



รายงานการวิจัยฉบับสมบูรณ์

ธุรกิจคอนโดมิเนียมภายใต้กระแสภัยแผ่นดินไหวในจังหวัดเชียงใหม่

Condominiums Business beyond the Seismic Risk in Chiangmai

นางสาวมณฑาจุฬา สุวัฒน์ดิลก

ได้รับทุนสนับสนุนงานวิจัยจากเงินรายได้ ประจำปีงบประมาณ 2555

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วิทยาลัยการบริหารและจัดการ

สถาบันเทคโนโลยีพระจอมเกล้าเจ้าคุณทหารลาดกระบัง

เอกสารนี้เป็นเอกสารที่สงวนไว้สำหรับการใช้งานเพื่อการศึกษาเท่านั้น ไม่อนุญาตให้นำไปใช้ประโยชน์ด้านการค้า
ไม่ว่ากรณีใดๆทั้งสิ้น อีกทั้งห้ามมิให้ดัดแปลงเนื้อหา และต้องอ้างอิงถึงเจ้าของเอกสารทุกครั้งที่มีการนำไปใช้

ชื่อโครงการ (ภาษาไทย) ธุรกิจคอนโดมิเนียมภายใต้กระแสภัยแผ่นดินไหวในจังหวัดเชียงใหม่

ชื่อโครงการ (ภาษาอังกฤษ) CONDOMINIUMS BUSINESS BEYOND THE SEISMIC RISK IN

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แหล่งเงิน เงินรายได้ วิทยาลัยการบริหารและจัดการ

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บทคัดย่อ

งานวิจัยเรื่องธุรกิจคอนโดมิเนียมภายใต้กระแสภัยแผ่นดินไหวในจังหวัดเชียงใหม่เป็นการตรวจสอบปัจจัยที่มีผลกระทบต่อธุรกิจคอนโดมิเนียมและพฤติกรรมของผู้บริโภคในการซื้อคอนโดมิเนียมในจังหวัดเชียงใหม่ ผลการศึกษาพบว่าปัจจัยกระแสแผ่นดินไหวมีอิทธิพลต่อการตัดสินใจซื้อคอนโดมิเนียมเรื่องความสะดวกและความปลอดภัยเป็นสิ่งสำคัญและมีอิทธิพลต่อการตัดสินใจของผู้อยู่อาศัยผู้ประกอบการมีมาตรการรักษาความสะดวกของอาคารและความปลอดภัย การควบคุมในเรื่องต่าง ๆ ซึ่งเป็นปัจจัยสำคัญต่อการตัดสินใจเข้าอยู่อาศัยนิยม Condominium Business, Seismic Risk, Chiangmai

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เอกสารนี้เป็นเอกสารที่สงวนไว้สำหรับการใช้งานเพื่อการศึกษาเท่านั้น ไม่อนุญาตให้นำไปใช้ประโยชน์ด้านการค้า ไม่ว่ากรณีใดๆทั้งสิ้น อีกทั้งห้ามมิให้ดัดแปลงเนื้อหา และต้องอ้างอิงถึงเจ้าของเอกสารทุกครั้งที่มีการนำไปใช้

Research Title: CONDOMINIUMS BUSINESS BEYOND THE SEISMIC RISK IN CHIANGMAI

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ABSTRACT

The research in the effect of earthquake on condominium business in Chiangmai was investigate the potential factors that have affected the condominium business in Chiangmai and to examine the intent of buying behavior of consumers in Chiangami. The finding showed that the earthquake-related factors that have influenced a buying decision considerably. In each respect of areas, sturdy structural building in accordance with engineering principle influenced a buying decision mostly, followed by no history of earthquake and no earth fault, availability of earthquake warning, proximity to fire station and availability of assistance system, assistance system; by land and by air, is available in case of the earthquake, and emergency plan is available in the event of natural disasters, respectively. In addition, cleanliness and safety of residence is another important issue influencing the decision-making on residence. The operators provide measures covering the cleanliness of residences and surroundings. A safety is regarded the most important factors in decision-making on residence, provide the safety measures and control effectively.

Keywords: Business Condominium Seismic Risk Purchasing Power Measure Chiangmai

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Montajula Suvattanadilok

September 2012

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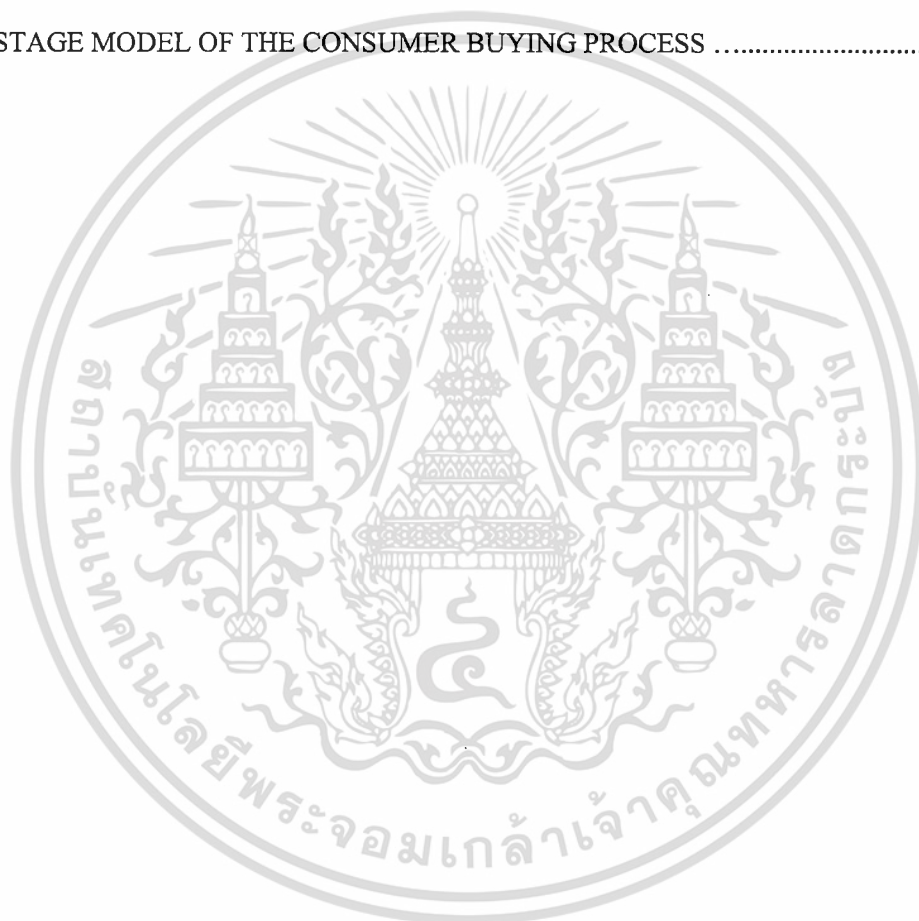
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CHAPTER I

INTRODUCTION

1.1 RATIONALE OF THE STUDY

Everybody needs a shelter or a place where they can feel comfortable and convenient to live in. Some people may like to live in a house whereas some prefer to live in an apartment. The decision on living normally depends on the lifestyle of each person and other factors that suit their needs.

In today's society, people, especially who are living in a city, would prefer to live in a condominium rather than in a house. The main reason is that it requires only few obligations and maintenances comparing to a detached house or other types of real estates. Also, condominiums are commonly located in well established and verified neighborhoods. People will have more chance to know each other so that the neighbors can help watching the property while another neighbor is away. For singles, couples and small families, possessing a condominium offers the freedom to enjoy their lives and have more time to concentrate on their important things. Next, condominiums offer many benefit facilities such as security guards, 24-hour concierge, recreation and fitness facilities. All access in the community is managed either by a concierge in the lobby or the security guards. Twenty-four a day, seven days a week, security guards not only observe who visit the condominium, but they also watch over a network of video cameras throughout the community. Moreover, the condominium owner will have a right to use all communities' leisure facilities such as swimming pool, fitness, and garden.

The demand of housing in Chiangmai has increased, condominium prices have been rapidly increasing since the recovery period in 2002. The current prices are already higher than those during pre-crisis, and have appreciated by 20 % - 50 % over the past 3 years. For example, the prices of grade A condominium projects in the CBD's Sathorn area, which in 2002 were 65,000 - 70,000 baht per square meter, are now 85,000 - 120,000 baht per square meter. In case of Chiangmai condominium, there are several critical factors in determining the market such as the ability of developers to precisely complete projects, the quality of condominium and the ability of buyers to transfer units. In this study, the researcher focused on critical factors affecting consumer's decision in purchasing condominium in Chiangmai.

1.2 STATEMENT OF PROBLEM

Nowadays, the condominium sector in downtown Chiangmai becomes much more globally focused. Many developers try to improve the designs and product quality, enabling Chiangmai condominiums to compete with those in other major cities around the world. Moreover, the developers have also noted the changes in people's lifestyles as new Thai generations have shifted their decisions continuously from living in single homes to condominiums.

TABLE 1 STATISTIC OF HOUSING IN CHIANGMAI AREAS

Housing in Chiangmai Areas	Jan – 2007	Jan – 2008	Increased / (Decreased)
House/Town House (Units)	3,760	3,761	0 %
Condominium (Units)	616	973	58 %

Note : Research, Statistic of Housing in Chiangmai Area by Annual Report, 2009, Retrieved July 29, 2012, from, <http://www.reic.or.th/download/AnnualReport.52.pdf>.

The study of consumers helps firms and organization improve their marketing strategies by understanding issue of consumers think, feel, reason, and selection between different alternatives such as brand name, products. Moreover, the customer's shopping related with demographic information including income, education level, occupation and ages (Lars Perner, 2007).

The consumers' decision to purchase depends on various factors such as demographic and marketing factors. For instance, according to Kitipong Wongfu's (1998) study, most condominium buyers were working male, aging between 21 – 40 years old single and have bachelor's degree.

Moreover, some of developers such as Major Development Public Company Limited used marketing mix strategy in selling their condominium. For example, MJD's pricing strategy is to set the high selling prices to reserve its high – end project marketing position and support for the image of its condominiums (new ideas, product innovations). According to the target customers, Major Development focuses on wealthy Thai customers, or well educated. Since consumers' demographic and marketing factors play a significant role in affecting the purchasing decision for Chiangmai condominiums, this

study, therefore, aims to identify and investigate consumer's decision in purchasing condominium in Chiangmai as influenced by the afore said factors.

In addition, the earthquake occurred on a previously unrecognized fault and shaking from the earthquake caused the fracturing of buildings previously considered protected from earthquake-related damages. For almost all these structures the damage was completely hidden and the problems were only uncovered by construction crews erecting steel frames for new buildings, in which the beam-column connections had not yet been hidden beneath fire-proofing and wall cladding.

The effect of earthquake, for example, the September 4th, 2010 earthquake in Canterbury had an immediate impact on the housing market in the area. Land and property damage across the region delayed sales already in progress, slowed the overall sales process, and changed the supply and demand in the area. In the month of the earthquake the number of sales dropped by 37% compared to pre-earthquake levels, but activity is continuing to pick up in subsequent months. In Chiangmai Burma and Thailand have been struck by a strong earthquake of magnitude 6.8, a U.S. monitoring agency reported. The quake occurred 8:25 p.m. on Thursday evening (local time), Burma Standard Time, in the northeast of that country, according to the U.S. Geological Survey (USGS). The quake occurred in Burma, also known as Myanmar, 365 miles (589 km) Northeast of Rangoon, which is actually much closer to the Northern Thailand city of Chiang Rai.

In Chiang Rai, a wall collapsed and killed a person, according to the Thai Public Broadcasting Service. In Bangkok, people living in several high rise buildings felt the tremors. The earthquake was shallow, at a depth of 6.2 miles (10 km). The National Oceanic and Atmospheric Administration's (NOAA) Pacific Tsunami Warning Center said that the quake was too far inland to create a tsunami in the Indian Ocean.

1.3 PURPOSE OF THE STUDY

This study emphasized on the consumer's decision in purchasing condominium in Chiangmai. A proposed model with empirical test is about the factors influencing the consumer's decision to buy condominium in Chiangmai area.

This research has been conducted for the following objectives:

- To examine the factors influencing the consumer's decision in purchasing condominium in Chiangmai areas.

1.4 RESEARCH QUESTIONS

What are the factors influencing the consumer's decision in purchasing condominium in Chiangmai areas?

1.5 SCOPE OF THE STUDY

This research employed the marketing mix strategy about price, place, product, promotion, and demographic characteristics of consumers as criteria that influence the consumers' purchase decision.

For this research, the researcher focused on the factors affecting consumer's decision to purchase condominium in Chiangmai areas.

1.6 ASSUMPTION

At present, the developers are trying to find out the influential factors of consumer's decision in purchasing condominium in Chiangmai; therefore, the assumptions are as follows:

1. Difference in gender, age, educational level, occupation and monthly income affect consumer's decision in purchasing condominium in Chiangmai.
2. Factors in marketing mix (price, place, product and promotion) influence the consumer's decision in purchasing condominium in Chiangmai.
3. Earthquake factor influence the consumer's decision in purchasing condominium in Chiangmai.

1.7 SIGNIFICANCE OF THE STUDY

This study intended to find out the attitude toward the effect of marketing mix strategies and demographics in consumer's purchase in condominium. This information will be beneficial and useful for advertisers and architectures who are finding the way to attract customers.

The result will help the marketers to better understand how the property market's trend creates the business growth opportunities and prepare for new strategies to serve the consumers by employing marketing mix strategies and demographic characteristics of consumers.

1.8 DEFINITION OF TERMS

Due to the variations of terms and definitions related to this study in literature, it is essential to classify some important terms that are often mentioned.

Condominium means one of the dwelling units in condominium or housing consisting of a complex of dwelling units (as an apartment house) in which each unit is individually owned.

In this study, the condominium is a unit that customers decide to purchase with consideration of the location, pricing, and etc. The locations of condominium are in Chiangmai areas.

Buyer/Customer usually refer to a current or potential buyer or user of the products of an individual or organization, called the supplier, seller, or vendor. This is typically through purchasing or renting goods or services. However, in certain contexts, the term customer also includes by extension anyone who uses or experiences the services of another. A customer may also be a viewer of the product or service that is being sold despite deciding not to buy them.

