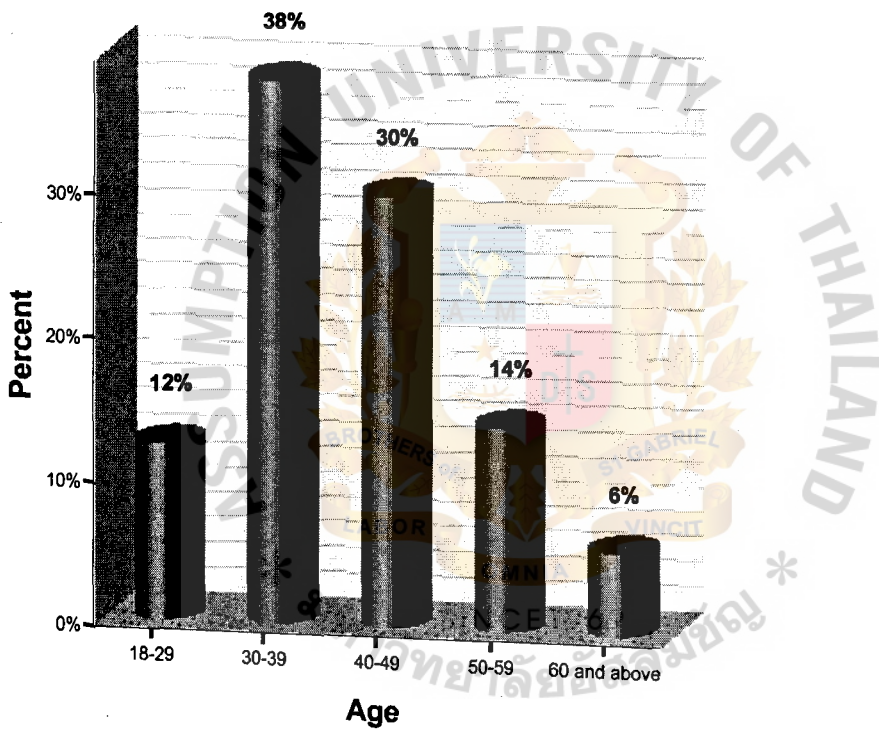
From figure 5.4, exemplify the largest percentages of respondents' age are between 30-39 years old, which accounted for 38%. Following by 40-49 years old



occupied for 30%, 50-59 years age for 14%, 18-29 for 12% and the least was 60 and above years age accounted for 6%.

**Table 5-5: Frequency Statistic table of Age**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-29	38	12.3	12.3	12.3
	30-39	117	37.7	37.7	50.0
	40-49	93	30.0	30.0	80.0
	50-59	44	14.2	14.2	94.2
	60 and above	18	5.8	5.8	100.0
	Total	310	100.0	100.0	



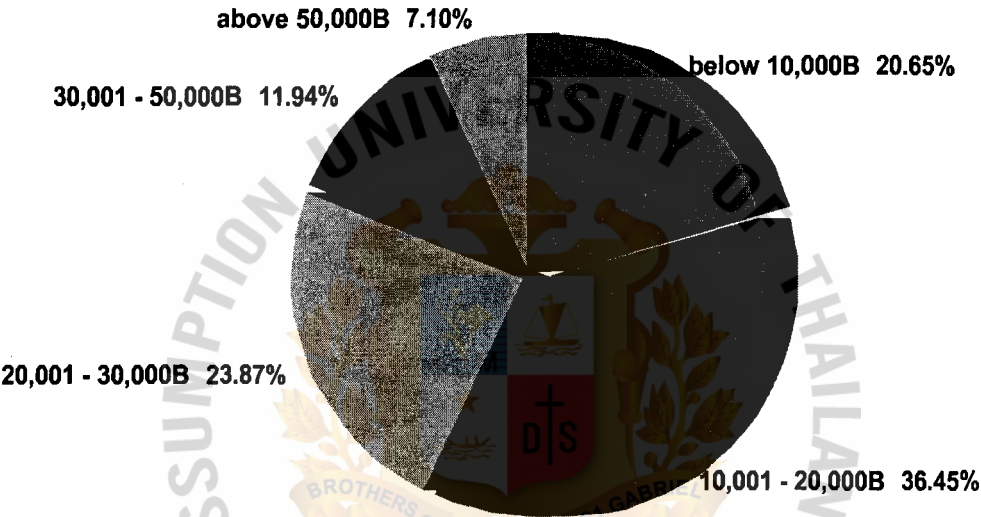
**Figure 5-4: Frequency of Age**

**5.1.6 Personal income**

From the profile about personal income of respondents, researcher found that 10,001 – 20,000B and 20,001 – 30,000B were the largest groups with the portion rate of 36.5% and 23.9% respectively. It was followed by groups below 10,000B and 30,001B with 20.6% and 11.9%. The group had income of above 50,000B accounted the least percentage in the respondents with 7.1%.

**Table 5-6: Frequency Statistic table of Personal income**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	below 10,000B	65	20.6	20.6	20.6
	10,001 - 20,000B	113	36.5	36.5	57.1
	20,001 - 30,000B	73	23.9	23.9	81.0
	30,001 - 50,000B	37	11.9	11.9	92.9
	above 50,000B	22	7.1	7.1	100.0
	Total	310	100.0	100.0	



**Figure 5-5: Frequency of Personal income**

5.2 Inferential Statistics

This area of the investigation has been analysed using the following statistical tools:

5.2.1 Chi-Square Test:

5.2.1.1 Gender and credit card usage level

*H10: Gender of credit cardholders and their credit card usage level are not dependent (null hypothesis > 0.05).*

*H1: Gender of credit cardholders and their credit card usage level are dependent (alternative hypothesis < 0.05).*

Table 5-7: Crosstab table between gender and credit card usage level

Count

		Active and Inactive cardholder		Total
		Inactive cardholder	Active cardholder	
Gender	Male	73	75	148
	Female	56	106	162
Total		129	181	310

Table 5-8: Chi-square test between gender and credit card usage level

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	6.932(b)	1	.008	.011	.006
Continuity Correction(a)	6.338	1	.012		
Likelihood Ratio	6.950	1	.008		
Fisher's Exact Test					
Linear-by-Linear Association	6.909	1	.009		
N of Valid Cases	310				

a Computed only for a 2x2 table

b 0 cells (.0%) have expected count less than 5. The minimum expected count is 66.36.

The table (Table 5-8) shows a Pearson significance value of 0.006 thus, it is advised to reject the null hypothesis and to accept the alternative hypothesis, stating that gender and credit card usage level are dependent.

5.2.1.2 Marital status and credit card usage level

*H2<sub>0</sub>: Marital status of credit cardholders and their credit card usage level are not dependent (null hypothesis > 0.05).*

*H2: Marital status of credit cardholders and their credit card usage level are dependent (alternative hypothesis < 0.05).*

Table 5-9: Crosstab table between marital status and credit card usage level

Count

		Active and Inactive cardholder		Total
		Inactive cardholder	Active cardholder	
Marital status	Married	71	89	160
	Unmarried - Widowed - Divorced - Separated	58	92	150
Total		129	181	310

Table 5-10: Chi-square test between marital status and credit card usage level

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.038(b)	1	.308		
Continuity Correction(a)	.817	1	.366		
Likelihood Ratio	1.039	1	.308		
Fisher's Exact Test				.356	.183
Linear-by-Linear Association	1.035	1	.309		
N of Valid Cases	310				

a Computed only for a 2x2 table

b 0 cells (.0%) have expected count less than 5. The minimum expected count is 67.71.

