

# SECOND CAR PURCHASING DECISION OF THE FIRST-TIME CAR BUYER TAX REBATE PROGRAM'S

## **PARTICIPANTS IN BANGKOK**

BY

### MR. KANGWAN KANGWANWATANA

# AN INDEPENDENT STUDY SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE PROGRAM IN MARKETING (INTERNATIONAL PROGRAM) FACULTY OF COMMERCE AND ACCOUNTANCY THAMMASAT UNIVERSITY ACADEMIC YEAR 2016 COPYRIGHT OF THAMMASAT UNIVERSITY

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### THAMMASAT UNIVERSITY FACULTY OF COMMERCE AND ACCOUNTANCY

#### INDEPENDENT STUDY

BY

#### MR. KANGWAN KANGWANWATANA

#### ENTITLED

### SECOND CAR PURCHASING DECISION OF THE FIRST-TIME CAR BUYER TAX REBATE PROGRAM'S PARTICIPANTS IN BANGKOK

was approved as partial fulfillment of the requirements for the degree of Master of Science Program in Marketing (International Program)

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### ABSTRACT

Sixty-five out of seventy-seven provinces in Thailand were hit by severe flooding in July 2011 which caused drastic damages to the national economy. On 16 September 2011, the Thai government, with the aim of improving the automotive industry and increasing local purchases, introduced the 'First-time Car Buyer Tax Rebate'. The outcome of this campaign was that it helped to boost annual domestic sales that year by 80%. Two years after the campaign ended, it was reported that there was a huge sales decline in the automotive industry. This was due to the instability of the global economic downfall that held back consumers' spending.

This independent study is a contemporary topic in applied marketing under the area of international business focusing mainly in Thailand with the study title of, "Second car purchasing decision of the First-time Car Buyer Tax Rebate Program's participants in Bangkok". The objectives are to explore and comprehend consumer behaviour upon purchasing their second car after their first car purchase through the 'First-time Car Buyer Tax Rebate' scheme. It also aims to identify the appropriate marketing mix for both the automotive companies and sales representatives.

Secondary research was conducted through both online and offline sources. Offline sources were journals and research papers. Qualitative analysis was done by using two focus groups and ten in-depth interviews to obtain a better understanding of the scheme and the respondents' purchasing criteria on their first and second car. Quantitative analysis was conducted with 242 respondents through both online and offline questionnaires. The results of the questionnaires were analysed and summarized with statistical procedures using SPSS.

The findings from this study would help to determine consumer's perception, needs and purchasing behaviours for purchasing their second car. In addition, it will also determine the marketing mix that will help boost sales again. This study would be a very beneficial guideline for automotive companies, sellers and suppliers, both in Thailand and other parts of the world.



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Mr. Kangwan Kangwanwatana

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# CHAPTER 1 INTRODUCTION

#### **1.1 Introduction**

For more than a decade, Thailand has been referred to as 'Detroit of Asia', being the hub of car manufacturing in Asia. In 2015, Thailand was ranked 12th in the world and ranked 1st in ASEAN for automotive production. The automotive industry also contributes 12.5% of the nation's GDP (Thailand Board of Investment, 2015).

In July 2011, an unexpected heavy monsoon in Thailand caused extensive flooding that led to the immersion of sixty-five out of seventy-seven provinces. More than half of the country experienced damage; villages, farms and factories were underwater. This affected not only Thailand's economy but also the world's economy as Thailand accounts for more than 25% of the world production of rice, rubber, automotive parts and computer hard drives. Some of these factories and plants were submerged and eventually shut down (Sirisithichote, 2013).

On 16 September 2011, the government of Thailand decided to launch the 'First-time Car Buyer Tax Rebate Program' so that the automotive industry in Thailand could recover quickly from the severe flood disaster and also help people who were affected by the flood. To be eligible, applicants needed to be 21 years old and above and must not have owned any car before. In addition, the car purchased must not have an engine with size exceeding 1500 cc. which is an ecological car or 'eco-car' and its ownership could not be transferred for five years. The application period of this program was from 16 September 2011 until 31 December 2012 (Thailand Board of Investment, 2011).