In this study, it refers to the condominium customers or buyers and potential customers (who are in the process of deciding to purchase condominium) between ages 21 - 60 years old and is employed. The condominium customers include both Thai and foreigner customers.

Consumer Behavior is defined as the behavior consumers' display in searching for purchasing, using, evaluating and disposing of products and services that they expect will satisfy their needs (Schiffman and Kanuk, 2007).

In this study, consumer behavior refers to the actions taken for buyers and potential buyers who intend to purchase and using the products and services of condominium in Chiangmai.

Research Model

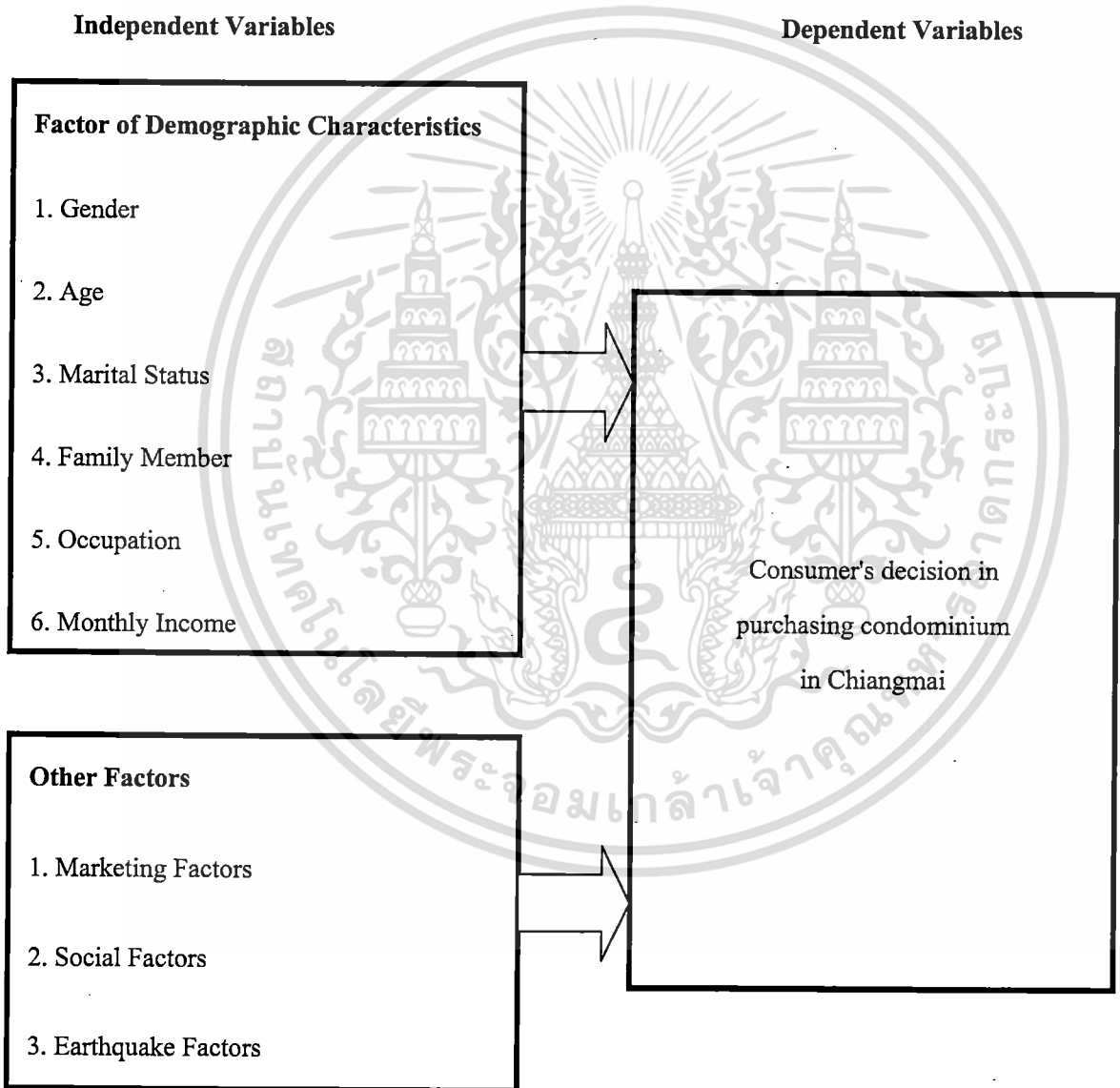


FIGURE 1 THE CONCEPTUAL MODEL

เอกสารนี้เป็นเอกสารที่สงวนไว้สำหรับการใช้งานเพื่อการศึกษาเท่านั้น ไม่อนุญาตให้นำไปใช้ประโยชน์ด้านการค้า ไม่ว่ากรณีใดๆทั้งสิ้น อีกทั้งห้ามมิให้ดัดแปลงเนื้อหา และต้องอ้างอิงถึงเจ้าของเอกสารทุกครั้งที่มีการนำไปใช้

CHAPTER 2

LITERATURE REVIEW

This chapter focuses on theories and models related to the research especially theory of consumer behavior, the purpose of which is to study the consumer's decision focusing on consumer decision process, major influential factors, and marketing mix. This chapter also comprises the literature and review of the factors affecting the consumer's decision in purchasing condominium in Chiangmai.

2.1 CONSUMER BEHAVIOR

According to Schiffman and Kanuk (2007), consumer behavior is defined as the behavior consumers' display in searching for purchasing, using, evaluating and disposing of products and services that they expect will satisfy their needs. Michael T. Ewing (2000) defined consumer behavior as purchasing habits that are not the way to precise predictors of subsequence purchase behavior. In addition, consumer behavior is described as how people spend money, effort or time and it includes the following questions: what, why, when, where and how often to buy or use it (Schiffman and Kanuk, 2007).

2.2 CONSUMER DECISION PROCESS

Understanding the buyer's decision making process is vital because the correct type of information would be transmitted at the right time and in the appropriate manner (Fill, 2005). Consumer decision process theory shows that consumers pass through five stages: problem recognition, information search, evaluation of alternatives, purchase decision, and post - purchase behavior (see figure 3). However, consumers may skip or reverse some stages (Fill, 2005). Consumer decision making varies with the types of product involvement, which are frequently between high and low involvement purchasing (Kotler, 2005). High and low involvements depend on the buyer's perceived buying risk. Not only how expensive of the product, but the degree of involvement also involves with buyer experience (Boyd et. al, 2002).

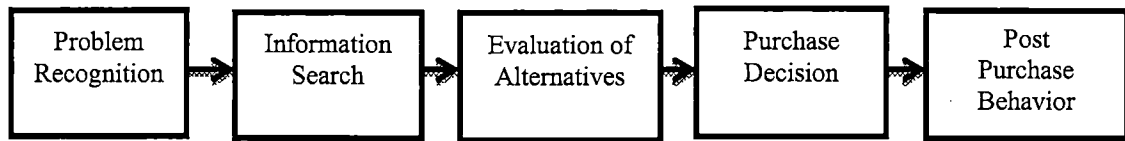


FIGURE 2 FIVE – STAGE MODEL OF THE CONSUMER BUYING PROCESS

Note : Research, Chris Fill, 2005

When a buyer recognizes a problem or unsatisfied need or desire, which is the first stage of the five-stage model of consumer buying process (Fill, 2005), the information search begins when a consumer perceived a need that might be satisfied by the consumption of a product (Shiffman and Kanuk, 2007).

In addition, Kotler (2000) states that consumer information sources fall in 4 groups; personal sources, commercial sources, public sources and experience sources. Each information source performs a different function in influencing the buying decision (Kotler, 2000). Once a consumer gets enough information, the alternatives are evaluated. Then, he can make decision to “buy or not to buy,” which is in the purchase decision stage. Finally, after the product is purchased, the consumer is now concerned with post purchase behavior to make further purchases of the same item or re-evaluating the purchased product (Kotler, 2000; and Fill, 2005).

2.3 MAJOR FACCTORS INFLUENCING BUYING BEHAVIOR

Kotler (1994) indicated that there are many factors influencing buying decision. Major factors influencing buying behavior are as follows.

2.4 DEMOGRAPHIC FACTORS

Demographic factors are statistical socio-economic characteristics or variables of a population, such as age, sex, education level, income level, marital status, occupation, religion, birth rate, death rate, average size of a family, average age at marriage.

Heller (2009) indicated that the demographic variables such as population size, age, and density influence the need for infrastructure.

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Kotler (2004) indicated that the major factors influencing consumers' decisions in purchasing are gender, age, marital status, family member, occupation, monthly income and educational level.

Family Factor is number of members in a family and that establishes the most influential primary reference group. A family member's influence can vary with different sub decisions made within a product or service category (Kotler, 2004).

Roles and status factors are important when a person participates in many groups throughout his life, such as, family, clubs, and organizations. Each group defines his status and role, and activities that a person is expected to perform.

Age factor affects whenever people buy and take different goods and services over their life spans. They eat baby food in the early years, most foods in the growing and mature years, and special diets in the later years. People's taste in clothes, furniture, and recreation is also age related.

Lastly occupation factor also influences a person's consumption pattern. Marketers try to identify the occupational groups that have over - average interest in their products and services. A company can even specialize their products for certain occupation groups.

For example, Apichit Suksin (2008), investigated demographic characteristics and marketing mix that affected buying behavior for condominium in Chiangmai. Results of the study showed that most of the respondents were female, single, and in the age group of 26 to 30 years old. They possessed a bachelor's degree and earned the income of less than 20,000 baht, and worked as government employees. The number of family members was 3 - 4 people. The finding indicated that demographic characteristics with different in gender, ages, marital status, education, occupation, income per month, number of family member, had relationship on the select behavior for condominium in Chiangmai in terms of budget, land for use, and persons influencing the decision to purchase. In addition to demographic factors, the marketing mix has relationship with on the selective behavior for condominium in Chiangmai.

2.5 THE DEFINITION OF CONSUMER BEHAVIOR

The definition of consumer behavior is briefly discussed to give basic understanding of consumer behaviors and their important roles in the marketing communication. In marketing literature, there are a lot of definitions of the term "consumer behavior." However, those definitions are quite similar. The following are definitions of the term "consumer behavior."

เอกสารนี้เป็นเอกสารที่สงวนไว้สำหรับการใช้งานเพื่อการศึกษาเท่านั้น ไม่อนุญาตให้นำไปใช้ประโยชน์ด้านการค้า
ไม่ว่ากรณีใดๆทั้งสิ้น อีกทั้งห้ามมิให้ดัดแปลงเนื้อหา และต้องอ้างอิงถึงเจ้าของเอกสารทุกครั้งที่มีการนำไปใช้

Kotler, Keller, Ang, Leong and Tan (2009) stated that consumer behavior is the study of how individuals, groups, and organizations select, buy, use, and dispose of goods, services, ideas, or experiences to satisfy their needs and wants.

Belch (1998) defined consumer behavior as the process and activities people engage in when searching for, selecting, purchasing, using, evaluating, and disposing of products and services so as to satisfy their needs and desires.

The American Marketing Association (AMA) defined consumer behavior as the dynamic interaction of cognition, behavior and environmental events by which human beings conduct the exchanges aspect of their lives (Peter & Olson, 1996).

Consumers' product and service preferences are constantly changing. Creating a proper marketing mix or a strategy for a well-defined market, marketing managers must have knowledge of consumer behavior. Therefore, consumer behavior is studied in order to understand perceptions, attitudes, and activities in which person responds to his or her environments. This understanding can provide guidelines to develop marketing approaches and activities to encourage people to purchase products.

2.5 CONSUMER BEHAVIOR ANALYSIS

Customer analysis defined as the process of analyzing customers and their habits, is one of the most important areas of study in a business. Customer analysis processes are performed in 3 stages: assessing before the purchase, during the purchase, and after the purchase.

7 O's model is a model of consumer behavior that managers have to rely on consumer research rather than the direct contact. Also, the marketing managers must be able to answer the following key questions (6W 1H) in order to analyze the proper target market as below:

Who is our customer?	To find the occupants
What does the customer buy?	To find objects
Why does the customer buy?	To find objectives
Who participates in the buying?	To find organizations
How does the customer buy?	To find operations
When does the customer buy?	To find occasions
Where does the customer buy?	To find outlets

In the service business, understanding consumer behavior is like the heart of marketing as “the customer is the business” (Anonymous, 2000). Consumer-buying behavior is the buying behavior of final customers-individuals and households who buy goods and services for personal consumptions (Kotler and Armstrong, 1999).

2.5 FACTORS AFFECTING CONSUMER BUYING DECISIO

Marketers must fully understand both theory and reality of consumer behavior a consumer’s buying behavior is influenced by cultural, social, and personal factors. Cultural actors exert the broadest and deepest influence.

1. Cultural Factors

Culture, subculture, and social class are important influences on consumer buying behavior. Culture is the fundamental determinant of a person’s want and behavior. The growing child acquires a set of values, perceptions, preferences, and behaviors through his or her family and other key instructions. A child growing up in many parts of Asia is exposed to such values as filial piety, hard work, obedience to

authority, and collectivism. For instance, the value of *krengjai*, or deference to or consideration of others, is pervasive in Thai culture (Kotler, Keller, Ang, Leong & Tan, 2009). Each Culture consists of smaller subcultures that provide more specific identification and socialization for their members. Subcultures include nationalities, religions, racial groups, and geographic regions. When subcultures grow large and affluent enough, companies often design specialized marketing programs to serve them. Multicultural marketing grew out of careful marketing research, which revealed that different ethnic and demographic niches did not always respond favorably to mass marketing.

Chinese customers, for instance, may respond differently from Indian, Malay, or Filipino consumers. To the Chinese, especially those of the Cantonese dialect group, *feng shui* (literally meaning wind water) or geomancy is important. Some Chinese avoid buying houses with the number four in the address because it sounds like, and thus connotes, “death,” while favoring the number eight as it sounds like “prosperity.” The Beijing Olympics was officially opened on August 8, 2008 (8-8-08). Some Chinese even consult fortune tellers to change the person’s birth date and time, astrological principles, and the five elements – metal, wood, water, fire, and earth – for a balanced, smooth life.