The null hypothesis is accepted, and with a significance value of 0.183 (Table 5-10) showing that marital status and credit card usage level are independent.

5.2.1.3 Occupation and credit card usage level

*H3<sub>0</sub>: Occupation of credit cardholders and their credit card usage level are not dependent (null hypothesis > 0.05).*

*H3: Occupation of credit cardholders and their credit card usage level are dependent (alternative hypothesis < 0.05).*

The null hypothesis is rejected on account of the significant value 0.003 being less than 0.05 (Table 5-12). Consequently, the alternative hypothesis is accepted, whereby occupation and credit card usage level are dependent.

**Table 5-11: Crosstab table between occupation and credit card usage level**

Count

		Active and Inactive cardholder		Total
		Inactive cardholder	Active cardholder	
Occupation	Executives	4	21	25
	Middle Management/ Management	6	24	30
	Employee of private organization	49	52	101
	Government/ State enterprise officer	43	43	86
	Entrepreneur	27	40	67
	Others	0	1	1
	Total	129	181	310

**Table 5-12: Chi-square test between occupation and credit card usage level**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	17.748(a)	5	.003
Likelihood Ratio	19.488	5	.002
Linear-by-Linear Association	5.303	1	.021
N of Valid Cases	310		

a 2 cells (16.7%) have expected count less than 5. The minimum expected count is .45.

**5.2.1.4 Age and credit card usage level**

*H4<sub>0</sub>: Age of credit cardholders and their credit card usage level are not dependent (null hypothesis > 0.05).*

*H4: Age of credit cardholders and their credit card usage level are dependent (alternative hypothesis < 0.05).*

The null hypothesis is accepted owing to the significance value of 0.912 (Table 5-14), the alternative hypothesis is rejected, showing that age and credit card usage level are independent.

**Table 5-13: Crosstab table between age and credit card usage level**

Count		Active and Inactive cardholder		Total
		Inactive cardholder	Active cardholder	
Age	18-29	17	21	38
	30-39	51	66	117
	40-49	37	56	93
	50-59	18	26	44
	60 and above	6	12	18
Total		129	181	310

**Table 5-14: Chi-square test between age and credit card usage level**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.986(a)	4	.912
Likelihood Ratio	.997	4	.910
Linear-by-Linear Association	.759	1	.384
N of Valid Cases	310		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.07.

**5.2.1.5 Monthly income and credit card usage level**

*H5<sub>0</sub>: Monthly income of credit cardholders and their credit card usage level are not dependent (null hypothesis > 0.05).*

*H5: Monthly income of credit cardholders and their credit card usage level are dependent (alternative hypothesis < 0.05).*

The null hypothesis is rejected, and with a significance value of 0.001 (Table 5-16) the alternative hypothesis showing that monthly income and credit card usage level are dependent is accepted.



**Table 5-15: Crosstab table between monthly income and credit card usage level**

Count

		Active and Inactive cardholder		Total
		Inactive cardholder	Active cardholder	
Personal Income	below 10,000B	39	26	65
	10,001 - 20,000B	49	64	113
	20,001 - 30,000B	27	46	73
	30,001 - 50,000B	10	27	37
	50,000B above 50,000B	4	18	22
Total		129	181	310

**Table 5-16: Chi-square test between monthly income and credit card usage level**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	18.041(a)	4	.001
Likelihood Ratio	18.602	4	.001
Linear-by-Linear Association	17.166	1	.000
N of Valid Cases	310		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 9.86.

**5.2.2 Independent Sample T-Test:**

It is found that the assumption of normality was satisfied for this test by the Central Limit Theorem since both groups (active and inactive cardholders) in the hypotheses test have more 50 subjects (Table 5-17).

From the SPSS output as shown on Table 5-18 and Table 5-19, researcher recognized that the significance values in the both case “equal variance are assumed” and “equal variance are not assumed” are equally or very similarly. Therefore, the interpretation of the output can be drawn from either significance value of case “equal variance are assumed” or “equal variance are not assumed” which is not misleading the correct answer. In the other way to say, it is not necessary to check the Levene's Test for Equality of Variances.

All of the research hypothesis of from H6 to H26 are to test of the difference. This is a two-tailed directional hypothesis. Since SPSS prints out the two-tailed significance, we can make our decision about the null hypothesis by comparing the full value of probability of the test statistic (t) to the alpha level of significance stated in the problem (0.05).

#### **5.2.2.1 Differences in overall attitude toward credit card ( $A_0$ ) between inactive and active cardholders**

*H6<sub>0</sub>: There are no differences in overall attitude toward attributes of credit card between active and inactive cardholders.*

*H6: There are differences in overall attitude toward attributes of credit card between active and inactive cardholders.*

Since the 2-tailed significance value of 0.001 less than 0.005 for the variable of overall attitude toward credit card [over\_att], follow rule of rejection, the null hypothesis is rejected. The alternative hypothesis is accepted stating that there are differences in overall attitude toward attributes of credit card between active and inactive cardholders.

#### **5.2.2.2 Differences in perceived importance ( $I_i$ ) about attributes of credit card between inactive and active cardholders**

*H7<sub>0</sub>: There are no differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of Wide acceptance.*

*H7: There are differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of Wide acceptance.*

As shown on the Table 5-18, since the two-tailed probability of the t statistic ( $t=1.804$ ) was  $p=0.072$ , greater than the alpha of 0.05, the null hypothesis of equal means was not rejected, and we do not have support for the research hypothesis. It is

said that there are no differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of Wide acceptance.

*H8<sub>0</sub>: There are no differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of Large credit limit.*

*H8: There are differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of Large credit limit.*

The null hypothesis was not rejected, since the two-tailed probability  $p=0.493$ , greater than the alpha of 0.05 (Table 5-18). There are no differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of Large credit limit.

*H9<sub>0</sub>: There are no differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of Design of the card.*

*H9: There are differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of Design of the card.*

The two-tailed probability  $p=0.001$ , less than the alpha of 0.05 (Table 5-18), the null hypothesis was rejected, we accepted the alternative hypothesis. There are differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of Design of the card.

*H10<sub>0</sub>: There are no differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of Ease of bill payment.*

*H10: There are differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of Ease of bill payment.*

The two-tailed probability  $p=0.001$ , less than the alpha of 0.05 (Table 5-18), the null hypothesis was rejected. The alternative hypothesis showed that there are differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of Ease of bill payment.

*H11<sub>0</sub>: There are no differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of Free annual fee.*

*H11: There are differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of Free annual fee.*

Again, the null hypothesis was rejected since the two-tailed probability  $p=0.001$ , less than the alpha of 0.05 (Table 5-18). There are differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of Free annual fee.

*H12<sub>0</sub>: There are no differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of Image of issuing bank.*

*H12: There are differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of Image of issuing bank.*

The null hypothesis was not rejected, contributed by the two-tailed probability  $p=0.407$ , greater than the alpha of 0.05 (Table 5-18). There are no differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of Image of issuing bank.

*H13<sub>0</sub>: There are no differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of Heavy advertising by issuing bank.*

*H13: There are differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of Heavy advertising by issuing bank.*

The null hypothesis was not rejected, owing to the two-tailed probability  $p=0.622$ , greater than the alpha of 0.05 (Table 5-18). There are no differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of Heavy advertising by issuing bank.