With this campaign, the Thai domestic vehicle market was boosted by over 80% to a record of 1.435 million units sold in 2012. However, total domestic sales started to decline 2 years after the campaign ended, and left the industry with only 0.88 million units sold in 2015 (Pugliese, 2015). The purpose of this study is to determine consumers' perceptions, needs and purchasing behaviours for purchasing their second car. It also aims to provide recommendations on the trends and blind opportunities for

the automotive companies, sellers and suppliers, both in Thailand and other parts of the world.

Next chapter will continue with the statement of the problem, followed by the objectives along with the relevant literature concerning the first-time car buyer tax rebate program. This is followed by a chapter describing the research methodology, a chapter on the results and followed by a chapter on conclusion and recommendations.

#### **1.2 Statement of the Problem**

The objective of this research is to provide Car Companies with a better understanding of consumers' purchasing decisions, wants and needs for their second car purchase. With these recommendations, the car manufacturing companies can adapt and apply these consumers' requirements into their product development and marketing strategies.

#### **1.3 Research Objectives**

- 1. To develop a consumer profile of those who participated in the first time car buyer scheme and purchase "eco-car" and would re-enter the vehicle market again in the next two years for their second car.
  - 1.1 According to their demographics: measured by age, gender, education, occupation and etc.
  - 1.2 According to their lifestyle: daily activities and etc.
  - 1.3 According to their geographic covering: Bangkok
- 2. To identify key factors that these target consumers use in their purchasing decision for their first cars.
  - 2.1 To determine the overview and get a better understanding about the 'First-time Car Buyer Tax Rebate Program'
  - 2.2 To understand consumer behaviour when purchasing an "eco-car" in each decision making process (problem recognition, information search, alternatives, evaluation, pre-purchase and post-purchase of "eco-car")
  - 2.3 To understand consumer's perception and expectation towards "ecocar"

- 3. To identify key drivers that these target consumers use in their purchasing decision for their second cars.
  - 3.1 To explore consumer behaviour when purchasing second car in each decision making process
  - 3.2 To identify the appropriate marketing mix for automotive manufacturers, and sales representatives
    - 3.2.1 Product: type and feature of the car
    - 3.2.2 Price Range
    - 3.2.3 Promotion
    - 3.2.4 Place: distribution channel



# CHAPTER 2 REVIEW OF LITERATURE

For more than a decade, Thailand has been referred to as 'Detroit of Asia', being the hub of car manufacturing in Asia. In 2015, Thailand was ranked 12<sup>th</sup> in the world and ranked 1<sup>st</sup> in ASEAN for automotive production (Patiwikraiwong, 2004). The automotive industry in Thailand also contributed 12.5% of the nation GDP (Thailand Board of Investment, 2015). Many car manufacturing plants in Thailand were flooded in 2011 and some were even forced to shut down. This led to a huge impact on economy of the country. The world's economy was also impacted as Thailand contributes 25% of the world's production of rice, rubber and computer hard drives (Quadir, 2012).

The government of Thailand then decided to launch the 'First-time Car Buyer Tax Rebate Program' so that the automotive industry in Thailand could recover quickly from the flood disaster. This scheme started from 16 September 2011 until 31 December 2012 and tax refunds would be returned after 1 October 2013 (Sirisithichote, 2013). 'First-time Car Buyer Tax Rebate Program' was a scheme that helped many Thais own their first car. This scheme was able to attract purchasers from two main categories, those that already planned to purchase the car before the scheme and those that wanted to purchase the car in the future but brought forward their purchase due to the scheme (Siriprapanukul, 2014). The applicants of this scheme needed to be at least 21 years old and must not have transferred the ownership of the car for five years after purchase (Thailand Board of Investment, 2011).

As a result of this campaign, the Thai domestic vehicle market jumped by over 80% to a record of 1.435 million units sold in 2012. However, it was also reported that there have been drastic fall in Thailand's automotive market since 2014 or two year after the 'First-time Car Buyer Tax Rebate Program' was initiated. This was due to the instability of the global economy which held back consumers' spending (Temphairojana, 2015). In the next coming years, after the five-year transfer restriction period is over, the vehicle market is expected to lift up again as the participants can sell their cars and re-enter the vehicle market for their second car purchase (Pugliese, 2015).