Virtually all human societies exhibit social stratification. Stratification sometimes takes the form of a caste system where the members of different castes are reared for certain role and cannot change their caste membership. Such caste systems still operate in rural India. More frequently, it takes the form of social class, relatively homogeneous and enduring divisions in a society, which are hierarchically ordered and whose members share similar values, interests, and behavior. One classic depiction of social classes defined seven ascending levels, as follows: (1) lower lowers, (2) upper lowers, (3) working class, (4) middle class, (5) upper middles, (6) lower uppers, and (7) upper uppers.

Social classes have several characteristics. First, those within each class tend to behave more alike than persons from two different social classes. Social classes differ in dress, speech patterns, recreational preferences, and many other characteristic. Second, persons are perceived as occupying inferior or superior positions according to social class. Third, social class is indicated by a cluster of variables – for example, occupation, income, wealth, education, and value orientation – rather than by any single variable.

Fourth, individuals can move up or down the social class ladder during their lifetimes. The extent of this mobility varies according to how rigid the social stratification is in a given society. Social classes show distinct product and brand preferences in many areas, including clothing, home furnishings, leisure activities, and automobiles. Social classes differ in media preferences, with upper-class consumers often preferring magazines and books and lower-class consumers often preferring television. Even within a media category such as TV, upper-class consumers tend to prefer news and drama, and lower-class consumers tend to prefer soap operas and sports programs. There are also language differences among the social classes. Advertising copy and dialogue must ring true to the targeted social class.

2. Social Factors

In addition to cultural factors, a consumer's behavior is influenced by such social factors as reference groups, family, and social roles and statuses.

Reference Groups

A person's reference groups consist of all the groups that have a direct (face-to-face) or indirect influence on his/her attitudes or behavior. Groups having a direct influence on a person are called membership groups. Some membership groups are primary groups, such as family, friends, neighbors, and co-workers, those with whom the person interacts fairly continuously and informally. People also belong to secondary groups, such as religious, professional, and trade-union groups, which tend to be more formal and require less continuous interaction. People are significantly influenced by their reference groups in at least three ways. Reference groups expose an individual to new behaviors and lifestyles, and influence attitudes and self-concept; they create pressures for conformity that may affect actual product and brand choices. People are also influenced by groups to which they do not belong. Aspiration groups are those a person hopes to join; dissociative groups are those whose values or behavior an individual rejects.

Manufacturers of products and brand where group influence is strong must determine how to reach and influence opinion leaders in these reference groups. An opinion leader is the person in informal, product-related communications who offers advice or information about a specific product or product category, such as which of several brands is best or how a particular product may be used. Marketers try

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to reach opinion leaders by identifying demographic and psychographic characteristics, and directing messages at opinion leaders. In Japan, high school girls have often been credited with creating the buzz that makes products such as Shiseido's Neuve nail polish a big hit.

Family

The family is the most important consumer buying organization in society, and family members constitute the most influential primary reference group. We can distinguish between two families in the buyer's life. The family of orientation consists of parents and siblings. From parents, a person acquires an orientation towards religion, politics, and economics, and a sense of personal ambition, self-worth, and love. Even if the buyer no longer interacts very much with his or her parents, their influence on behavior can be significant. In Asia, where parents live with grown children, their influence can be substantial. A more direct influence on everyday buying behavior is the family of procreation – namely, one's spouse and children.

Marketers are interested in the roles and relative influence of family members in the purchase of a large variety of products and services. These roles vary widely in different countries and social classes. For example, among traditional Chinese and Japanese households, it is not uncommon for the husband to give his wife his pay packet as she manages the family's expenditure. In contrast, India is a patriarchal society where the husband makes the most decisions. Given women's increasing wealth and income-generating ability, household purchasing patterns are gradually changing in Asia. Thus marketers of products traditionally purchased by men are now thinking about women as possible buyers.

Indeed, women are becoming an economic force in Asia. In China, women are at the forefront of consumer spending. Urban women are spending more of their hard-earned cash on personal travel and related recreational activities, dining out, shopping, as well as buying cars and pursuing urban leisure lifestyles. Their spending will help to determine which foreign brand will succeed in China. Analysts say that Chinese women are particularly susceptible to advertising by foreign brands like Louis Vuitton. In India, Hindustan Uniliver launched the Fair & Lovely Foundation to economically empower women and avail them with opportunities for education and skills training.

Men and women may respond differently to marketing messages. One study showed that women valued connections and relationships with family and friends and placed a high priority on people. Men, on the other hand, related more to competitions and placed a high priority on action. Another shift in buying patterns is an increase in the amount of dollars spent and the direct and indirect influence wielded by children and teens. Direct influence describes children's hints, requests, and demands – "I want to go to McDonald's." indirect influence means that parents know the brands, products choices, and preferences of their children without hints or outright request. One research study showed that teenagers were playing a more active role than before in helping parents choose a car, audio/ video equipment, or a vacation spot. "Marketing Insight: China's Young Consumers" gives an idea of what marketers can encounter in this rapidly transforming growth market. However, marketers use many channels of communication to reach kids, including such media as Nickelodeon, Cartoon Network, or the Disney Channel on TV. The Lizzie McGuire and The Legends of the Ring of Fire programs demonstrates how powerful television can be in reaching children, and marketers are using television to target children at younger ages than ever before. By the time children are around 2 years old, they can often recognize characters, logos, and specific brands. Marketers are tapping into that audience with product tie-ins, placed at a child's eye level, on just about everything – from Scooby-Doo vitamins to Disney Princesses toothbrushes.

Today, companies are also likely to use the Internet to show products to children and to solicit personal information from them, offering freebies in exchange. Many have come under fire for this practice and for not clearly differentiating ads from games or entertainment. In China and Hong Kong, there is concern over businesses like Internet café offering online games targeting children. Numerous kids devote long hours at a stretch playing games on computer terminals against parental objections.

Roles and Statuses

A person participates in many groups – family, clubs, and organizations. The person's position in each group can be defined in terms of role and status. A role consists of the activities a person is expected to perform. Each role carries a status. A senior vice president of marketing has more status than a sales manager, and a sales manager has more status than an office clerk. People choose products that reflect and communicate their role and actual or desired status in society. Company presidents often drive Mercedes,

wear expensive suits, and drink XO cognac. Marketers must be aware of the status symbol potential of products and brands. Like the family, roles and status in Asia are undergoing gradual changes as well. Such changes are reflected in ads featuring men in formerly traditional women's roles and smart-looking women in the workplace. Nevertheless, Asia's hierarchical society still emphasizes the relative position of an individual in a group context. Thus, the concept of mianzi or "face," requiring individuals to abide by social norms, is vital among the Chinese.

3. Personal Factors

A buyer's decisions are also influenced by personal characteristics. These include the buyer's age and stage in the life cycle; occupation and economic circumstances; personality and self-concept; and lifestyle and values. Because many of these characteristics have a very direct impact on consumer behavior, it is important for marketers to follow them closely.

Age and Stage in the Life Cycle

People buy different goods and services over a lifetime. Taste in food, clothes, furniture, and recreation is often age-related. Consumption is also shaped by the family life cycle and the number, age, gender of people in the household at any point in time. Some households in Asia are increasing fragmented – the traditional family with as husband, wife and kids makes up a smaller percentage of total households than before. In addition, psychological life-cycle stages may matter. Adults experience certain "passages" or "transformations" as they go through life. Marketers should also consider critical life events or transitions – marriage, childbirth, illness, relocation, divorce, career change, and widowhood – as giving rise to new needs. These should alert service providers – banks, lawyers, and insurance agents – to ways they can help.

Occupation and Economic Circumstances

Occupation also influences consumption patterns. A blue-collar worker will buy work clothes, work shoes, and lunchboxes. A company president will buy dress suits, air travel, and country club memberships. Marketers try to identify the occupational groups that have above - average interest in their

products and services. A company can even tailor its products for certain occupational groups: computer software companies, for example, design different products for brand managers, engineers, lawyers, and physicians. Product choice is greatly affected by economic circumstance: spendable income (level, stability, and time pattern), savings and assets (including the percentage that is liquid), debts, borrowing power, and attitudes towards spending and saving. Purchasing discretionary items on credit has risen in Asia. For example, while visitors to China 20 years ago had a hard time explaining what a credit card was, the majority of Chinese business people now carry it around. While luxury goods makers such as Gucci, Prada, and Louis Vuitton are typically vulnerable to economic downturns, their sales in Japan were sustained and a secondary market for their used bags flourished. Nonetheless, if economic indicators point to a recession, marketers can take steps to redesign, reposition, and reprice their products or introduce or increase the emphasis on discount brands so that they can continue to offer value to target customers.

Personality and Self-Concept

Each person has personality characteristics that influence his or her buying behavior. Personality is a set of distinguishing human psychological traits that lead to relatively consistent and enduring responses to environmental stimuli. Personality is often described in terms of such traits as self-confidence, dominance, autonomy, deference, sociability, defensiveness, and adaptability. Personality can be a useful variable in analyzing consumer brand choices. The idea is that brands also have personalities, and consumers are likely to choose brands whose personalities match their own. We define brand personality as the specific mix of human traits that may be attributed to a particular brand.

Consumers often choose and use brands that have a brand personality consistent with their own actual self-concept (how one views oneself), although in some cases the match may be based on consumer's ideal self-concept (how one would like to view oneself) or even other's self-concept (how one thinks others see one) rather than actual self-image. These effects may also be more pronounced for publicly consumed products as compared to privately consumed goods. However, consumers who are high "self-monitors" – that is, sensitive to how others see them – are more likely to choose brands whose personalities fit the consumption situation.

Lifestyles and Values

People from the same subculture, social class, and occupation may lead quite different lifestyles. Members of India's so called Gen Next spend most of their money on personal clothing and accessories, food, entertainment, and consumer durables as well as on exotic holidays in India and abroad. Luxury cars and shiny motorbikes are the most sought-after status symbols among these newly prosperous young people, most of who work in India's burgeoning IT sector. Harley-Davidson has set its sight on the Indian market, and Levi's Strauss India (Pvt.) Ltd., a subsidiary of the U.S.-based clothing giant, regards India as one of the fastest-growing markets for Levi's in the world. A life style is a person's pattern of living in the world as expressed in activities interests, and opinions. Lifestyle portrays the "whole person" interacting with his or her environment. Marketers search for relationships between their products and lifestyle groups. For example, a computer might find that most computer buyers are achievement-oriented. The marketer may then aim the brand more clearly at the achiever lifestyle. Marketers are always uncovering new trends in consumer lifestyles. Lifestyles are shaped partly by whether consumers are money-constrained or time-constrained. Companies aiming to serve money-constrained consumers will create lower-cost products and services. Local brands usually fill this need in many emerging markets, while their foreign counterparts target more affluent consumers. "Breakthrough Marketing: IKEA" outlines IKEA's global success formula of appealing to price-conscious shoppers in the furniture market. Consumers who experience time famine are prone to multitasking, that is, doing two or more things at the same time. They will phone or eat while driving, or bicycle to work to get exercise. They will also pay others to perform tasks because time is more important than money. They may prefer eating buns to congee because they are quicker. Companies aiming to serve them will create convenient products and services for this group. Much of the wireless revolution is fueled by the multitasking trend. Some mobile phones allow users to talk while Web browsing over Wi-Fi and conducting business via Bluetooth.

In some categories, notably food processing, companies targeting time-constrained consumers need to be aware that these consumers seek the illusion that they are not operating within time constraints. The food processing industry labels those who seek both convenience and some involvement in the cooking process: the "convenience involvement segment." Consumer decisions are also influenced by core values, the belief systems that underlie consumer attitudes and behaviors. Core values go much

deeper than behavior or attitudes, and determine, at a basic level, people's choices and desires over the long-term. Marketers who target consumers on the basis of their values believe that by appealing to people's inner selves, it is possible to influence their outer selves – their purchase behavior.

4. Psychological Factors

Motivation or drive is a need that is sufficiently pressing to direct the person to seek satisfaction of the needs (Kotler and Armstrong, 1996). For instance, hungry, thirsty and discomfort called biogenic.

Perception

Before a person has a choice to purchase the product, they would gather information from environment to make decision. The processes by which people select, organize, and interpret information to form a meaningful picture, information or stimuli detected was known as perception. It occurred quickly and often with less information, but it was a powerful factor in decision making.

Learning

Learning was changes an individual's behavior that result from observation and experience. Predicting and interpreting of consumer learning can enhance the understanding of their buying behavior because learning played a role at every stage of buying decision process.

Beliefs and Attitudes

A belief is a descriptive thought that a person holds about something. Attitude refers to a person's consistently favorable evaluations, feelings, and tendencies toward an object or idea (Kotler and Armstrong, 1996).

2.8 BUYER'S DECISION PROCESS

Buyer's decision processes are the decision making processes undertaken by consumers in regard

to a potential market transaction before, during, and after the purchase of a product or service (Wikipedia). Marketing managers must realize that the buyers may refuse the products or services at any point of the process. Therefore, the knowledge of a buyer's decision is vital since it enable the company to transmit the correct type of information at the right time and in the right or appropriate manner (Fill, 2002). The five-stage decision making model is important for anyone making marketing decisions. It forces the marketers to consider the whole buying process rather than just the purchase decision. The following figure demonstrates the five-stages of a consumer's buying decision process (Kotler, 2003).

TABLE 2 THE CONSUMER BUYING DECISION PROCESS

Stage	Description	Feeling
Problem Recognition	The consumer perceives a need and becomes motivated to solve a problem	Motivation
Information Research	The consumer searches for information required to make a purchase decision	Perception
Information Evaluation	The consumer compares various brands and products	Attitude formation
Purchase Decision	The consumer decides which brand to purchase	Integration
Post-Purchase Evaluation	The consumer evaluates their purchase decision	Learning

Note : Research, Philip Kotler, John Bowen, and James Makens, 2003

2.9 PURCHASE DECISION MAKING FOR PROPERTY

Wallance (1971) explained that purchase decision making consists of information and systematic processes:

1. Consumers need to change their residence. This stage will start when their lifestyle is changed such as having more income, plus marketing factors that support their change such as property grand sale at end-of-year. If they do not need to change their residence, they will revert to the decision making stage again; else, they will move to the second stage.
2. Consumers set up their objectives. This stage is includes the budget planning, location, residential type such as condominium, house or town and living style such as renting or buying.
3. The selective stage is the first process considered by consumers. They study residential information such as sale prices, marketing and financial conditions such as amount and period of installment. After they analyze their financial limitations and what they can afford, the next stage will be continued.
4. The comparative stage: consumers will analyze alternative residences that they got information about in the previous stage.
5. They evaluate functional and psychological benefits that the market can provide for their decision making, such as project information, company profile and location.
6. They evaluate the financial alternatives such as payment conditions, cash amounts, down amounts, installments and durations. Also, the risk will be analyzed at this stage.
7. After consumers have evaluated all alternatives, they are ready to make decisions on the best choice.