*H14<sub>0</sub>: There are no differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of Effective handling of cardholders' complaints.*

*H14: There are differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of Effective handling of cardholders' complaints.*

The null hypothesis was not rejected, because of the two-tailed probability  $p=0.377$ , greater than the alpha of 0.05 (Table 5-18). There are no differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of Effective handling of cardholders' complaints.

*H15<sub>0</sub>: There are no differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of Attractive incentive to credit card users.*

*H15: There are differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of Attractive incentive to credit card users.*

The null hypothesis was rejected since the two-tailed probability  $p=0.001$ , less than the alpha of 0.05 (Table 5-18). There are differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of Attractive incentive to credit card users.

*H16<sub>0</sub>: There are no differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of Long interest-free repayment period.*

*H16: There are differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of Long interest-free repayment period.*

The null hypothesis was rejected since the two-tailed probability  $p=0.001$ , less than the alpha of 0.05 (Table 5-18). There are differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of Long interest-free repayment period.

#### **5.2.2.3 Differences in cognitive evaluation ( $B_i$ ) on attributes of credit card between inactive and active cardholders**

*H17<sub>0</sub>: There are no differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of Wide acceptance.*

*H17: There are differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of Wide acceptance.*



The null hypothesis was not rejected due to the two-tailed probability  $p=0.709$ , greater than the alpha of 0.05 (Table 5-19). There are no differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of Wide acceptance.

*H18<sub>0</sub>: There are no differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of Large credit limit.*

*H18: There are differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of Large credit limit.*

The null hypothesis was rejected because of the two-tailed probability  $p=0.001$ , less than the alpha of 0.05 (Table 5-19). There are differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of Large credit limit.

*H19<sub>0</sub>: There are no differences in cognitive evaluation on about attributes of credit card between active and inactive cardholders in terms of Design of the card.*

*H19: There are differences in cognitive evaluation on about attributes of credit card between active and inactive cardholders in terms of Design of the card.*

The null hypothesis was again rejected owing to the two-tailed probability  $p=0.001$ , less than the alpha of 0.05 (Table 5-19). There are differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of Design of the card.

*H20<sub>0</sub>: There are no differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of Ease of bill payment.*

*H20: There are differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of Ease of bill payment.*

The null hypothesis was rejected since the two-tailed probability  $p=0.001$ , less than the alpha of 0.05 (Table 5-19). There are differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of Ease of bill payment.

*H21<sub>0</sub>: There are no differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of Free annual fee.*

*H21: There are differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of Free annual fee.*

The null hypothesis was not rejected since the two-tailed probability  $p=0.838$ , greater than the alpha of 0.05 (Table 5-19). There are no differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of Free annual fee.

*H22<sub>0</sub>: There are no differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of Image of issuing bank.*

*H22: There are differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of Image of issuing bank.*

Since the two-tailed probability  $p=0.543$ , greater than the alpha of 0.05 (Table 5-19), the null hypothesis was not rejected. There are no differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of Image of issuing bank.

*H23<sub>0</sub>: There are no differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of Heavy advertising by issuing bank.*

*H23: There are differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of Heavy advertising by issuing bank.*

Since the two-tailed probability  $p=0.201$ , greater than the alpha of 0.05 (Table 5-19), the null hypothesis was not rejected. There are no differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of Heavy advertising by issuing bank.

*H24<sub>0</sub>: There are no differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of Effective handling of cardholders' complaints.*

*H24: There are differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of Effective handling of cardholders' complaints.*

The null hypothesis was rejected since the two-tailed probability  $p=0.001$ , less than the alpha of 0.05 (Table 5-19). There are differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of Effective handling of cardholders' complaints.

*H25<sub>0</sub>: There are no differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of Attractive incentive to credit card users.*

*H25: There are differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of Attractive incentive to credit card users.*

Since the two-tailed probability  $p=0.001$ , less than the alpha of 0.05 (Table 5-19) the null hypothesis was rejected. There are differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of Attractive incentive to credit card users.

*H26<sub>0</sub>: There are no differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of Long interest-free repayment period.*

*H26: There are differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of Long interest-free repayment period.*

Since the two-tailed probability  $p=0.001$ , less than the alpha of 0.05 (Table 5-19) the null hypothesis was rejected. There are differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of Long interest-free repayment period.

## **Chapter 6**

### **Conclusion and Recommendation**

The results analyzed in the descriptive and hypothesis testing (Chi-square analysis and Independent Sample t-test analysis) are iterated and further discussed in this chapter. Based on these results and the objectives stated for this research, recommendations are contributed for both academic and business implications.

#### **6.1 Summary of Finding**

##### **6.1.1 Summary of Descriptive Analysis – Profile of Sample**

There were 310 persons participated in this survey in which the number of females occupied for 52% and the rest 48% were males. Fifty two percent of the sample was married with 48% single. Half of the respondents in the sample had his age below 39 years old and another half of the respondents had his age above 39 years old.

Survey respondents were asked to report their current level of occupation. Of the 310 responses to this inquiry, approximately 8% was in executive level. Another 10% were doing their job in middle management or in the position of manager. Most of the respondents were willing to participate in the survey working as employee of private organization (32%), as government/ state enterprise officer (28%) or self employee, owner of own business (22%).

Approximately, 21% of the respondents reported a monthly income below Bt 10,000 (USD 243). More than one-third of respondents had income of Bt 10,001 (USD 243) to Bt 20,000 (USD 486) per month. Meanwhile, 24% reported Bt 20,001 (USD 486) to Bt 30,000 (USD 728). The high income people who were approached to the research occupied only 12% for income from Bt 30,001 (USD 728) to Bt 50,000 (USD 1214) and 7% for income of Bt 50,001 (USD 1214) or more.

## **6.1.2 Summary of Hypothesis Testing**

### **6.1.2.1 Demographic factors and credit card usage**

Chi-square test used to test for the interdependency between demographic factors and level of credit card usage, researcher found that:

- (1) Gender and credit card usage level are dependent,
- (2) Marital status and credit card usage level are independent,
- (3) Occupation and credit card usage level are dependent,
- (4) Age and credit card usage level are independent,
- (5) Income and credit card usage level are dependent.

### **6.1.2.2 Differences between active and inactive cardholders in terms of the overall attitude of cardholder**

Independent samples t-test was used to test the differences between active and inactive cardholders in terms of the overall attitude of cardholder toward credit card usage. It is found that:

- (6) There are differences in overall attitude toward attributes of credit card between active and inactive cardholders.

### **6.1.2.3 Differences between active and inactive cardholders in terms of the perceived importance of card attributes**

Again, from the output of the Independent samples t-test analysis, researcher found that

There are no differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of

- (7) “wide acceptance”,
- (8) “large credit limit”,
- (9) “image of issuing bank”,



- (10) “heavy advertising by issuing bank”,
- (11) “effective handling of cardholders’ complaints”

There are differences in perceived importance about attributes of credit card between active and inactive cardholders in terms of

- (12) “design of the card”,
- (13) “ease of bill payment”,
- (14) “free annual fee”,
- (15) “attractive incentive to credit card users”,
- (16) “long interest-free repayment period”.