Age, income, occupation, fuel consumption, gasoline type, type of car and car energy's saving are factors which stimulate consumers' purchasing decision. The foremost factor influencing consumers' purchasing decision of eco cars is the fuel consumption. The lower the fuel consumption, the higher the chance of the car being purchased (Sanitthangkul, 2012).

In summary, (1) Thailand which is the hub of Asia automotive industry was hit by severe flood in 2011 resulting serious damage to the country economy. (2) In an attempt to recover the country's economy, the Thai government then launched the 'First-time Car Buyer Tax Rebate Program'. (3) The 'First-time Car Buyer Tax Rebate Program' was able to boost the automotive sales by 80% but sales eventually drop drastically two years after the campaign has ended. (4) There are several factors influencing purchase decision but the foremost factor for choosing eco car is the lower fuel consumption rate. The purpose of this study is to help to determine the insight about the consumer perception, needs and purchasing behaviours for purchasing their second car. Also, this study will provide guideline regarding the marketing mix that will help to boost the sales for automotive industry again.

# CHAPTER 3 RESEARCH METHODOLOGY

#### 3.1 Research Design

The research methods used were divided into two main phases using Exploratory Research methods and Descriptive Research methods. Figure 1 below, shows the outline of the research framework design.

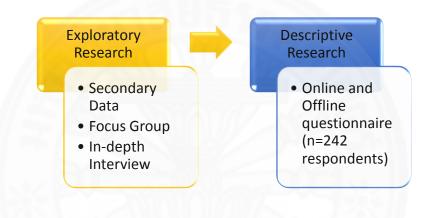


Figure 1: Research Framework

#### **3.2 Exploratory Research Methods**

In this phase, exploratory research was conducted to determine consumer purchasing behaviours, consumers' decision making, expectations and perceptions toward the 'eco-car'. The results of this particular research method were used to provide guidelines for the descriptive research design.

#### **3.2.1 Secondary Data**

Reliable data were gathered from both online and offline sources. Online sources were 'Thailand Development Research Institute' and 'Thailand Board of Investment'. Offline sources were obtained mainly from research papers. Data obtained gave a better understanding of the 'First-time Car Buyer Tax Rebate Program' including all the criteria for all the eligible applicants, duration of the whole scheme, etc. The benefits and effects of the scheme to the automotive industry in Thailand were also found.

#### 3.2.2 Focus Group and In-depth Interviews

Qualitative research was conducted using both focus groups and in-depth interviews. The selected respondents were those who were applicants of the 'First-time Car Buyer Tax Rebate Program' and live in Bangkok. These were conducted to get a better understanding of the participant profiles, their decision making process, perceptions and preference towards their first car. The effectiveness of the 'First-time Car Buyer Tax Rebate' scheme was also determined in this section of the study. The interview questions for focus group and in-depth interview can be found in the Appendix A.

#### **3.3 Descriptive Research Design**

This part of the research provided insights of the current consumers' perception, consumer decision making process and their behaviour towards the purchasing of the respondents' second car. The questionnaire was distributed through both online and offline channels. The expected duration of completing each questionnaire is about 10 minutes. The questionnaire was developed and pre-tested with 10 respondents to prevent errors, complexity and incomplete questions.

#### **3.4 Identification of Key Research Variables**

The key research variable to meet the objectives are as follows:

- a. Consumer profiles such as age, gender, education, occupation, income and etc.
- b. Key factors that are used in decision making for second car purchase such as product, price, promotion, place and etc.

#### **3.5 Sampling Procedure**

Convenience sampling was used for both the qualitative and the quantitative parts of this particular research.

#### 3.5.1 Respondent Screening Criteria

- Male/Female aged 25-40 years old. The minimum age that was eligible for the 'First-time Car Buyer Tax Rebate Program' in 2011 was 21 years old, so the minimum recruitment age are at least 25 years old and above.
- b. Residents of Bangkok only.
- c. All participants must have joined the 'First-time Car Buyer Tax Rebate Program'
- d. Socio-Economic Class (SEC) of Bangkok, Thailand, as defined by Hakuhodo Institute of Life and Living ASEAN: HILL ASEAN. (Hakuhodo Institute of Life and Living ASEAN (HILL ASEAN) unveils new perspectives on the ASEAN middle class at ASEAN Sei-katsu-sha Forum 2015, 2015) Selecting only class A, B and C as they are 72% of the total Bangkok population and they are the group of people who are likely to be able to afford to purchase new car.