2.10 RESIDENTIAL SELECTION THEORIES

Most explanations of residential selection focus on public construction, public utilities and environment that is suitable for living. However, each theory differs in its details. William (1964) explained that residential selection is related to land price. The nearer the area, the more expensive the price. This is one factor determining the residential price. Moreover, land price is linked to transportation cost. As a result, people who have high income have alternatives to live in a suburban area and pay more for transportation, while people have low income must live in crowded area around the centralized area, reducing their transportation cost. Many reasons why residences should be grouped together. People tend to select the area beside public transportation, need convenience to travel from their residence to workplace and select the area around the centralized business center. Although the previous studies focused on a variety of factors such as accessibility, transportation, residential environment, and public utilities attributed in various theories influence consumers' decision making selecting residence, the actual situation may have other factors which also influence the consumers' decision making. Especially, Wittawat Rungruengphol (2006) mentioned that the other factors impacting the consumers' decision on buying condominiums are as follow:

1. Consumers' income – different income influences consumers' residential selection. People who have high income can select their residence according to their needs such as good environment, ready public utilities, while people who have low income have more limitation to select their residence. They may select a residence near their workplace to reduce their transportation costs, despite air pollution.

2. Family life cycle – different family life cycles influence consumers' residential selection.

- a. People who are studying or have recently started working tend to select residences that are close to their university or workplace depending on their needs. b. People who are married tend to select their residences on criteria related to their family. For example, a couple may select their residence near the husband's workplace or wife's workplace; others will select their residences near their parents' house.

c. People who are married with children tend to select residence that have move living area and are close to their children's school. d. People who are retired tend to select residences that peaceful, often in the suburbs.

3. Life style – the unique traits of a certain consumer's life style influences consumers' residential selection. For example, a condominium in the city is suitable for singles and new couples who have worked in the city and live separately from their parents because their life is focused on their work and friends. Hence, they don't have much time to stay in and take care of a house; they need convenience, safety, and proximity to their workplace, shopping malls and community amenities as pubs and restaurants. A condominium in the central area is thus their solution. Chiangmai.

2.11 RELATED STUDIES

The following information was the research that relate to this independent study, service marketing and marketing mix towards the characteristics of Thai real estate business.

Sirirat Sanichwannakul (2009) conducted on the study on "Factors affecting consumers' decision making on buying condominium among people of different genders, marital status and incomes." This study aimed to ascertain the factors affecting consumer decision making on buying condominiums among people of different genders, marital status and incomes. In particular, it was designed to find out five factors – price, location, marketing and promotion, facilities, and trustworthiness of the company – influencing the consumer's behavior of buying a condominium. The methodology that has been used was a survey method, by collecting 316 questionnaires from the employees of one of the largest information technology companies in Bangkok, in every department at the head-quarters building around Phayathai district and another customer' sites where employees were working at one of the largest banks in Bangkok at the head-quarters building around Rajburana district. The data was analyzed by descriptive statistic including frequency distribution and percentage, arithmetic mean and standard deviation, chi-square test, a five-point likert scale. The results of this study concluded that the findings of the study showed that most of the respondents agreed that the trustworthiness of the company, facilities, price, location, marketing and promotion would affect their decision making on buying a condominium in Bangkok. However, the

results of these studies revealed that they considered their ability to buy a condominium, which was sub-factor of the price factor, and the security systems installed in the project, such as 24-hour security guards and CCTV, which was a sub-factor of facilities, were the highest priority that they pinpointed. Consequently, it could be inferred that all of these five factors did influence the respondents' decision making on buying a condominium in Bangkok. Moreover, the results of this study showed that the consumers' demographic factor such as gender, marital status, and monthly income was not related to consumers' decision making.

Sirilak Yooprasert (2008) conducted on the study on "Marketing Factors Affecting Condominium Buying Decisions of Consumers in Bangkok Metropolis". The purposes of this study were: (1) to study condominium buying decision of consumers in Bangkok Metropolis; (2) to study personal characteristic affecting marketing factors in condominium buying decision of the consumer in Bangkok Metropolis; (3) to study personal characteristic affecting condominium buying decision of the consumers in Bangkok Metropolis. The methodology that has been used was a survey method, by collecting 400 questionnaires from all population staying in condominium registered with the Department of Land in Bangkok Metropolis by 2006. The data was analyzed by descriptive statistic including percentage, mean, standard deviation, t-test, one-way ANOVA, and Pearson Product Moment Correlation Coefficient. The results of this study concluded that the findings of the study showed that data of condominium buyers in Bangkok area were mostly considered on price and installment condition as a main determination buying process. The two main objective of buying condominium are having own family and having their own residence. Also, the personal characteristic is affecting the different marketing factors in condominium buying decision. Moreover, the differentiated in personal characteristic were determined on condominium buying decision. However, gender is not affecting on buying decision.

Apa Ataboonwongse (2010) conducted on the study on "A Casual Model of Condominium Unit Buyer's Response in Bangkok Metropolitan." The purposes of this study were: (1) to study the factors that influenced the condominium unit buyers in Bangkok Metropolitan. (2) to examined a relationship between the hypothesized model and the empirical data concerning the condominium buyer's responses. The methodology that has been use was survey method, by collecting 386 questionnaires from the condominium buyers and in-depth interview method from 7 condominium buyers. The data was analyzed

by confirmatory factor analysis, Cronbach's alpha Coefficiency, Regression analysis, and Path analysis. The results of this study concluded that the buyer's decision process and other stimuli strongly influenced the condominium buyer's responses. Therefore, condominium developers should not only utilize marketing stimuli, but utilize more of other stimuli. Also, stress on an analysis of essential information relating each step of decision-making process of buyers as strategic means in increasing the condominium buyer's process which are constantly changing. Moreover, there should be another casual model testing of factors influencing the condominium buyer's responses in different contest as different location of condominium or different price range.



CHAPTER 3

RESEARCH METHODOLOGY

This chapter describes the details of study design and methodologies to conduct through the gathering primary data and secondary data that influence consumer's buying decision of condominium. The content of this chapter is defined as the following topics:

1. Study design
2. Target Populations and Samples
3. Research Instrument
4. Validity and Reliability Assessment
5. Data Collection
6. Data Analysis
7. Operational Variable
 - a. Independent Variable
 - b. Dependent Variable

3.1 STUDY DESIGN

This information of this research included the primary data that was collected by convenience sampling method. In addition, the secondary data was gathered from many sources such as related independent studies, textbooks, articles, websites, summary of studies which related to the principal topics of the study.

3.2 TARGET POPULATIONS AND SAMPLES

The target population of this study was focused on people who live in the Chiangmai area.

The small number of target populations was selected as the target sample. The exact number was calculated from Yamane's formula. However, there was the infinite amount of the target populations. Therefore, the exact number was instead referred from the Tao Yamane's statistic table.

3.3 SAMPLE SIZE

In order to know the sample size of this study, the researcher will use the Taro Yamane's (1993) formula to calculate the number of population who are able to complete the questionnaire. The formula show as below:

$$n = \frac{N}{1 + Ne^2}$$

n = number of sample size
 N = number of population
 e² = square of the maximum allowances of error between the true proportion and sample proportion (confidence interval equal 95%, so standard error units equal 0.05)

Calculation

$$\begin{aligned} n &= \frac{89,454}{1 + 89,454 (0.05)^2} \\ &= 398.22 \\ &\approx 400 \end{aligned}$$

From the calculation, the sample size (n) is equal to 400 samples. The study will use this amount of questionnaires as a minimum requirement to gather the data from the respondents. From these 400 samples, the researcher will divided into three districts, which are Muang, Hangdong, and Sansai District.

3.4 RESEARCH INSTRUMENT

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Instrument Testing

The main instrument used for the data collecting was the questionnaire. The questionnaire was categorized into two parts as follows:

Part I: Demographic characteristic of respondents. In this part, the questions were about the personal data in term of gender, age, educational level, occupation, and monthly income. The question was designed to be the nominal scale.

Part II: The marketing factors that influence the consumer's buying decision of condominium. In this part, the questions asked the respondents were about the factors that influence the consumer's buying decision of condominium in Chiangmai. The questions will be asked about the marketing factors, social factors and earthquake factors that influence the respondents to make the buying decision easier. There were designed by using rating scale that requires choosing answer about the important level (from Strongly Agree to Strongly Disagree which consists of four levels). The values were set as follows:

Frequency	Rating Score
Strongly Agree	4
Agree	3
Disagree	2
Strongly Disagree	1
No Information / No Idea	0

3.5 VALIDATION

The total questionnaire were examined the content validity under panel expert and supervision of the independent study advisor to improve content validity before pre-testing to the target respondents.

3.6 RELIABILITY

The questionnaires had been developed the questions by reviewing related books and previous research under the advice of the independent study advisor by testing the validity and reliability before pre-testing to the respondents. The reliability test was applied before

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collecting primary data. This was measured by using the Cronbach's Alpha coefficient. The pre-testing was distributed to 50 populations in Lamphoon area. Data was analyzed by SPSS (Statistic Package for Social Science) to find out alpha coefficient equal to 0.9409 as shown in Appendix A that illustrates the reliability results of each factor. Thus, the researcher concluded that the questionnaires were acceptable.

3.7 Data Collection

Data was collected from two sources:

1. Primary Data

Primary data was gathered by directly distributing 400 questionnaires to people who are interested in and can make decision to buy condominium in Chiangmai area. The questionnaire will be collected in during January, 2012 at Chiangmai area. The representative had to check that all of respondents completed the questionnaire before collecting and analyzing data.

2. Secondary Data

This study gathered some definitions and theory in order to completely support this project from textbooks, online resources, articles, and other research papers.

3.8 DATA ANALYSIS

After collecting 400 questionnaires, the data was analyzed by SPSS program in order to analyze all statistic data to specify the results of the survey.

These are the statistics used for data analysis. Descriptive Statistics:

Descriptive statistic used to describe or summarize information about population or sample. In this study, descriptive statistics are used in the forms of frequency distribution, percentage distribution, arithmetic mean and standard deviation as follows:

1. Frequency distribution is used to summarize the number of times a particular value of variable occurs. In this study, it is used to summarize frequency distribution of consumer's demographic profiles such as gender, age, marital status, education, occupation, and monthly income.

2. Percentage distribution is used to summarize percentage value associated with frequency distribution of the variables. In this study, it is used to summarize proportion of consumer's demographic profiles.

3. Mean is used to measure a central tendency of variables. In this study, the interpretation of average weighted mean score has to be set by assigning values between 1.00 (least important) and 4.00 (most highly important). This study was calculated the range in order to divide the level by:

$$\begin{aligned} \text{Range of scores} &= \frac{\text{Highest score} - \text{Lowest score}}{\text{Number of range}} \\ &= \frac{4 - 1}{4} \\ &= 0.75 \end{aligned}$$

Thus, from the calculation at the above, 0.75 score was used to separate the measurement of important level as follows:

Frequency	Rating Score
Strongly Agree	3.26 – 4.00
Agree	2.51 – 3.25
Disagree	1.76 – 2.50
Strongly Disagree	1.00 – 1.75

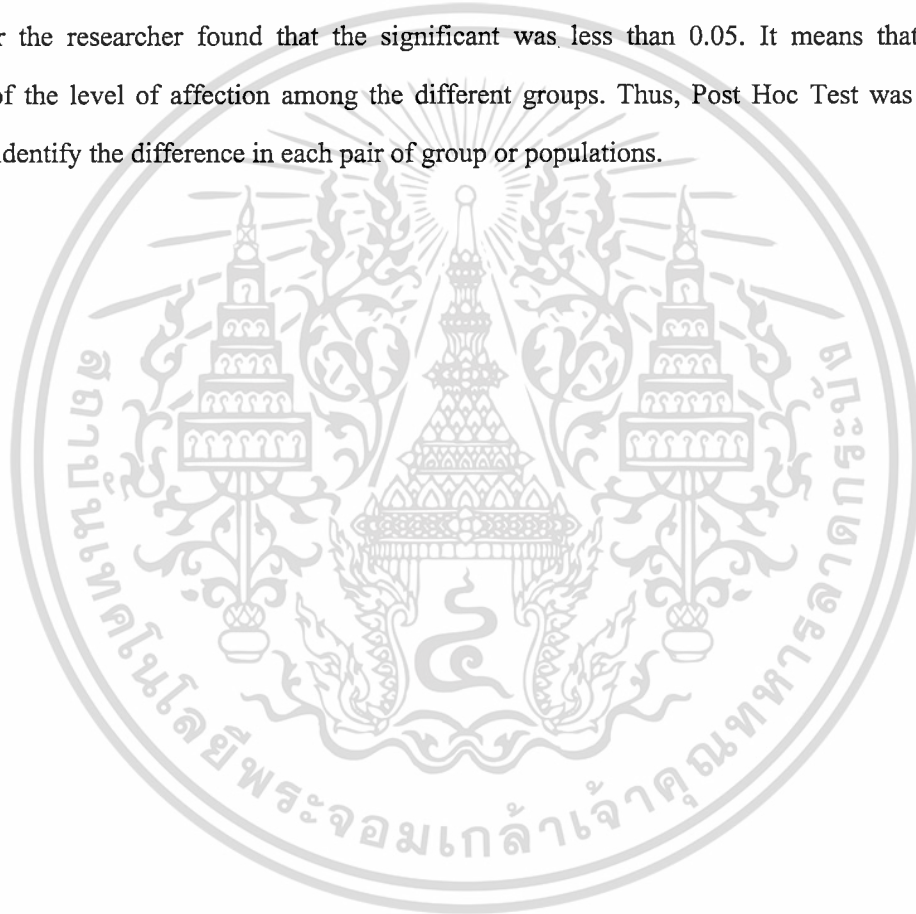
Standard deviation is used to measure spread, variability or dispersion.