#### **6.1.2.4 Differences between active and inactive cardholders in terms of the cognitive evaluation of card attributes**

There are no differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of

- (17) “wide acceptance”,
- (18) “free annual fee”,
- (19) “image of issuing bank”,
- (20) “heavy advertising by issuing bank”

There are differences in cognitive evaluation on attributes of credit card between active and inactive cardholders in terms of

- (21) “large credit limit”,
- (22) “design of the card”,
- (23) “ease of bill payment”,
- (24) “effective handling of cardholders’ complaints”,
- (25) “attractive incentive to credit card users”,
- (26) “long interest-free repayment period”.

## 6.2 Conclusion

### 6.2.1 In terms of demographic

From the results of statistic analysis, it is found that active and inactive cardholders are dependent with gender. It is recognized that female was more active than male cardholders since as of 162 female respondents, 62% of them are active cardholders whereas 53% of 148 male respondents are inactive users (Table 5-7). This clearly shows that female Bangkokian prefer of using their credit card to serve for their personal consumption.

In the study of Chan (1997) about the active and inactive credit cardholders at Hong Kong, the salient demographic characteristics that make the difference between these two groups were age and income. It is found that within the age range of 50-59, there were significantly more active cardholders than inactive cardholders. The finding is quite different with the current study in which age of Bangkok cardholders and their credit card usage are not related. The active and inactive cardholders in Bangkok can not be distinguished by “age” perspective.

Nevertheless, consonant with findings of Chan (1997) income is found to be the factor related to the credit card usage level of credit cardholders whether they are active or inactive. The positive association between usage rate and income was highlighted from the sample of Hong Kong cardholders. The same finding can be seen from the current study in which credit cardholders who have monthly income from more than Bt 10,000 (USD 243) are more active users than the rest.

Together with Ramayah *et al.* (2002), the study gives another support for the finding that credit card usage level dependent on occupation. Evidences from the current paper showed that executive, middle management/managers are the most active cardholders in the sample. Employee of private organization and government or

state enterprise officers are the inactive ones. Whereas self-employed or entrepreneur credit cardholders are seen as question marks that need card issuers aggressively explore.

### **6.2.2 In terms of attitudinal perspective**

The overall attitude toward attributes of credit card between active and inactive cardholders was compared. It is found that the former to have more favorable overall attitude toward their card than the later (one tailed significance value less than 0.05).

Summary of the output of t-test is showing that there are no differences on the perceive importance about the attributes of credit card between active and inactive cardholders in terms of wide acceptance, large credit limit, image of issuing bank, heavy advertising by issuing bank and effective handling of cardholders' complaints. The results also stated that there are differences on the perceive importance between active and inactive cardholders about the attributes of credit card in terms of design of the card, ease of bill payment, free annual fee, attractive incentive to credit card users and long interest free repayment period. The Hong Kong active and inactive credit cardholders were found to weight differently their perceive importance on the attributes of "design of the card", "wide acceptance" and "detailed leaflet to describe the card". The attribute "design of the card" can be seen as important factor that both Hong Kong and Bangkok cardholders want to be emphasized by card issuers.

The study indicated that active and inactive cardholders have no differences in cognitive evaluation on attributes of credit card in terms of wide acceptance, free annual fee, image of issuing bank and heavy advertising by issuing bank. The attributes of large credit limit, design of the card, ease of bill payment, effective handling of cardholders' complaints, attractive incentive to credit card users and long

interest free repayment period were received differences on the satisfying evaluation of active and inactive cardholders. The Bangkok cardholders seem to be somewhat satisfied with the performance of card issuers in terms of widely acceptance of card by merchants, free annual fee, image of issuing bank and heavy advertising by issuing bank. The rest of attributes are rated by the different evaluations from active and inactive cardholders.

### **6.3 Implication**

#### **6.3.1 From the finding of the interdependency of demographic towards credit card usage level**

It is realised that the trend in credit card competition would move toward more segmentation of cards targeted at specific customer groups (Somporn, 2004). Understanding the interdependency of demographic factors towards credit card usage level may help credit card marketing managers to tailor or initiate their marketing strategies and communication programmes at more focused level to individuals and targeted groups of customers. More new products of credit card can be introduced to attract potential cardholders.

The dependent relationship between gender, occupation, income and credit card usage level of Thai credit cardholders indicated very specific segments of customers for issuing banks to pay their attention. The marketing managers now can have their customised marketing program to focus on these groups since they are found to be more active users than others. At the mean time the marketing managers can also find their weak or forgot segments of customers that should be improved or explored.

In considering the association between gender and the credit card usage level of cardholders, female is found as active credit cards user. This segment of customers

has been weighted for its importance in the market by many card issuers. It is not surprised by the fact that Krungsri Ayudhya Bank have tried to lure this high purchasing frequency segment to their service by offering the Krungsri GE “Lady card” with many incentives for female. Another example is MasterCard introduced more customised credit cards tailored to niche markets, such as women by joining with Bank of Asia to launch the Lady Card offers special privileges that appeal to women specifically (Sriwipa, 2003).

The findings of active and inactive cardholders depend on occupation (especially for the occupational level of executive and middle management/managers) and income (specific for group having income from more than Bt 10,000 or USD 243) has opened rooms for the marketers to develop their stream of revenue.

Banks may cooperate with other firms to create new products for specific segment of customer. For example, Kasikorn bank joined with auto giant Daimler Chrysler to introduce a new Mercedes Card for local customers. This new credit card tapped into luxury market, comprised of those with monthly incomes over Bt 40,000 (USD 970). Credit lines ranging from Bt 80,000 (USD 1940) to 1.5 million (USD 36,400) will be offered to cardholders, together with discounts of 10% to 15% on parts and labour charges from Daimler Chrysler dealers (Darana, 2004b).

On the other hand, from the result of this test, card issuers may identify what group of customers that they need to consider and take into more consideration, what special segments are emerging for which the company needs to tailor its services. Take an example for “entrepreneur” segment which was discovered as one of the largest group of Thai credit cardholders and the potential of increasing the number of active cardholders. In compared with their role in the current Thai economy not only in size but also in income creation, researcher believed that credit card issuers can



gain significant revenue from this segmentation. Therefore, it would be highly advised to credit card issuers to explore this segment by more aggressively marketing programs, by improving consumer understanding of this kind of financial products.

Additionally, by applying the knowledge about the attributes of cards that can satisfy the active cardholders as discussed in the later part, the marketing manager now have more information that can be helpful for their performance.

### **6.3.2 From the finding of Attitudinal differences between inactive and active cardholders**

Understanding attitudes and credit card usage may affect the development of marketing strategies of credit card issuers. Equipped with this kind of knowledge, credit card companies may be able to change consumer attitudes towards the behavior of using credit cards in more favourable way.

#### **6.3.2.1 Perceived importance of card attributes**

Overall, both inactive and active cardholders perceived most of the attributes under study as important attributes of a credit card. As indicated by Table 5-18, both parties attached a mean score of not less than 50 for most of the attributes.

The major attributes that contributed to the credit card usage level of active and inactive cardholders consisted of large credit limit, design of the card, ease of bill payment, free annual fee, effective handling of cardholders' complaints, attractive incentive to credit card users and long interest free repayment period.