Class A: Monthly household income of more than 85,000 baht

Class B: Monthly household income of 50,001 – 85,000 baht

Class C: Monthly household income of 18,001 - 50,000 baht

#### 3.5.2 Survey Acquisition and Recruitment Plan

- a. For the focus groups, respondents were recruited from two different sources. The first source was at the university and the second source was at office buildings. The participants in this group must have participated the 'First-time Car Buyer Tax Rebate Program'. Each respondent received free food and drink as their incentive.
- b. For the in-depth interviews, respondents were recruited through personal connections, and from other communities in office buildings, apartment buildings and universities within Bangkok. Each respondent received free food and drink as their incentive.
- c. For the survey, respondents were recruited mainly through online channels. The questionnaire was created using "Google Forms" web page and distributed by the researcher through personal contacts in the university,

family and work place. Another source of distribution was at car showrooms to find the right target respondents.

#### 3.6 Data Collection

#### 3.6.1 Qualitative: Focus Groups

For the focus groups, the respondents were recruited through personal connections and there were two focus groups. Each group consists of 6 respondents and had purchased their first car through the 'First-time Car Buyer Tax Rebate Program' and live in Bangkok. The duration of each focus group discussion took about one hours to complete.

#### 3.6.2 Qualitative: In-depth Interviews

For the in-depth interviews, the respondents were recruited through personal connections and there were 10 respondents. These respondents purchased their first car through the 'First-time Car Buyer Tax Rebate Program' and live in Bangkok; aged between 25 to 40 years old. The one to one in-depth interviews took approximately thirty minute per person. These were conducted through both face-to-face interviews and phone interviews.

#### 3.6.3 Quantitative: Survey

The questionnaires were distributed using convenience sampling through both offline and online channels such as Facebook and through Line (Mobile chat messaging application). There were 242 respondents who took part in this questionnaire. The questionnaire was divided into four main sections:

- Part 1: Screening questions
- Part 2: Consumer purchasing behaviour toward their first car purchase
- Part 3: Consumer purchasing behaviour toward their second car purchase
- Part 4: Lifestyle and demographic

The questionnaire can be found in Appendix B.

#### 3.7 Data Analysis

Qualitative research data from both the focus groups and in-depth interviews were recorded and analysed. Whereas, the quantitative results from the online and offline questionnaires were self-managed and analysed. The Statistical Package for the Social Sciences program (SPSS) was used for processing all the quantitative data. The questionnaire results were cleaned and coded before doing the SPSS analysis. The results from SPSS were collected in the form of tables and graphs for the ease of the reader's interpretation.



# CHAPTER 4 RESULTS AND DISCUSSION

#### 4.1 Results from Exploratory Research

#### 4.1.1 Secondary Data

The 'First-time Car Buyer Tax Rebate Program' started on 16 September 2011 and lasted until 31 December 2012 and tax refunds were returned after 1 October 2013 to the buyer (Sirisithichote, 2013). The 'First-time Car Buyer Tax Rebate Program' was a scheme that helped many Thais own their first car. This scheme was able to attract purchasers from two main categories, those that already planned to purchase the car before the scheme and those that wanted to purchase the car in the future but brought forward their purchase due to the scheme (Siriprapanukul, 2014). The applicants of this scheme needed to be at least 21 years old and could not have transferred the ownership of the car for five years after purchase (Thailand Board of Investment, 2011).

As a result of this campaign, the Thai domestic vehicle market jumped by over 80% to a record of 1.435m units sold in 2012. However, it was also reported that there has been drastic fall in Thailand's automotive market since 2014 or two years after the 'First-time Car Buyer Tax Rebate Program' was initiated. This was due to the instability of the global economy which held back consumers' spending (Temphairojana, 2015).