Inference Statistics:

Inference statistic is used to make inferences or judgments about a population on the basis of a sample.

1. T-test is a statistical test that compares the means of two independent groups of a sample to test the hypothesis at 0.05 level of significance.

2. F-test (One-Way ANOVA) is statistical test that compare the means of more than two independent groups of a sample to test the hypothesis. This study establishes significant level at 0.05. Post Hoc Test, Fisher's Least Significant Difference (LSD) was a further step of F-test (One-Way ANOVA) testing after the researcher found that the significant was less than 0.05. It means that there is the difference of the level of affection among the different groups. Thus, Post Hoc Test was using in this research to identify the difference in each pair of group or populations.



CHAPTER 4

STATISTICAL ANALYSIS

4.1 ANALYSIS RESULT

The paper examined the effect of earthquakes on condominium business in Chiangmai and investigated condo-selecting behavior of consumers in Chiangmai. The questionnaires were used as instrument to collect data from 400 samples. The results showed as follows.

Part I: Number and percent of general information prior to buying decision, household's eco-socio factors influencing a buying behavior of condominium.

Part II: Mean, standard deviation, and interpretation of project-related factors influencing a buying decision, and earthquake-related factors influencing a buying decision of condominium.

Part III: Number and percent of reasons for buying a condominium.

Part IV: Hypothesis testing

PART I: Number and percent of general information, data prior to buying decision, household's eco-socio factors that have affected buying behavior of condominium.

TABLE 3 NUMBER AND PERCENT OF GENERAL INFORMATION ON RESPONDENTS

Respondent's General Information	Number	Percentage
Gender		
Male	192	48.00
Female	208	52.00
Total	400	100.00
Age		
Less than 30 yrs.	216	54.30
30 – 40 yrs.	119	29.90
41 – 50 yrs.	57	14.30
51 yrs. or higher	6	1.50
Total	398	100.00

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TABLE 3 NUMBER AND PERCENT OF GENERAL INFORMATION ON RESPONDENTS**(continued)**

Respondent's General Information	Number	Percentage
Educational Level		
High School or lesser	41	10.30
Diploma	74	18.60
Graduated (B.A) or equivalent	236	59.30
Postgraduate	47	11.80
Total	398	100.00
Occupation		
Civil Servant/State Enterprise	39	12.10
Merchant/Business Owner	89	27.60
Employee/Private Employee	128	39.80
Freelance/Employed	66	20.50
Total	322	100.00

As shown in Table 3 number and percent of general information on respondents were detailed as follows. Of 400 respondents, they mainly were female (52%) and male (48%).

Regarding to age, of 398 respondents, majority were aged less than 30 years old (54.30%), followed by 30-40 years old (29.90%), 41-50 years old (14.30%), and 51 years old or higher (1.50%), respectively.

Regarding to educational level, of 398 respondents, majority graduated the Bachelor Degree or equivalent (59.30%), followed by diploma (18.60%), postgraduate (11.80%), high school or lesser (10.30%), respectively.

Regarding to occupation, of 322 respondents, majority were employees/private employees (39.80%), followed by merchant/business owner (27.60%), freelance/employed in general (20.50%), civil servant/state enterprise (12.10%), respectively.

**TABLE 4 NUMBER AND PERCENT OF GENERAL INFORMATION PRIOR TO BUYING
DECISION**

Information Prior to Buying Decision	Number	Percent
Description of Residence		
Government/Corporate Housing	20	5.10
Own house	119	30.20
Rented house	86	21.80
Living with parents/relative	41	10.40
Other	128	32.50
Total	394	100.00
Original Domicile		
Sansai	153	38.20
Hangdong	28	7.00
Muang (Chiangmai)	219	54.80
Total	400	100.00
Year of Condominium Buying		
N/A	183	47.80
B.E. 2530 – 2540	13	3.40
B.E. 2541 – 2550	59	15.40
B.E. 2551 onwards	128	33.40
Total	383	100.00
Project Location		
Muang	350	92.10
Mae Rim	6	1.60
San Sai	9	2.40
Other	15	3.90
Total	380	100.00

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As shown in Table 4 number and percent of general information on respondents prior to buying decision were detailed as follows.

Regarding to description of residence, of 394 respondents, majority reported other accommodations, for examples, dormitory/ rented room (32.50%), followed by own house (30.20%), rented house (21.80%), living with parents/relatives (10.40%), and government/corporate housing (5.10%), respectively.

Regarding to original domicile, of 400 respondents, majority had original domicile Chiangmai (54.80%), followed by Sansai (38.20%), and Hangdong (7%), respectively.

Regarding to year of buying, of 383 respondents, majority did not specify year of buying (47.80%), followed by B.E 2551 onwards (33.40%), B.E.2541-2550 (15.40%), and B.E.2530-2540, respectively.

Regarding to project location, of 380 respondents, majority resided in Muang (92.10%), followed by others (3.90%), San Sai (2.40%), and Mae Rim (1.60%), respectively.

TABLE 5 NUMBER AND PERCENT OF HOUSEHOLD'S ECO-SOCIO FACTORS INFLUENCING BUYING BEHAVIOR OF CONDOMINIUM

Household's Eco-Socio Factors Influencing Buying Behavior of Condominium	Number	Percent
Condominium Price		
N/A	104	26.70
Less than THB 500, 000	52	13.40
THB 500,000 – 1,000,000	164	42.10
THB 1,000,001 – 1,500,000	29	7.50
THB 1,500,001 or higher	40	10.30
Total	389	100.00

**TABLE 5 NUMBER AND PERCENT OF HOUSEHOLD'S ECO-SOCIO FACTORS
INFLUENCING BUYING BEHAVIOR OF CONDOMINIUM (continued)**

Household's Eco-Socio Factors Influencing Buying Behavior of Condominium	Number	Percent
Household Income		
N/A	150	37.50
Not over THB 10, 000	23	5.80
THB 10, 001 – 20,000	36	9.00
THB 20, 001 – 30,000	49	12.30
THB 30, 001 – 40,000	49	12.30
THB 40, 001 or higher	93	23.10
Total	400	100.00
Monthly Average Household Expenses		
Less than THB 10, 000	87	21.90
THB 10, 000 – 20,000	113	28.40
THB 20, 001– 30,000	92	23.10
THB 30, 001 – 40,000	40	10.00
THB 40, 001 or higher	66	16.60
Total	398	100.00
Number of Family Numbers		
N/A	59	15
1 -2 persons	110	27.90
3-4 persons	189	48.00
5-6 persons	28	7.10
More than 6 persons	8	2.00
Total	394	100.00

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**TABLE 5 NUMBER AND PERCENT OF HOUSEHOLD'S ECO-SOCIO FACTORS
INFLUENCING BUYING BEHAVIOR OF CONDOMINIUM (continued)**

Household's Eco-Socio Factors Influencing Buying Behavior of Condominium	Number	Percent
Amount of Saving Money		
N/A	267	66.80
Less than persons THB 50, 000	63	15.80
THB 50, 000 – 100,000	58	14.50
THB 100, 001 – 200,000	4	1.00
THB 200,001 – 300,000	2	0.50
THB 300, 001 or higher	6	1.50
Total	400	100.00
Marital Status		
Single	262	67.20
Married	122	31.30
Divorced	6	1.50
Total	390	100.00

Table 5 shows the statistics of the number and percent of household's eco-socio factors influencing buying behavior of condominium were detailed as follows.

Regarding to condominium price, of 389 respondents, majority were interested in price range TBH 500,000-1,000,000 (42.10%), followed by not specify price (26.70%), lower than THB 500,000 (13.40%), TBH 1,500,001 or higher (10.30%), and THB 1,000,001 -1,500,000 (7.50%), respectively.

Regarding to household income, of 400 respondents, majority didn't specify their household income (37.50%), followed by THB 40,001 or higher (23.30%), THB 20,001-30,000 (12.30%), THB 30,001-40,000 (12.30%), THB 10,001-20,000 (9%), and not over THB 10,000 (5.80%), respectively.

Regarding to household expenses, of 398 respondents, majority reported their household income ranged THB 10,000-20,000 (28.40%), followed by THB 20,001-30,000 (23.10%), less than THB 10,000 (21.90%), THB 40,001 or higher (16.60%), and THB 30,001-40,000 (10%), respectively.

Regarding to number of family members, of 394 respondents, majority reported their family members of 3-4 persons (48%), followed by 1-2 persons (27.90%), not specify number of family members (15%), 5-6 persons (7.10%), and more than 6 persons (2%), respectively.

Regarding to amount of saving money, of 400 respondents, majority did not specify their saving amount (66.80%), followed by less than THB 50,000 (15.80%), THB 50,000-100,000 (14.50%), THB 300,001 or higher (1.50%), THB 100,001-200,000 (1%), and THB 200,001-300,000 (0.50%), respectively.

Regarding to marital status, of 390 respondents, majority reported their marital status as single (67.20%), followed by married (31.30%), and divorced (1.50%), respectively.

PART II: Mean, standard deviation, and interpretation of related factors influencing the buying decision, and earthquake-related factors influencing a buying decision of condominium

TABLE 6 MEAN, STANDARD DEVIATION, AND INTERPRETATION OF PROJECT-RELATED FACTORS INFLUENCING A BUYING DECISION

Project-Related Factors Influencing a Buying Decision	Mean	S.D.	Interpretation
Marketing Factors			
- Term and condition on monthly installment is more attractive than other projects.	3.77	0.95	Highly
- Travel economy	4.03	0.81	Highly
- Interest rate is cheaper than normal rate	3.49	1.18	Highly

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TABLE 6 MEAN, STANDARD DEVIATION, AND INTERPRETATION OF PROJECT-RELATED FACTORS INFLUENCING A BUYING DECISION (continued)

Project-Related Factors Influencing a Buying Decision	Mean	S.D.	Interpretation
- The project offers financial institutions for loan	3.45	2.38	Highly
- The project allows withdraw from occupational welfares	3.01	1.30	Fairly
Overall	3.55	0.92	Highly
- Life and asset safety is more secured than other projects	4.12	0.93	Highly
- Proximity to parents/relatives	3.25	1.20	Fairly
- Relatives/neighbors also buy one.	3.04	1.30	Fairly
- Desire to stay nearby workplace/child's school	3.99	1.07	Highly
- No congested environment	3.73	1.03	Highly
- A multitude of habitants	3.31	1.03	Fairly
- Habitants are relatively quality	3.99	0.96	Highly
Social Factors	3.63	0.69	Highly

As shown mean, standard deviation, and interpretation of project-related factors that have influenced a buying decision were detailed as follows. Overall, marketing factors have influenced a buying decision highly ($M = 3.55$). In each respect of areas, travel economy influenced a buying decision mostly ($M = 4.03$), followed by term and condition on monthly installment ($M = 3.49$), the project offers financial institutions for loan ($M = 3.45$), and the project allows withdraw from occupational welfares ($M = 3.01$), respectively. Overall, social factors have influenced a buying decision highly ($M = 3.63$). In each respect of areas, life and asset safety influenced a buying decision mostly ($M = 4.12$), followed by proximity to workplace/child's school and habitants are relatively quality ($M = 3.99$), no congested

environment ($M = 3.31$), proximity to parents/relatives ($M = 3.25$), and the relatives/neighbors also buy one ($M = 3.04$), respectively.

TABLE 7 MEAN, STANDARD DEVIATION, AND INTERPRETATION OF THE EARTHQUAKE-RELATED FACTORS INFLUENCING A BUYING DECISION

Earthquake-Related Factors That Have Influenced a Buying Decision	Mean	S.D.	Interpretation
- Structural building is sturdy accordingly to engineering principle.	4.21	0.79	Mostly
- Earthquake warning is available.	3.67	1.24	Highly
- Assistance system; by land and by air, is available in case of the earthquake.	3.58	1.17	Highly
- No history of earthquake occurs with project location, and no earth fault.	3.74	1.17	Highly
- Project location is adjacent to fire station that is ready in case of fire.	3.63	1.10	Highly
Overall	3.72	0.95	Highly

As shown in Table 7, overall, it found that the earthquake-related factors that have influenced a buying decision highly ($M = 4.72$). In each respect of areas, sturdy structural building in accordance with engineering principle influenced a buying decision mostly ($M = 4.21$), followed by no history of earthquake and no earth fault ($M = 3.74$), availability of earthquake warning ($M = 3.67$), proximity to fire station and availability of assistance system ($M = 3.63$), assistance system; by land and by air, is available in case of the earthquake ($M = 3.58$), and emergency plan is available in the event of natural disasters ($M = 3.51$), respectively.

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PART III: NUMBER AND PERCENT OF REASONS FOR BUYING CONDOMINIUM

TABLE 8 NUMBER AND PERCENT OF REASONS FOR BUYING A CONDOMINIUM

Reasons for Buying Condominium	Number	Percentage
Reasons for purchase of condominium (one or higher choices are allowed)		
Deteriorated former house	8	1.53
Former residence is far from office.	204	38.92
Want to possess own house	114	21.76
Environment is more nice than old residence	53	10.11
Relocation of office	55	10.50
Others (speculative, rent, relax purpose)	90	17.18
Overall	524	100.00
Description of Former Residence		
Single house	235	59.90
Twin house	11	2.80
Town house	33	8.40
Commercial building	29	7.40
Others	72	18.40
No ideas to buy other kinds of residence	12	3.10
Overall	392	100.00
Reasons not to buy a desired residence		
Too expensive	142	36.80
Unsuitable to family size	20	5.20
Desire upland residence	12	3.10
Undesirable location	68	17.60
Having own house, just look for reserve	89	23.10
Others (e.g. it shall facilitate business operation)	55	14.20
Overall	386	100.00

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TABLE 8 NUMBER AND PERCENT OF REASONS FOR BUYING A CONDOMINIUM**(continued)**

Reasons for Buying Condominium	Number	Percentage
Buying Method		
N/A	185	47.40
Cash	81	20.80
Loan from financial institution	124	31.80
Overall	390	100.00
Information source supporting a purchase decision		
Self-seeking	152	38.80
Various medias and ads	124	31.60
Friends/Relatives	87	22.20
Salesperson	13	3.30
Others	16	4.10
Overall	392	100.00
Person supporting a purchase decision		
Self-determination	149	37.81
Own decision and family members	194	49.24
Father/Mother/Relatives	49	12.44
Others	2	0.51
Overall	394	100.00
Pleasant	291	73.90
Unpleasant	17	4.30
No idea	86	21.80
Overall	394	100.00

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TABLE 8 NUMBER AND PERCENT OF REASONS FOR BUYING A CONDOMINIUM**(continued)**

Reasons for Buying Condominium	Number	Percentage
Opinion after moving into the condominium		
Pleasant as expected	166	42.10
Unpleasant as expected	30	7.60
No problems	198	50.30
Overall	394	100.00
Futuristic role of condominium		
Very important	252	64.00
Uncertain	132	33.50
Less important	10	2.50
Overall	394	100.00
Factors influencing the intent of future purchase		
Physical nature of condominium	116	29.44
Family's economics	171	43.40
Social factors	69	17.51
Others	38	9.65
Overall	394	100.00

As shown in Table 8 number and percent of reasons for buying a condo, most respondents reasoned for buying a condominium because of the former residence is far from office mostly (38.92%), followed by desire to possess own house (21.76%), and other reasons (e.g. speculative, rent, relax purpose) (17.18%), relocation of office (10.50%), new environment is more nice than old one (10.11%), and deteriorated former house (1.53%), respectively.