The active cardholder emphasized more on the importance of card's attributes: design of the card, ease of bill payment, free annual fee, attractive incentive to credit card users and the long interest free period as compared to the inactive cardholder. This implies that modern lifestyle, the desire of having good service, saving time and monetary beneficiary played an active role in distinguishing active and inactive



cardholder. It is believed that the market now has become much more knowledgeable and complicated. Card issuers are recommended trying to be more and more sophisticated in product innovation. Their current positioning is more than just a credit card issuer but a financial payment service company.

To this respect, the present findings suggest for card issuers improve more on the superiority of card design with considering the lifestyle of segments of customers that they aim to. The card no longer has a place only in wallets used for the solely purpose of doing cashless transaction. It should be promoted in the “pocketless” society in which the card could be regarded as a fashion accessory. As a matter of fact, recently several Thai issuing banks have already turned their attention to enhancing the appearance of their credit cards with more fashionable design. The cardholders now can have their own pictures or their beloved ones on the plastic card with trendy design. Holes are punched into it for holders to attach the trendy card to a necklace, keychain or money clip. Among others, Krungthai bank was trying to foster a new trend for mini-mania in Thailand, with the introduction of nine mini credit cards in five categories, claimed to match the preference of each client's lifestyle (Somporn, 2004). MasterCard Bangkok Bank and MasterCard Siam City Bank have followed the trend recently with very attractive key chain design. The near future trend for the plastic card will be smart card or credit card with embedded chip. It is moving credit cards away from magnetic strips towards next generation embedded chip technology to offer greater security and faster transaction processing for customers and retailers.

The attribute “ease of bill payment” was rated as one of the most importance conditions that any cardholders especially for active users have to consider. This is just another confirmation of the fact of current life. In this era of information and

technology, people face a very daily intense pressure not only in works but also in their common life. Time saving and convenience are what hi-tech generation hunting for. Therefore, the importance of availability of as much kind of payment methods as possible has been increasingly pressuring the issuers. The tasks for banks now are to improve the efficiency of staffs and equipments that serve for online payment, phone payment service and especially for the new trend of payment by mobile phone.

“Free annual fee” and “longer repayment period without interest” have been used by many banks as first priority from the beginning when offering their credit card service. It is now constraint by laws and regulations. This finding conforms to the success case of Krungthai Card Company in improving his role in the credit market. After KTC was spun off from KTB, the company applied an aggressive marketing strategy, including offering lifetime free membership to expand its portfolio. By using the strategy “no annual charge and no application fee”, KTC built its customer base from only 250,000 cards as of June 2002 to 600,000 by the end of 2002. In only six months the number of KTC cards grew by 140% (Pichai, 2003). At the moment, these two methods have been used widely by card issuers in credit card industry. Therefore, they are no longer considered as a powerful tool to differentiate the performance of card issuers in the market.

“Attractive incentives” can be understood as any special privileges that appeal to cardholders specifically. It can be a “birthday coupon”, “discounted dinner” or any campaign that bank cooperated with merchants. Card issuers normally give earning marks for every transaction of their cardholders. These marks can be exchanged for products or services which displayed in a periodically attractive published catalog. The card issuers are recommended to continuously improve the display of Bonus

catalog more attractively. Add more variety of exchanged products, services to cover all aspects that each targeted segmentation of customer is interested in.

#### **6.3.2.2 Evaluation on card attributes**

By referring to the relevant descriptive statistics of mean  $B_i$  values, it is found that active cardholders rated the performance of their cards as more satisfactory in most of the card attributes than inactive cardholders. These results are familiar with the conventional belief that frequent users are usually more satisfied consumers than infrequent ones. In general, from the output of analysis, active users were more satisfied with their card than inactive users in terms of large credit limit, design of the card, ease of bill payment, effective handling of cardholders' complaints, attractive incentive to credit card users and long interest free repayment period. The attributes of "large credit limit" and "attractive incentive to credit card users" were satisfied by the active users seen by the highest score.

It is observed that most attributes only received a mean score of not more than 60 from both groups. This score is still relative low in comparison with the maximum of 100. Therefore, researcher believes that there is a room for card marketers to perform more to improve cardholders' satisfaction on these salient attributes especially for the attributes that distinguish clearly the more satisfaction of active cardholders to inactive ones.

"Large credit limit", for instance, may be first area where card marketers can work on. By increasing their credit limits, active users may activate more on their usage level since this segment of customer have already satisfied on this attribute. They can have a further satisfaction when their need is extending. In the process of increasing the satisfaction of the attribute "Large credit limit", inactive card users may be motivated to rely more on their cards for payment. Of course, in this attempt, credit

risks in terms of highly delinquency should be taken into consideration and well managed by card issuers. The rule of law should also be first consulted as well. Continuing cooperate with Thai Credit Bureau and constantly upgrade computerized control systems so as to facilitate a thorough and continuous assessment of cardholders' credit information are recommended to bank card issuers.

“Effective handling of cardholders' complaints” is another factor can distinguish Thai active and inactive cardholders in terms of attribute's evaluation. To handle complaints made by cardholders effectively, the card-issuing bank should have a special center to attend to the credit cardholder's complaints and give necessary information. It may be a call center which can be set up by bank own or outsourcing depends on cost and bank policy. Key performance indicators should be implemented to ensure the effectiveness of the bank. For example, deadlines in solving each of the complaints should be allocated. A team of well-trained staffs to is necessary to project a professional image to cardholders.

Besides, from the information provided by the study, marketers can find out some attributes that even not differentiate between active and inactive cardholder but it is importance enough to be improved for the more satisfaction of both of the group. “Wide acceptance”, for example, received highly important score but is not considerably in satisfaction. To raise the rating of this attribute, issuing banks should consider efforts to popularize the use of their credit cards at the lower end retail outlets, focus on liaising with these retailers to convince them of the advantages of increasing sales and profits via accepting credit card payment. In addition, intensive training should be given to these merchants so as to make them familiar with the relevant mechanical procedures and considerate of the feelings of customers during the verification process.

#### 6.4 Further research

The thesis investigated the differences between active and inactive Bangkokian cardholders in terms of demographic factors and attitudinal perspectives on credit card attributes. In addition to attitude, the study found that credit use was influenced by demographic as well. The results interpreted a very general picture about attitudes of cardholders on the sample.

Further study can be conducted at more focused level in which the attitudinal perspectives of credit cardholders can be explored in a specific segment of customer. For example, the next study can be carried out under the objective to find the attitudinal differences towards credit card's attributes between active and inactive cardholders of married female group. These results can be very useful for cardholder and card educators better understand the role of attitude toward using credit in an attempt to change the behavior of card users.

The definition of credit card usage level can be extended to other specific terms such as “average amount of Baht used per transaction”, “rate of repayment”, “credit limit utilisation”, or “monthly credit debt installment” depended on the availability of source of information or per required by situation of credit card issuers. The outcome may help issuers identify their most profitable customers, particularly those who make large transactions, creditworthy revolvers.

On the other end of the scale, the research can be conducted with attitudinal perspectives of customers toward attributes of consumer financing products issued by non-bank companies such as Aeon Thana Sinsap and GE Capital.

## Notes

The exchange rate used in the study was 1 USD = 42. 2 B as of 30 October 2004.





## Abbreviation

<b>BOT</b>	Bank of Thailand
<b>NESDB</b>	National Economic and Social Development Board
<b>KTC</b>	Krungthai Card Plc.
<b>KTB</b>	Krungthai Bank



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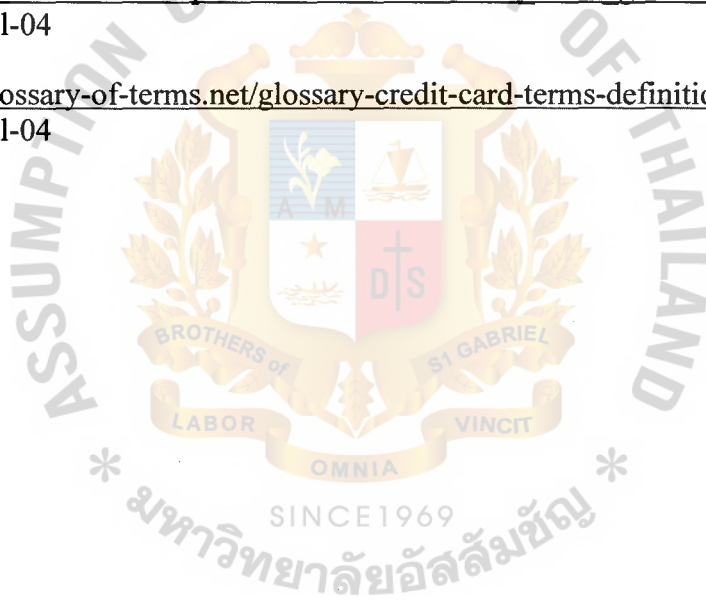
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**Appendix**



### Group Statistics

	Active cardholders and Inactive cardholders	N	Mean	Std. Deviation	Std. Error Mean
Overall attitude toward credit card attributes	Inactive cardholder	139	2.8391	0.9914	0.0841
	Active cardholder	171	3.3961	0.6428	0.0492
(belief) Wide acceptance	Inactive cardholder	139	0.7101	0.1612	0.0137
	Active cardholder	171	0.6784	0.1477	0.0113
(belief) Large credit limit	Inactive cardholder	139	0.5151	0.3014	0.0256
	Active cardholder	171	0.4924	0.2799	0.0214
(belief) Design of the card	Inactive cardholder	139	0.5482	0.2266	0.0192
	Active cardholder	171	0.6626	0.1752	0.0134
(belief) Ease of bill payment	Inactive cardholder	139	0.5417	0.2284	0.0194
	Active cardholder	171	0.6830	0.1542	0.0118
(belief) Free annual free	Inactive cardholder	139	0.5568	0.2365	0.0201
	Active cardholder	171	0.6778	0.1808	0.0138
(belief) Image of issuing bank	Inactive cardholder	139	0.5317	0.2897	0.0246
	Active cardholder	171	0.5047	0.2801	0.0214
(belief) Heavy advertising by issuing bank	Inactive cardholder	139	0.4964	0.2712	0.0230
	Active cardholder	171	0.4807	0.2844	0.0217
(belief) Effective handling of cardholders' complaint	Inactive cardholder	139	0.5295	0.2717	0.0230
	Active cardholder	171	0.5012	0.2868	0.0219
(belief) Attractive incentive to credit card users	Inactive cardholder	139	0.5770	0.2214	0.0188
	Active cardholder	171	0.6509	0.1668	0.0128
(belief) Long interest free repayment period	Inactive cardholder	139	0.5525	0.2244	0.0190
	Active cardholder	171	0.6480	0.1730	0.0132
(satisfy) Wide acceptance	Inactive cardholder	139	0.5058	0.2995	0.0254
	Active cardholder	171	0.5181	0.2815	0.0215
(satisfy) Large credit limit	Inactive cardholder	139	0.4835	0.2358	0.0200
	Active cardholder	171	0.6199	0.2235	0.0171
(satisfy) Design of the card	Inactive cardholder	139	0.5079	0.1911	0.0162
	Active cardholder	171	0.6088	0.2023	0.0155
(satisfy) Ease of bill payment	Inactive cardholder	139	0.4885	0.2322	0.0197
	Active cardholder	171	0.5895	0.2142	0.0164
(satisfy) Free annual free	Inactive cardholder	139	0.5194	0.3102	0.0263
	Active cardholder	171	0.5123	0.3016	0.0231
(satisfy) Image of issuing bank	Inactive cardholder	139	0.4957	0.3007	0.0255
	Active cardholder	171	0.5170	0.3102	0.0237
(satisfy) Heavy advertising by issuing bank	Inactive cardholder	139	0.4676	0.2775	0.0235
	Active cardholder	171	0.5105	0.3051	0.0233
(satisfy) Effective handling of cardholders' complaint	Inactive cardholder	139	0.4835	0.2639	0.0224
	Active cardholder	171	0.5977	0.2233	0.0171
(satisfy) Attractive incentive to credit card users	Inactive cardholder	139	0.4986	0.2464	0.0209
	Active cardholder	171	0.6140	0.1870	0.0143
(satisfy) Long interest free repayment period	Inactive cardholder	139	0.4878	0.2418	0.0205
	Active cardholder	171	0.5982	0.2007	0.0153

**Table 5-17**



### Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Overall attitude toward credit card attributes	Equal variances assumed	31.755	0.000	-5.965	308.000	0.000	-0.55695	0.09337	-0.74066	-0.37323
	Equal variances not assumed			-5.718	226.923	0.000	-0.55695	0.09740	-0.74887	-0.36502
(belief) Wide acceptance	Equal variances assumed	1.032	0.311	1.804	308.000	0.072	0.03171	0.01758	-0.00288	0.06630
	Equal variances not assumed			1.788	283.485	0.075	0.03171	0.01774	-0.00320	0.06662
(belief) Large credit limit	Equal variances assumed	1.193	0.276	0.686	308.000	0.493	0.02271	0.03309	-0.04240	0.08782
	Equal variances not assumed			0.681	285.431	0.496	0.02271	0.03334	-0.04292	0.08834
(belief) Design of the card	Equal variances assumed	4.392	0.037	-5.010	308.000	0.000	-0.11437	0.02283	-0.15929	-0.06945
	Equal variances not assumed			-4.881	255.715	0.000	-0.11437	0.02343	-0.16052	-0.06823
(belief) Ease of bill payment	Equal variances assumed	24.073	0.000	-6.478	308.000	0.000	-0.14131	0.02182	-0.18424	-0.09839
	Equal variances not assumed			-6.232	233.199	0.000	-0.14131	0.02268	-0.18599	-0.09664
(belief) Free annual free	Equal variances assumed	10.252	0.002	-5.101	308.000	0.000	-0.12094	0.02371	-0.16760	-0.07429
	Equal variances not assumed			-4.964	253.722	0.000	-0.12094	0.02436	-0.16893	-0.07296
(belief) Image of issuing bank	Equal variances assumed	0.979	0.323	0.830	308.000	0.407	0.02698	0.03248	-0.03694	0.09089
	Equal variances not assumed			0.828	291.008	0.409	0.02698	0.03260	-0.03718	0.09113
(belief) Heavy advertising by issuing bank	Equal variances assumed	0.716	0.398	0.494	308.000	0.622	0.01570	0.03181	-0.04689	0.07829
	Equal variances not assumed			0.496	300.233	0.620	0.01570	0.03165	-0.04659	0.07799
(belief) Effective handling of cardholders' complaint	Equal variances assumed	0.129	0.720	0.885	308.000	0.377	0.02833	0.03199	-0.03462	0.09128
	Equal variances not assumed			0.890	300.828	0.374	0.02833	0.03181	-0.03428	0.09093
(belief) Attractive incentive to credit card users	Equal variances assumed	9.097	0.003	-3.350	308.000	0.001	-0.07390	0.02206	-0.11731	-0.03049
	Equal variances not assumed			-3.255	251.226	0.001	-0.07390	0.02270	-0.11861	-0.02919
(belief) Long interest free repayment period	Equal variances assumed	6.664	0.010	-4.228	308.000	0.000	-0.09544	0.02257	-0.13985	-0.05102
	Equal variances not assumed			-4.118	255.211	0.000	-0.09544	0.02318	-0.14108	-0.04979