Regarding to former residence before buying, of 392 respondents, the majority lived in single house (59.90%), followed by others (18.40%), town house (8.40%), commercial building (7.40%), no idea to buy (3.10%), and twin house (2.80%), respectively.

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Regarding to reasons not to buy a desired residence, of 386 respondents, majority reasoned it's too expensive (36.80%), followed by having own house, just look for reserve (23.10%), Undesirable location (17.60%), other (e.g. it shall facilitate business operation) (14.20%), unsuitable to family size (5.20%), desire upland residence (3.10%), respectively.

Regarding to buying method, of 390 respondents, majority did not specify their buying method (47.40%), followed by loan from financial institution (31.80%), and cash (20.80%), respectively.

Regarding to information source supporting a purchase decision, of 392 respondents, majority obtained information by self-seeking (38.80%), followed by various medias and ads (31.60%), friends/relatives (22.20%), others (4.10%), and salesperson (3.30%), respectively.

Regarding to person supporting a purchase decision, of 394 respondents, majority obtained information by own decision and family members (49.24%), followed by self-determination (37.81%), father/mother/relatives (12.44%), and others (0.51%), respectively.

Regarding to opinion prior to moving into the condominium, of 394 respondents, majority considered the residence pleasant (73.90%), followed by no idea (21.80%), and unpleasant (4.30%), respectively.

Regarding to opinion after moving into the condominium, of 394 respondents, majority considered the residence as no problems (50.30%), followed by pleasant as expected (42.10%), and unpleasant as expected (7.60%), respectively.

Regarding to futuristic role of condominium, of 394 respondents, majority considered it as very important (64%), followed by uncertain (33.50%), and less important (2.50%), respectively.

Regarding to factors influencing the intent of future purchase, of 394 respondents, majority considered family's economics mostly (43.40%), followed by physical nature of condominium (29.44%), social factors (17.51%), and others (9.65%), respectively.

PART IV: HYPOTHESIS TESTING

H1: Household's eco-socio factors, including; condominium price, household income, and household expenses have associated with project-related factors; marketing, social, physical and reputation that have influenced a buying decision

TABLE 9 RELATIONSHIPS BETWEEN CONDOMINIUM PRICE AND PROJECT-RELATED FACTORS INFLUENCING A BUYING DECISION

Project-Related Factors Influencing a Buying Decision	Correlation	Sig.
Marketing	0.075	0.134
Social	0.028	0.579
Physical nature and reputation	0.058	0.250

* Statistically significant level .05

** Statistically significant level .01

As shown in Table 9 relationship between condominium price and project-related factors influencing a buying decision, the results showed there was no relationship between condominium price and project-related factors that have influenced a buying decision for marketing, social, and physical nature and reputation at statistically significant level .05.

TABLE 10 RELATIONSHIPS BETWEEN HOUSEHOLD INCOME AND PROJECT-RELATED FACTORS INFLUENCING A BUYING DECISION

Project-Related Factors Influencing a Buying Decision	Correlation	Sig.
Marketing	0.034	0.501
Social	-0.033	0.514
Physical nature and reputation	0.096	0.055

* Statistically significant level .05

** Statistically significant level .01

As shown in Table 10 relationship between household income and project-related factors influencing a buying decision, the results showed there was no relationship between household income and project-related factors that have influenced a buying decision for marketing, social, and physical nature and reputation at statistically significant level .05.

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TABLE 11 RELATIONSHIPS BETWEEN HOUSEHOLD EXPENSES AND PROJEC-RELATED FACTORS INFLUENCING A BUYING DECISION

Project-Related Factors Influencing a Buying Decision	Correlation	Sig.
Marketing	0.049	0.325
Social	0.033	0.512
Physical nature and reputation	0.175**	0.000**

* Statistically significant level .05

** Statistically significant level .01

As shown in Table 11 relationship between household expenses and project-related factors influencing a buying decision, the results showed there was relationship between household expenses and project-related factors that have influenced a buying decision for physical nature and reputation at statistically significant level .01 whereas there was no relationship between household expenses and project-related factors that have influenced a buying decision for marketing and social factor.

H2: Household's eco-socio factors, including; condominium price, household income, and household expenses have associated with earthquake-related factors that have influenced a buying decision

TABLE 12 RELATIONSHIPS BETWEEN CONDOMINIUM PRICE AND THE EARTHQUAKE-RELATED FACTORS INFLUENCING A BUYING DECISION

The Earthquake-Related Factors Influencing a Buying Decision	Correlation	Sig.
The Earthquake-related factors influencing a buying decision	0.022	0.656

* Statistically significant level .05

** Statistically significant level .01

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As shown in Table 12 relationship between condominium price and the earthquake-related factors that have influenced a buying decision, the results showed that there was no relationship between condominium price and the earthquake-related factors that have influenced a buying decision at statistically significant level .05.

TABLE 13 RELATIONSHIPS BETWEEN HOUSEHOLD INCOME AND THE EARTHQUAKE-RELATED FACTORS INFLUENCING A BUYING DECISION

The Earthquake-Related Factors Influencing a Buying Decision	Correlation	Sig.
The Earthquake-related factors influencing a buying decision	0.013	0.802

* Statistically significant level .05

** Statistically significant level .01

As shown in Table 13 relationship between household income and the earthquake-related factors that have influenced a buying decision, the results showed that there was no relationship between household income and the earthquake-related factors that have influenced a buying decision at statistically significant level .05.

TABLE 14 RELATIONSHIP BETWEEN HOUSEHOLD EXPENSES AND THE EARTHQUAKE-RELATED FACTORS INFLUENCING A BUYING DECISION

The Earthquake-Related Factors Influencing a Buying Decision	Correlation	Sig.
The Earthquake-related factors influencing a buying decision	0.008	0.869

* Statistically significant level .05

** Statistically significant level .01

As shown in Table 14 relationship between household expenses and the earthquake-related factors that have influenced a buying decision, the results showed that there was no relationship between

household expenses and the earthquake-related factors that have influenced a buying decision at statistically significant level .05.

H3: Project-Related Factors; including marketing, social, and physical nature and reputation have associated with earthquake-related factors that have influenced a buying decision.

TABLE 15 RELATIONSHIP BETWEEN EARTHQUAKE - RELATED FACTORS AND PROJECT- RELATED FACTORS INFLUENCING A BUYING DECISION

Project-Related Factors Influencing a Buying Decision	Correlation	Sig.
Marketing	0.416**	0.000**
Social	0.479**	0.000**
Physical nature and reputation	0.661**	0.000**

* Statistically significant level .05

** Statistically significant level .01

As shown in Table 15 relationship between earthquake-related factors and project-related factors (including marketing, social, and physical nature and reputation) influencing a buying decision, the results showed that earthquake-related factors have moderately associated with project-related factors for marketing, social, physical nature and reputation at statistically significant level .05.

CHAPTER 5

RESULTS, DISCUSSIONS AND RECOMMENDATIONS

A study of the effect of earthquake on condominium business in Chiangmai was aimed to investigate the potential factors that have affected the condominium business in Chiangmai and to examine the intent of buying behavior of consumers in Chiangmai. In present study, the statistics implemented included percentage, means, standard deviation, and chi-square. The results were summarized below.

Part I: Results derived from questionnaires

Part II: Results of hypothesis testing

Part III: Discussion

Part IV: Recommendation

PART I:

5.1 RESULTS DERIVED FROM QUESTIONNAIRES

General information on respondents:

Majority of respondents were female, aged less than 30 years old, graduated Bachelor Degree or equivalent, and worked as employees/private employees. Respondent's information prior to buying decision. Most respondents reported their residence for choice of other types of residence, for examples, dormitory and rented room. They had their original domicile in up-country. Most of them did not specify year of buying. They largely lived in territory of Muang district.

Household's eco-social factors influencing a buying decision:

Most respondents were interested in condominium price ranged between THB 500,000 - 1,000,000. Most of them did not specify household income while monthly household expenses reported ranged between THB 10,000-20,000. They reported 3-4 family members. They did not specify amount of saving money. They mainly were single.

Project-related factors influencing a buying decision:

Overall, marketing factors have influenced a buying decision considerably. In each respect of areas, travel economy influenced a buying decision mostly, followed by term and condition on monthly installment, the project offers financial institutions for loan, and the project allows withdraw from occupational welfares, respectively. Overall, social factors have influenced a buying decision considerably. In each respect of areas, life and asset safety influenced a buying decision mostly, followed by proximity to workplace/child's school and habitants are relatively quality, no congested environment, proximity to parents/relatives, and the relatives/neighbors also buy one, respectively. Overall, physical factors and reputation have influenced a buying decision considerably. In each respect of areas, desired location influenced a buying decision mostly, followed by well-equipped with infrastructure and facility, high level of life and asset security, condominium and accommodation style is fine, and pleasant environment, fine materials and construction, space is suitable to family numbers, project owner is reputed and trustful, respectively.

Earthquake-related factors influencing a buying decision:

Overall, it found that the earthquake-related factors that have influenced a buying decision considerably. In each respect of areas, sturdy structural building in accordance with engineering principle influenced a buying decision mostly, followed by no history of earthquake and no earth fault, availability of earthquake warning, proximity to fire station and availability of assistance system: by land and by air, is available in case of the earthquake, and emergency plan is available in the event of natural disasters, respectively.

Reasons for purchase of condominium:

Most respondents reasoned for buying a condominium because of the former residence is far from office mostly. Before buying a condominium, they mainly lived in single house. Reasons for not to buy a condominium is because it is too expensive. They mainly did not specify buying method. They mainly sought information by themselves and making a decision is based on self-determination and family members' opinion. Before moving into the condominium, they perceived it pleasant and reported no problem after moving into. Role of condominium is quite important. The factors influencing buying decision in the future is household's economics.

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PART II:

5.2 RESULTS OF HYPOTHESIS TESTING

H1: Household's eco-socio factors, including; condominium price, household income, and household expenses have associated with project-related factors; marketing, social, physical and reputation that have influenced a buying decision. The finding showed that household expenses have slightly associated with decision-making on buying a condominium in term of physical nature and reputation at statistically significant level .01 while household expenses have no association with other factors in decision-making on buying a condominium.

H2: Household's eco-socio factors, including; condominium price, household income, and household expenses have associated with earthquake-related factors that have influenced a buying decision. The finding showed that household's eco-socio factors, including; condominium price, household income, and household expenses have no association the earthquake-related factors in decision-making on buying a condominium.

H3: Project-Related Factors; including marketing, social, and physical nature and reputation have associated with earthquake-related factors that have influenced a buying decision. The finding showed a moderate relationship between earthquake-related factors and project-related factors (including marketing, social, and physical nature and reputation) influencing a buying decision at statistically significant level .05.

PART III:

5.3 DISCUSSION

The results demonstrated that main reason for buying a condominium is a proximity office. Consistent with Kanchana Kaewyam (1996)'s work of current status and the need for residence of students of KMUUT Thonburi, it pointed out that most students moved from domicile to rent a dormitory nearby the educational institution which they spent less than an hour from residence to university. Factors

influencing their choice of rented residence included at priority; convenience of travel, room size, rental price, environment, and the need for independent staying. Most students desired that their educational institution provided the dormitory sufficiently to students' need.

In present study, it found that location has influenced the respondents' decision-making on buying a condominium mostly, followed by well-equipped infrastructure and facility, high security of life and assets, fine accommodation and condominium style, pleasant living environment. Consistent with Papakorn Suwanthada (1995)'s examination of the need for residence of Khonkaen University students, it showed that students reported a great satisfaction with location of campus dormitory because it provides a convenience of travel. The factors influencing students' choice of residence at priority included safety, rental price, and comfortableness of residence.

In present study, the earthquake-related factors that have influenced a buying decision considerably. However, the consumers reported their confidence in study structure in accordance with engineering principle mostly, followed by location with no history of earthquake and earth fault, respectively.

PART IV:

5.4 RECOMMENDATION

In examination of the effect of earthquake on condominium business in Chiangmai, since data was gathered using the questionnaires, it's possible that mistakes of communication may occur. In future work, it's suggested to carry out the in-depth data collection by interview method to improve the reliability of the investigation. In present study, data collection was incomplete in some questions; this also may result in some errors.

It's suggested that factors affecting the expectation and satisfaction of condominium residents should be investigated to identify the important issues of decision-making on buying a condominium of the residents.

In addition, cleanliness and safety of residence is another important issue influencing the decision-making on residence. Those concerned operators should provide measures covering the cleanliness of residences and surroundings. As safety is regarded the most important factors in decision-making on residence, the operators should provide the safety measures and control effectively.