**Table 5-18**

# Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
(satisfy) Wide acceptance	Equal variances assumed	1.214	0.271	-0.374	308.000	0.709	-0.01237	0.03308	-0.07747	0.05273
	Equal variances not assumed			-0.372	287.186	0.710	-0.01237	0.03330	-0.07791	0.05316
(satisfy) Large credit limit	Equal variances assumed	0.206	0.650	-5.215	308.000	0.000	-0.13643	0.02616	-0.18791	-0.08495
	Equal variances not assumed			-5.186	288.343	0.000	-0.13643	0.02631	-0.18821	-0.08465
(satisfy) Design of the card	Equal variances assumed	0.764	0.383	-4.475	308.000	0.000	-0.10086	0.02254	-0.14521	-0.05651
	Equal variances not assumed			-4.501	301.088	0.000	-0.10086	0.02241	-0.14495	-0.05676
(satisfy) Ease of bill payment	Equal variances assumed	1.116	0.292	-3.975	308.000	0.000	-0.10098	0.02541	-0.15098	-0.05099
	Equal variances not assumed			-3.942	284.459	0.000	-0.10098	0.02562	-0.15141	-0.05056
(satisfy) Free annual free	Equal variances assumed	0.034	0.853	0.205	308.000	0.838	0.00714	0.03489	-0.06150	0.07579
	Equal variances not assumed			0.204	291.743	0.838	0.00714	0.03499	-0.06172	0.07600
(satisfy) Image of issuing bank	Equal variances assumed	0.700	0.404	-0.609	308.000	0.543	-0.02128	0.03494	-0.09004	0.04749
	Equal variances not assumed			-0.611	298.632	0.542	-0.02128	0.03483	-0.08982	0.04727
(satisfy) Heavy advertising by issuing bank	Equal variances assumed	4.567	0.033	-1.282	308.000	0.201	-0.04290	0.03346	-0.10875	0.02295
	Equal variances not assumed			-1.295	304.098	0.196	-0.04290	0.03314	-0.10811	0.02231
(satisfy) Effective handling of cardholders' complaint	Equal variances assumed	7.855	0.005	-4.126	308.000	0.000	-0.11421	0.02768	-0.16867	-0.05975
	Equal variances not assumed			-4.056	270.903	0.000	-0.11421	0.02816	-0.16964	-0.05877
(satisfy) Attractive incentive to credit card users	Equal variances assumed	12.412	0.000	-4.688	308.000	0.000	-0.11547	0.02463	-0.16394	-0.06701
	Equal variances not assumed			-4.560	252.543	0.000	-0.11547	0.02533	-0.16535	-0.06560
(satisfy) Long interest free repayment period	Equal variances assumed	5.911	0.016	-4.395	308.000	0.000	-0.11048	0.02513	-0.15993	-0.06102
	Equal variances not assumed			-4.312	267.708	0.000	-0.11048	0.02562	-0.16091	-0.06004

Table 5-19

# Questionnaire (English version)



## Questionnaire

Dear Sir/Madam,

My full name is TRAN TRONG NGHIA, MBA student of Assumption University. These questionnaires are designed to study “Demographic and Attitudinal Differences between Active and Inactive Credit Cardholders in the Bangkok Metropolitan Area”. Please take a few moments to complete this questionnaire based on your experience. Your participation is very much appreciated. All information provided by you will be kept **“STRICTLY CONFIDENT”**

**a). How many bank credit card are you owning now?**

number of bank credit cards

none (End here)

**b). Do you have any card of yours is confined at least 75% of your transaction?**

Yes

none (End here)

**c). On average, how many times a month do you use this card?**

1 once or less than once

2 2-6 times

3 7-10 times

4 11-14 times

5 15-19 times

6 over 19 times

**Part 1:** In this part, here are some statements which describe about the attributes of the credit card.

Please circle “0” if you think that the following attributes is “not at all important” for the credit card, “100” if it is “very important”, or somewhere in between depend on how much you evaluate the attributes’ importance to your major credit card.

There are no right or wrong answers to these questions. Just give your opinion:

Attributes of credit card	0 = Not at all important	50 = Indifferent	100 = Very Important
(Q 1.1) Wide acceptance			
(Q 1.2) Large credit limit			
(Q 1.3) Design of the card			
(Q 1.4) Ease of bill payment			
(Q 1.5) Free annual fee			
(Q 1.6) Image of issuing bank			
(Q 1.7) Heavy advertising by issuing bank			
(Q 1.8) Effective handling of cardholders' complaints			
(Q 1.9) Attractive incentive to credit card users			
(Q 1.10) Long Interest-free repayment period			

**Part 2:** In this part, here are some statements which describe about the attributes of the credit card.

Please circle “0” if you think that the credit card is “very dissatisfied” in the attributes, “100” if it is “very satisfied” in the attributes, or somewhere in between depend on how well you are satisfied with major credit card.

There are no right or wrong answers to these questions. Just give your opinion:

Attributes of credit card	0 = Very dissatisfied	50 = Indifferent	100 = Very satisfied
(Q 2.1) Wide acceptance			
(Q 2.2) Large credit limit			
(Q 2.3) Design of the card			
(Q 2.4) Ease of bill payment			
(Q 2.5) Free annual fee			
(Q 2.6) Image of issuing bank			
(Q 2.7) Heavy advertising by issuing bank			
(Q 2.8) Effective handling of cardholders' complaints			
(Q 2.9) Attractive incentive to credit card users			
(Q 2.10) Long Interest-free repayment period			



Personal Information

1. Gender

- 1Male
- 2Female

2. Status

- 1Married
- 2Unmarried/Widowed/Divorced/Separated

3. Occupation

- 1Executives
- 2Middle management/ management
- 3Employee of private organization
- 4Government/ state enterprise officer
- 5Entrepreneur
- 6Others (Please specify.....)

4. Age

- 118 – 29 years old
- 230 – 39 years old
- 340 – 49 years old
- 450 – 59 years old
- 560 years old or above

5. Personal Income (Baht)

- 1below Bt 10,000
- 2Bt 10,001 – Bt 20,000
- 3Bt 20,001 – Bt 30,000
- 4Bt 30,001 – Bt 50,000B
- 5above Bt 50,000

# Questionnaire (Thai version)



## แบบสอบถาม

เรียน ท่านผู้ตอบแบบสอบถาม

แบบสอบถามชุดนี้จัดทำขึ้นเพื่อใช้เป็นส่วนประกอบในการศึกษาและทำวิทยานิพนธ์ในการศึกษาพฤติกรรมและทัศนคติของผู้ใช้บัตรเครดิตที่อาศัยอยู่ในจังหวัดกรุงเทพมหานครของนักศึกษาปริญญาโท มหาวิทยาลัยอัสสัมชัญผู้จัดทำขอความกรุณาท่านผู้ตอบแบบสอบถามทุกท่านโปรดตอบแบบสอบถามนี้ทุกข้อเพื่อให้วิทยานิพนธ์ฉบับนี้สมบูรณ์เพื่อนำข้อมูลที่ได้ไปใช้ประโยชน์ต่อการศึกษาและผู้ที่ต้องการจะใช้ประโยชน์จากวิทยานิพนธ์ชุดนี้ผู้จัดทำขอขอบคุณท่านผู้ตอบแบบสอบถามทุกท่านที่สละเวลาของท่านและให้ความร่วมมือเป็นอย่างดีในการทำแบบสอบถามชุดนี้มา ณ ที่นี้ด้วยครับ อนึ่งข้อมูลของท่านจะถูกเก็บเป็นความลับ

ก). ท่านมีบัตรเครดิตกี่บัตร?

\_\_\_ จำนวนบัตรเครดิต \_\_\_ ไม่มี (จบคำถาม)

ข). ท่านมีบัตรเครดิตที่ใช้ซื้อสินค้าบ่อยๆ หรือไม่? (ใช้ซื้อสินค้าเกินกว่า 75% ของการซื้อสินค้า)

\_\_\_ ใช่ \_\_\_ ไม่ใช่ (จบคำถาม)

ค). ท่านใช้บัตรเครดิตกี่ครั้งต่อเดือน?

- |                                 |                      |                           |
|---------------------------------|----------------------|---------------------------|
| <u>1</u> หนึ่งครั้งหรือน้อยกว่า | <u>2</u> 2-6 ครั้ง   | <u>3</u> 7-10 ครั้ง       |
| <u>4</u> 11-14 ครั้ง            | <u>5</u> 15-19 ครั้ง | <u>6</u> มากกว่า 19 ครั้ง |

**ส่วนที่ 1:** สอบถามเกี่ยวกับความสำคัญของคุณสมบัติบัตรเครดิต

ถ้าท่านคิดว่าคุณสมบัติของบัตรเครดิตไม่มีความสำคัญ กรุณาวางกลมที่ 0 คะแนน แต่ถ้าท่านเห็นว่ามีความสำคัญมาก กรุณาวางกลมที่ 100 คะแนนหรือเลือกคะแนนใดๆก็ได้ระหว่าง 0–100 คะแนน ขึ้นอยู่กับความเห็นของท่านเกี่ยวกับความสำคัญของคุณสมบัติของบัตรเครดิตต่อการตอบคำถามของท่านไม่ถือว่าผิดหรือถูก เป็นเพียงต้องการความคิดเห็นของท่าน

คุณสมบัติของบัตรเครดิต	0 = ไม่มีความสำคัญ	50 = ปานกลาง	100 = สำคัญมาก
(Q 1.1) เป็นที่รู้จักกว้างขวาง			
(Q 1.2) อนุมัติวงเงินกู้บัตรเครดิตให้มาก			
(Q 1.3) รูปแบบของบัตรเครดิต			
(Q 1.4) สะดวกในการชำระค่าใช้จ่ายบัตรเครดิต			
(Q 1.5) ไม่เรียกเก็บค่าธรรมเนียมรายปี			
(Q 1.6) ชื่อเสียงของผู้ออกบัตรเครดิต			
(Q 1.7) การโฆษณาของผู้ออกบัตรเครดิต			
(Q 1.8) ประสิทธิภาพในการแก้ไขปัญหาให้กับผู้ถือบัตรเครดิต			
(Q 1.9) มีสิ่งกระตุ้นเพื่อดึงดูดใจให้กับผู้ถือบัตรเครดิต			
(Q 1.10) ให้ระยะเวลารอบจ่ายชำระเงินนาน			

**Part 2:** สอบถามเกี่ยวกับความพึงพอใจของท่านที่มีต่อบัตรเครดิต

ถ้าท่านคิดว่าคุณสมบัติของบัตรเครดิตไม่น่าพอใจมาก กรุณาวางกลมที่ 0 คะแนน แต่ถ้าท่านเห็นว่าพอใจมาก กรุณาวางกลมที่ 100 คะแนน หรือเลือกคะแนนใดๆ ก็ได้ระหว่าง 0 – 100 คะแนน ขึ้นอยู่กับความพอใจของท่าน ที่มีกับบัตรเครดิต อนึ่งการตอบคำถามของท่านไม่ถือว่าผิดหรือถูก เป็นเพียงต้องการความคิดเห็นของท่าน

คุณสมบัติของบัตรเครดิต	0 = ไม่พอใจมาก	50 = ปานกลาง	100 = พอใจมาก
(Q 2.1) เป็นที่รู้จักกว้างขวาง			
(Q 2.2) อนุมัติวงเงินกู้บัตรเครดิตให้มาก			
(Q 2.3) รูปแบบของบัตรเครดิต			
(Q 2.4) สะดวกในการชำระค่าใช้จ่ายบัตรเครดิต			
(Q 2.5) ไม่เรียกเก็บค่าธรรมเนียมรายปี			
(Q 2.6) ชื่อเสียงของผู้ออกบัตรเครดิต			
(Q 2.7) การโฆษณาของผู้ออกบัตรเครดิต			
(Q 2.8) ประสิทธิภาพในการแก้ไขปัญหาให้กับผู้ถือบัตรเครดิต			
(Q 2.9) มีสิ่งกระตุ้นเพื่อดึงดูดใจให้กับผู้ถือบัตรเครดิต			
(Q 2.10) ให้ระยะเวลาปลอดชำระหนี้เงินนาน			

## ข้อมูลส่วนตัว

### 1. เพศ

- |   |        |   |         |
|---|--------|---|---------|
| 1 | ผู้ชาย | 2 | ผู้หญิง |
|---|--------|---|---------|

### 2. สถานะ

- |   |         |   |                    |
|---|---------|---|--------------------|
| 1 | แต่งงาน | 2 | โสด/เป็นหม้าย/หย่า |
|---|---------|---|--------------------|

### 3. ตำแหน่งงาน

- |   |                                   |  |
|---|-----------------------------------|--|
| 1 | ผู้บริหารระดับสูง                 | (executive)                            |
| 2 | ผู้บริหารระดับกลาง/ระดับผู้จัดการ | (middle management/ management)        |
| 3 | พนักงานบริษัท                     | (employee of private organization)     |
| 4 | ข้าราชการ                         | (government/ state enterprise officer) |
| 5 | พนักงานรัฐวิสาหกิจ                | (entrepreneur)                         |
| 6 | อื่นๆ (กรุณาระบุ.....)            |  |

### 4. อายุ

- |   |                    |   |            |
|---|--------------------|---|------------|
| 1 | 18 – 29 ปี         | 2 | 30 – 39 ปี |
| 3 | 40 – 49 ปี         | 4 | 50 – 59 ปี |
| 5 | 60 ปี หรือ มากกว่า |   |            |

### 5. รายได้ต่อเดือน

- |   |                     |   |                     |
|---|---------------------|---|---------------------|
| 1 | ต่ำกว่า 10,000 บาท  | 2 | 10,001 – 20,000 บาท |
| 3 | 20,001 – 30,000 บาท | 4 | 30,001 – 50,000 บาท |
| 5 | มากกว่า 50,000 บาท  |   |                     |