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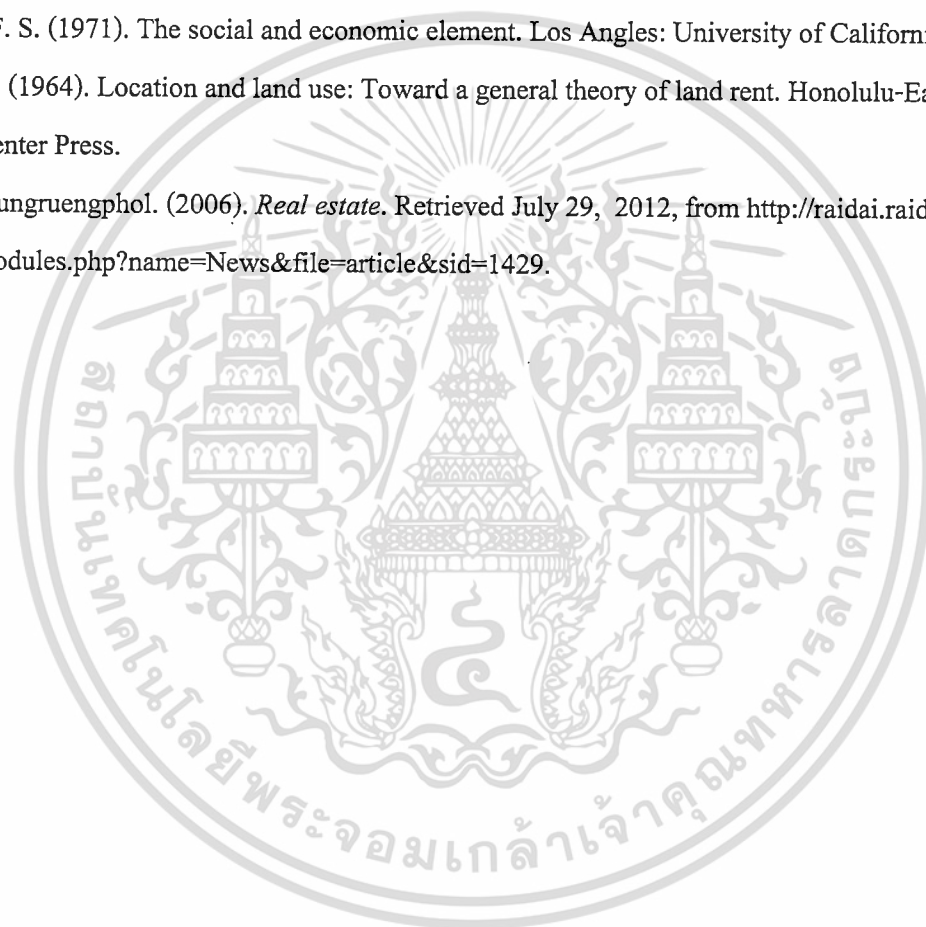
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Questionnaire

Part I: Demographic Data:

Please choose the choice that is appropriate for you by marking X or write your answer in details.

1. Gender

- male female

2. Age

- Not over 30 years
 31 – 40 years
 41 – 50 years
 51 years or higher

3. Educational Level

- High School or lesser
 Diploma
 Graduated (B.A.) or equivalent
 Postgraduate

4. Occupation

- Civil Servant/State Enterprise
 Merchant/Business Owner
 Employee/Private Employee
 Freelance/Employed

Part II: General Information Prior to Buying Decision:

Please choose the choice that is appropriate for you by marking X or write your answer in details.

5. Description of Residence

1. Government/Corporate Housing
 2. Own house
 3. Rented house
 4. Living with parents/relative
 5. Others, please specify

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6. Original Domicile

1. Hangdong
2. Chiangmai
3. Sansai

7. Year of Condominium Buying

1. N/A
2. B.E. 1987 – 1997
3. B.E. 1998 – 2007
4. B.E. 2008 onwards

8. Project Location

1. Muang
2. Mae Rim
3. Sansai
4. Other

Part III: Household's Eco-Socio Factors Influencing Buying Behavior of Condominium

Please choose the choice that is appropriate for you by marking X or write your answer in details.

9. Condominium Price

1. N/A
2. Less than 500, 000
3. 500, 000 – 1,000,000
4. 1,000, 001 – 1,500,000
5. 1,500,001 Baht or higher

10. Household Income

1. N/A
2. Less than 10, 000 Baht
3. 10, 001 – 20,000 Baht
4. 20, 001 – 30,000 Baht
5. 30, 001 – 40,000 Baht
6. 40, 001 Baht or higher

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11. Monthly Average Household Expenses

- 1. Less than 10, 000 Baht
- 2. 10, 001 – 20,000 Baht
- 3. 20, 001 – 30,000 Baht
- 4. 30, 001 – 40,000 Baht
- 5. 40, 001 Baht or higher

12. Number of Family Members

- 1. N/A
- 2. 1 - 2 persons
- 3. 3 - 4 persons
- 4. 5 - 6 persons
- 5. More than 6 persons

13. Amount of Saving Money

- 1. N/A
- 2. Not Over than persons THB 50,000
- 3. THB 50,001 – 100,000
- 4. THB 100,001 – 200,000
- 5. THB 200,001 – 300,000
- 6. THB 300,001 or higher

14. Marital Status

- 1. Single
- 2. Married
- 3. Divorced
- 4. Widowed

Part IV: Project related factors influencing the buying decision, and earthquake-related factors influencing a buying decision of condominium:

Please check or mark X at the level for each influence factor that effect to your renting decision.

Project related factors influencing the buying decision	Level of important				
	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree
Marketing Factors					
- Term and condition on monthly installment is more attractive than other projects.					
- Travel economy					
- The project offers financial institutions for loan.					
- The project allows withdraw from occupational welfares.					
Social factors					
- Life and asset safety is more secured than other projects					
- Proximity to parents/relatives					
- Relatives/neighbors also buy one.					
- Desire to stay nearby workplace/child's school					
- No congested environment					
- A multitude of habitants					
- Habitants are relatively quality.					
Physical and reputation factors					
- Well-equipped with infrastructure and facility					
- Fine materials and construction					
- Condominium and accommodation style is fine					
- Pleasant environment					
- Space is suitable to family numbers					
- Project owner is reputed and trustful					
- High level of life and asset security					
- Desired location					

เอกสารนี้เป็นเอกสารที่สงวนไว้สำหรับการใช้งานเพื่อการศึกษาเท่านั้น ไม่อนุญาตให้นำไปใช้ประโยชน์ด้านการค้า ไม่ว่าจะกรณีใดๆทั้งสิ้น อีกทั้งห้ามมิให้ดัดแปลงเนื้อหา และต้องอ้างอิงถึงเจ้าของเอกสารทุกครั้งที่มีการนำไปใช้

Part V: Earthquake-Related Factors Influencing a Buying Decision:

Please check or mark X at the level for each influence factor that effect to your renting decision.

Earthquake-Related Factors Influencing a Buying Decision	Level of important				
	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree
- Structural building is sturdy accordingly to engineering principle.					
- Earthquake warning is available.					
- Assistance system; by land and by air, is available in case of the earthquake.					
- No history of earthquake occurs with project location, and no earth fault.					
- Project location is adjacent to fire station that is ready in case of fire.					
- Emergency plan is available in the event of natural disasters.					

Part VI: Buying Behavior:

1. Reasons for purchase of condominium (*one or higher choices are allowed*)

- Deteriorated former house
- Former residence is far from office.
- Want to possess own house
- Environment is more nice than old residence
- Relocation of office
- Others (speculative, rent, relax purpose)

2. Description of Former Residence

- Single house
- Twin house

เอกสารนี้เป็นเอกสารที่สงวนไว้สำหรับการใช้งานเพื่อการศึกษาเท่านั้น ไม่อนุญาตให้นำไปใช้ประโยชน์ด้านการค้า
ไม่ว่ากรณีใดๆทั้งสิ้น อีกทั้งห้ามมิให้ดัดแปลงเนื้อหา และต้องอ้างอิงถึงเจ้าของเอกสารทุกครั้งที่มีการนำไปใช้

- Town house
- Commercial building
- Others
- No ideas to buy other kinds of residence

3. Reasons not to buy a desired residence

- Too expensive
- Unsuitable to family size
- Desire upland residence
- Undesirable location
- Having own house, just look for reserve
- Others (e.g. it shall facilitate business operation)

4. Buying Method

- N/A
- Cash
- Loan from financial institution

5. Information source supporting a purchase decision

- Self-seeking
- Various medias and ads
- Friends/Relatives
- Salesperson
- Others

6. Person supporting a purchase decision

- Self-determination
- Own decision and family members
- Father/Mother/Relatives
- Other

7. Opinion prior to moving into the condominium

- Pleasant
- Unpleasant
- No idea

8. Opinion after moving into the condominium

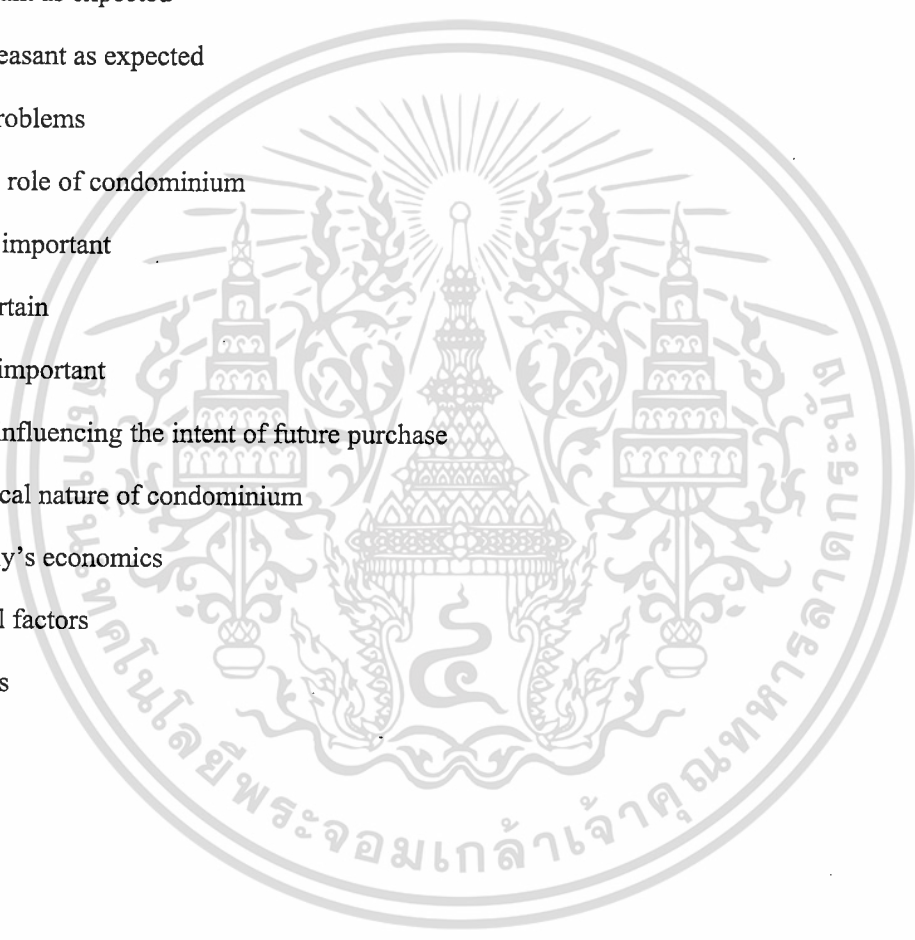
- Pleasant as expected
- Unpleasant as expected
- No problems

9. Futuristic role of condominium

- Very important
- Uncertain
- Less important

10. Factors influencing the intent of future purchase

- Physical nature of condominium
- Family's economics
- Social factors
- Others





เอกสารนี้เป็นเอกสารที่สงวนไว้สำหรับการใช้งานเพื่อการศึกษาเท่านั้น ไม่อนุญาตให้นำไปใช้ประโยชน์ด้านการค้า
ไม่ว่ากรณีใดๆทั้งสิ้น อีกทั้งห้ามมิให้ดัดแปลงเนื้อหา และต้องอ้างอิงถึงเจ้าของเอกสารทุกครั้งที่มีการนำไปใช้

แบบสอบถาม

ส่วนที่ 1: ข้อมูลทั่วไปของผู้ซื้อคอนโดมิเนียม:

โปรดเลือกข้อความที่ตรงกับตัวท่านมากที่สุด โดยการทำเครื่องหมาย x เพียงข้อเดียว

1. เพศ

- ชาย หญิง

2. อายุ

- ไม่เกิน 30 ปี
 31 – 40 ปี
 41 – 50 ปี
 51 ปีขึ้นไป

3. ระดับการศึกษา

- มัธยมศึกษาหรือต่ำกว่า
 อนุปริญญาหรืออาชีวศึกษา
 ปริญญาตรีหรือเทียบเท่า
 สูงกว่าปริญญาตรี
 อื่นๆ (กำลังศึกษาต่อ)

4. อาชีพ

- รับราชการ/รัฐวิสาหกิจ
 ค้าขาย/ธุรกิจส่วนตัว
 ลูกจ้าง/พนักงานบริษัทเอกชน
 อาชีพอิสระอื่นๆ (รับจ้างทั่วไป แม่บ้าน ฯลฯ)

ส่วนที่ 2: รายละเอียดข้อมูลก่อนตัดสินใจซื้อคอนโดมิเนียม:

โปรดเลือกข้อความที่ตรงกับตัวท่านมากที่สุด โดยการทำเครื่องหมาย x เพียงข้อเดียว

5. ลักษณะของที่พัก

1. บ้านของราชการ/บริษัท
 2. บ้านของตนเอง
 3. บ้านเช่า
 4. อาศัยอยู่ร่วมกับบิดามารดา หรือญาติพี่น้อง
 5. อื่นๆ (หอพักในมหาวิทยาลัย เช่าหอพัก)

6. ภูมิลำเนาเดิม

- 1. อยู่ในจังหวัดเชียงใหม่
- 2. กรุงเทพมหานคร
- 3. อื่นๆ (ต่างจังหวัด)

7. ปีที่ซื้อคอนโดมิเนียม

- 1. ไม่ระบุปีที่ซื้อ
- 2. ระหว่าง พ.ศ. 2530 – 2540
- 3. ระหว่าง พ.ศ. 2541 – 2550
- 4. ตั้งแต่ พ.ศ. 2551 เป็นต้นมา

8. สถานที่ตั้งโครงการ

- 1. อำเภอเมือง
- 2. อำเภอแม่ริม
- 3. อำเภอสันทราย
- 4. ไม่ระบุสถานที่

ส่วนที่ 3: ปัจจัยทางด้านเศรษฐกิจและสังคมของครัวเรือนที่มีผลต่อการซื้อคอนโดมิเนียม:

โปรดเลือกข้อความที่ตรงกับตัวท่านมากที่สุด โดยการทำเครื่องหมาย x เพียงข้อเดียว

9. ราคาคอนโดมิเนียม

- 1. ไม่ระบุ
- 2. ต่ำกว่า 500,000 บาท
- 3. 500,000 – 1,000,000 บาท
- 4. 1,000,001 – 1,500,000 บาท
- 5. 1,500,001 บาทขึ้นไป

10. รายได้ครอบครัว

- 1. ไม่ระบุรายได้
- 2. ไม่เกิน 10,000 บาท
- 3. 10,001 – 20,000 บาท
- 4. 20,001 – 30,000 บาท
- 5. 30,001 – 40,000 บาท
- 6. 40,001 บาทขึ้นไป

เอกสารนี้เป็นเอกสารที่สงวนไว้สำหรับการใช้งานเพื่อการศึกษาเท่านั้น ไม่อนุญาตให้นำไปใช้ประโยชน์ด้านการค้า ไม่ว่าจะกรณีใดๆทั้งสิ้น อีกทั้งห้ามมิให้ดัดแปลงเนื้อหา และต้องอ้างอิงถึงเจ้าของเอกสารทุกครั้งที่มีการนำไปใช้

11. รายจ่ายของครอบครัว (เฉลี่ยต่อเดือน)

1. ไม่เกิน 10,000 บาท
2. 10,001 – 20,000 บาท
3. 20,001 – 30,000 บาท
4. 30,001 – 40,000 บาท
5. มากกว่า 40,001 บาท

12. จำนวนสมาชิกในครัวเรือน

1. ไม่ระบุจำนวนสมาชิก
2. 1 – 2 ราย
3. 3 – 4 ราย
4. 5 – 6 ราย
5. มากกว่า 6 ราย

13. จำนวนเงินออม

1. ไม่ระบุเงินออม
2. ไม่เกิน 50,000 บาท
3. 50,001 – 100,000 บาท
4. 100,001 – 200,000 บาท
5. 200,001 – 300,000 บาท
6. 300,001 บาทขึ้นไป

14. สถานภาพ

1. โสด
2. สมรส
3. หย่า
4. หม้าย

ส่วนที่ 4: ปัจจัยที่เกี่ยวข้องกับโครงการคอนโดมิเนียมที่มีผลต่อการตัดสินใจซื้อคอนโดมิเนียม:

โปรดเลือกข้อความที่ตรงกับตัวท่านมากที่สุด โดยการทำเครื่องหมาย X เพียงข้อเดียว

เป็นปัจจัยที่มีอิทธิพลต่อการตัดสินใจมากที่สุด

เป็นปัจจัยที่มีอิทธิพลต่อการตัดสินใจมาก

เป็นปัจจัยที่มีอิทธิพลต่อการตัดสินใจปานกลาง

เอกสารนี้เป็นเอกสารที่สงวนไว้สำหรับการใช้งานเพื่อการศึกษาเท่านั้น ไม่อนุญาตให้นำไปใช้ประโยชน์ด้านการค้า
ไม่ว่ากรณีใดๆทั้งสิ้น อีกทั้งห้ามมิให้ดัดแปลงเนื้อหา และต้องอ้างอิงถึงเจ้าของเอกสารทุกครั้งที่มีการนำไปใช้

เป็นปัจจัยที่มีอิทธิพลต่อการตัดสินใจน้อย
เป็นปัจจัยที่มีอิทธิพลต่อการตัดสินใจน้อยที่สุด

ปัจจัยที่เกี่ยวข้องกับ โครงการคอนโดมิเนียมที่มีผลต่อการตัดสินใจซื้อคอนโดมิเนียม	ระดับความพึงพอใจ				
	มากที่สุด	มาก	ปานกลาง	น้อย	น้อยที่สุด
ปัจจัยด้านการตลาด					
- เงื่อนไขผ่อนชำระต่อเดือนน่าสนใจกว่าโครงการอื่น					
- ประหยัดค่าใช้จ่ายในการเดินทาง					
- อัตราดอกเบี้ยถูกกว่าปกติ					
- โครงการจัดพาสถาบันการเงินให้กู้ยืม					
- โครงการนี้สามารถเบี่ยงจากสวัสดิการจากอาชีพได้					
ปัจจัยทางการด้านสังคม					
- มีความปลอดภัยในชีวิตและทรัพย์สินมากกว่าที่อื่น					
- อยู่ใกล้ปั้ดามารถ หรือญาติพี่น้อง					
- มีญาติ พี่น้อง หรือเพื่อนบ้านมาซื้อที่เดียวกัน					
- ต้องการอยู่ใกล้ที่ทำงานหรือสถานศึกษาของบุตรหลาน					
- มีผู้อยู่อาศัยน้อยไม่พลุกพล่าน					
- มีผู้อยู่อาศัยจำนวนมาก					
- กลุ่มผู้อยู่อาศัยเป็นกลุ่มที่มีคุณภาพดี					
ปัจจัยทางด้านกายภาพและชื่อเสียงของคอนโดมิเนียม					
- วัสดุก่อสร้างดีมีความประณีตในการก่อสร้าง					
- มีสาธารณูปโภคสิ่งอำนวยความสะดวกครบถ้วน					
- รูปแบบของคอนโดมิเนียมห้องพักดี					
- ลักษณะสิ่งแวดล้อมดีน่าอยู่อาศัย					
- ขนาดพื้นที่เหมาะสมสำหรับครอบครัว					
- ชื่อเสียงของเจ้าของโครงการเชื่อถือได้					
- มีความปลอดภัยในชีวิตและทรัพย์สินสูง					
- อยู่ในทำเลที่ตั้งที่ต้องการ					

เอกสารนี้เป็นเอกสารที่สงวนไว้สำหรับการใช้งานเพื่อการศึกษาเท่านั้น ไม่อนุญาตให้นำไปใช้ประโยชน์ด้านการค้าไม่ว่ากรณีใดๆทั้งสิ้น อีกทั้งห้ามมิให้ดัดแปลงเนื้อหา และต้องอ้างอิงถึงเจ้าของเอกสารทุกครั้งที่มีการนำไปใช้

ส่วนที่ 5: ปัจจัยที่เกี่ยวข้องกับแผ่นดินไหวที่มีผลต่อการตัดสินใจซื้อคอนโดมิเนียม:

เป็นปัจจัยที่มีอิทธิพลต่อการตัดสินใจมากที่สุด

เป็นปัจจัยที่มีอิทธิพลต่อการตัดสินใจมาก

เป็นปัจจัยที่มีอิทธิพลต่อการตัดสินใจปานกลาง

เป็นปัจจัยที่มีอิทธิพลต่อการตัดสินใจน้อย

เป็นปัจจัยที่มีอิทธิพลต่อการตัดสินใจน้อยที่สุด

ปัจจัยที่เกี่ยวข้องกับแผ่นดินไหวที่มีผลต่อการตัดสินใจ ซื้อคอนโดมิเนียม	ระดับความพึงพอใจ				
	มากที่สุด	มาก	ปานกลาง	น้อย	น้อยที่สุด
- โครงสร้างอาคารมั่นคงแข็งแรงถูกต้องตามหลักวิศวกรรม					
- มีระบบเตือนภัยแผ่นดินไหว					
- มีระบบให้ความช่วยเหลือเมื่อเกิดภัยพิบัติแผ่นดินไหว ทั้งทางบก และทางอากาศ					
- บริเวณที่ตั้งโครงการไม่เคยมีประวัติการเกิดแผ่นดินไหวและไม่เป็นรอยเลื่อนของแผ่นดิน					
- ที่ตั้งโครงการอยู่ใกล้สถานีดับเพลิง สำนักงานป้องกันภัยสาธารณะที่พร้อมให้ความช่วยเหลือได้ทันที					
- มีการเตรียมแผนฉุกเฉินและป้องกันเมื่อเกิดภัยธรรมชาติ					

ส่วนที่ 6: เหตุผลในการซื้อคอนโดมิเนียม:

(เลือกคำตอบได้มากกว่า 1 ข้อ)

1. เหตุผลในการซื้อคอนโดมิเนียม

- 1. บ้านเดิมทรุดโทรม
- 2. ที่อยู่อาศัยเดิมอยู่ห่างไกลที่ทำงาน
- 3. ต้องการที่อยู่เป็นเจ้าของตนเอง
- 4. สภาพแวดล้อมดีกว่าที่อยู่อาศัยเดิม
- 5. ย้ายสถานที่ทำงาน
- 6. อื่นๆ (ชื่อเต็มๆให้เข้า พักผ่อน)

2. ประเภทที่อยู่ที่ต้องการก่อนการซื้อคอนโดมิเนียม

- 1. บ้านเดี่ยว
- 2. บ้านแฝด
- 3. ทาวน์เฮ้าส์
- 4. ตึกแถว (อาคารพาณิชย์)
- 5. อื่นๆ
- 6. ไม่มีคิดที่จะซื้อที่อยู่อาศัยประเภทอื่น

3. สาเหตุที่ไม่ได้ซื้อที่อยู่อาศัยที่ต้องการ

- 1. ราคาสูงเกินไป
- 2. ขนาดไม่เหมาะสมกับขนาดของครอบครัว
- 3. ต้องการที่อยู่อาศัยที่สูง
- 4. หาทำเลที่ถูกต้องไม่ได้
- 5. มีบ้านประเภทอื่นอยู่แล้วซื้อเป็นบ้านสำรอง
- 6. อื่น ๆ (ต้องการทำธุรกิจได้ด้วย ฯลฯ)

4. วิธีการซื้อคอนโดมิเนียม

- 1. ไม่ระบุ
- 2. ซื้อด้วยเงินสด
- 3. กู้สถาบันการเงิน

5. แหล่งข้อมูลในการเลือกซื้อคอนโดมิเนียม

- 1. เสาะหาด้วยตัวเอง
- 2. จากสื่อโฆษณาต่างๆ
- 3. เพื่อน ญาติ พี่น้องแนะนำ
- 4. พนักงานขาย
- 5. อื่น ๆ

6. บุคคลที่ช่วยตัดสินใจซื้อคอนโดมิเนียม

- 1. ตัดสินใจเอง
- 2. ตนเองและสมาชิกในครอบครัว
- 3. บิดา มารดา ญาติ เป็นผู้ร่วมตัดสินใจ
- 4. อื่น ๆ

7. ความเห็นก่อนเข้าพักคอนโดมิเนียม

- 1. น่าอยู่
- 2. ไม่น่าอยู่
- 3. เฉยๆ

8. ความเห็นหลังการเข้าพักคอนโดมิเนียม

- 1. น่าอยู่กว่าที่คิด
- 2. ไม่น่าอยู่กว่าที่คิด
- 3. ไม่มีปัญหา

9. บทบาทของคอนโดมิเนียมในอนาคต

- 1. มีความสำคัญมาก
- 2. ไม่แน่ใจ
- 3. มีความสำคัญน้อย

10. ปัจจัยที่มีผลต่อการตัดสินใจซื้อในอนาคต

- 1. ด้านกายภาพของคอนโดมิเนียม
- 2. ด้านเศรษฐกิจของครอบครัว
- 3. ด้านสังคม
- 4. อื่นๆ



ข้อมูลประวัติคณะผู้วิจัย

ประวัติส่วนตัว

ชื่อ-สกุล...นางสาวมณฑาทูพา สุวัฒน์คิลก.....

เพศ ชาย หญิง วันเดือนปีเกิด 7 พ.ย. 2506 อายุ 47 ปี
 สถานภาพ โสด สมรส

ตำแหน่งปัจจุบัน.....อาจารย์.....

ประวัติการศึกษา

ชื่อย่อปริญญา	สาขา	สถาบันที่จบ	ปีที่จบ
ศศบ.	รัฐศาสตร์	มหาวิทยาลัยรามคำแหง	2532
MBA.	International Business	University of New Haven, U.S.A.	2539
Ph.D.	Business Administration (English Program)	Ramkhamhaeng University	2553

สาขาวิจัยที่มีความชำนาญพิเศษ (แตกต่างจากวุฒิการศึกษา)... การจัดการธุรกิจ การจัดการทรัพยากรมนุษย์..
 การพัฒนาองค์การ และการตลาด

รางวัลด้านวิชาการ/ด้านวิจัย/งานสร้างสรรค์ (ด้านศิลปะ หรืออื่น ๆ) ที่ได้รับ

ปี พ.ศ.	ชื่อรางวัล	สถาบันที่ให้

ทุนการศึกษาและทุนวิจัยที่เคยได้รับ

ปี พ.ศ.	ทุนการศึกษาและทุนวิจัย	สถาบันที่ให้
2555	ทุนวิจัย	วิทยาลัยการบริหารและจัดการ สถาบันเทคโนโลยีพระจอมเกล้าเจ้าคุณทหารลาดกระบัง

เอกสารนี้เป็นเอกสารที่สงวนไว้สำหรับการใช้งานเพื่อการศึกษาเท่านั้น ไม่อนุญาตให้นำไปใช้ประโยชน์ด้านการค้า
 ไม่ว่ากรณีใดๆทั้งสิ้น อีกทั้งห้ามมิให้ดัดแปลงเนื้อหา และต้องอ้างอิงถึงเจ้าของเอกสารทุกครั้งที่มีการนำไปใช้

ผลงานวิจัย/งานสร้างสรรค์/

ผลงานวิจัย/งานสร้างสรรค์ที่ตีพิมพ์เผยแพร่ (ระดับชาติและนานาชาติ).

การเสนอผลงานวิชาการ

ผลงานสิทธิบัตร/สิ่งประดิษฐ์/งานสร้างสรรค์ (ศิลปะ หรือ อื่น ๆ)

อื่น ๆ



เอกสารนี้เป็นเอกสารที่สงวนไว้สำหรับการใช้งานเพื่อการศึกษาเท่านั้น ไม่อนุญาตให้นำไปใช้ประโยชน์ด้านการค้า
ไม่ว่ากรณีใดๆทั้งสิ้น อีกทั้งห้ามมิให้ดัดแปลงเนื้อหา และต้องอ้างอิงถึงเจ้าของเอกสารทุกครั้งที่มีการนำไปใช้