#### 4.1.2 Focus Groups and In-depth Interviews

Qualitative research was conducted using both focus groups and in-depth interviews, in order to develop the questionnaire in the quantitative part of this research. Two focus groups with 6 respondents each and 10 in-depth interviews were conducted and the finding were as follows:

The respondents were mixture of males and females aged between 25 years old and 40 years old. 75% of the respondents agreed that the campaign, did fast forward their first car purchase. The main reason that they bought an ecological car or eco-car was that it was one of few choices in the tax rebate program. Every respondent classified an eco-car as small, fuel efficient vehicle and that should be used mainly in the city. Male respondents were more interested in cars and knew more details than women. When considering a car, women would look at the design of the interior and exterior of the car as the main factor for their purchasing criteria, followed by the fuel efficiency of the car. Male respondents would look at the technical details along with the design of the car when deciding which car to purchase.

Approximately 90% of the users would like to repurchase their second right after the scheme ends. About 70% would like to keep their old car, and own two cars instead of one as their first car is still in good condition and has good accessibility in the city.

They would normally take 3-6 months for their second car decision period. The participants of the 'First-time Car Buyer Tax Rebate Program' were the main influencers who made the decision on which car to buy. However, they received financial support from their parents and bought their car through car financing. Respondents also think that buying a car is a huge investment. Their car's purchasing criteria were ranked from the design, fuel consumption, brand and the car service centre, correspondingly.

After nearly 5 years of driving eco-car users, these users want to switch to a larger cars and also cars with more safety compared to an eco-car. However, the car needs to be fuel efficient. Respondents also wished to get a better quality car compared to an eco-car as they believed that they would have more spending power compared to the time that they purchased their first car. Every respondent also mentioned that car presenter did not have impact on their decision making of their first car.

#### 4.2 Results from Descriptive Research

#### **4.2.1 Summary of the Respondent Profiles**

Data from the questionnaires were collected and analysed by utilizing the Statistic Package for Social Science (SPSS). Table 1 below, shows the summary of the respondents' demographics. Out of 242 respondents, there were 51.2% male and 48.8% female respondents who took part in this study. 71% of these respondents were in the age between 25 to 35 years old and over 95% of the respondents had bachelor degree or higher as their highest level of education. 99.2% of the respondents were working,

with majority of them working as employees, followed by business owners, government officials and freelance.

Responde	nts' Demographic	Ν	%
Gender	Male	124	51.2%
Genuer	Female	118	48.8%
	Ages between 25 to 30 years old	88	36.0%
Age	Ages between 31 to 35 years old	84	35.0%
	Ages between 36 to 40 years old	70	29.0%
	Lower than Bachelor degree	10	4.1%
Education Level	Bachelor degree	200	82.6%
(AO/AO)	Master degree	32	13.2%
	Employee	158	65.3%
Occupation	Business owner	48	19.8%
	Government Officials	24	9.9%
- Con-	Freelance	10	4.1%
	Not working	2	0.8%

Table 1: Summary of Respondents Demographic (n=242)

In terms of a second car purchase, respondents were classified into two main groups for easier analysis of the study

- 1) *Non-repeat eco-car users*: respondents who would purchase some other type of car that is not an ecological car for their second car.
- Repeat eco-car users: respondents who would continue to purchase an ecological car as their second car.

Table 2 below, shows the number of respondents in each group. There were 146 *Non-repeat eco-car users* (60.3% of the total respondents), and there were 96 *Repeat eco-car users* (39.7% of the total respondents).

Table 3 shows that for the *Non*-re*peat eco-car users*, nearly 58.9% of male respondents would purchase another type of car for their second car and majority of these respondents are between 31 years old to 35 years old. 56.2% of the respondents were married and 94.6% of them had family size that consist of 3-6 members.

Table 3 shows that for the *Repeat eco-car users*, nearly 60.4% of female respondents would continue to purchase an eco-car and the majority of these respondent are between 25 years old to 30 years old. 52.1% of the respondents were single people and 81.3% of them have a family size that consist of 1-4 members.

	Ν	%
Non-repeat eco-car users	146	60.30%
Repeat eco-car users	96	39.70%
Table 2: Number of Users	s in Ea	ch Group

1	1000000	Non-repeat eco	-car users	Repeat eco-car users	
		Ν	%	Ν	%
Condon	Male	86	58.90%	38	39.60%
Gender	Female	60	41.10%	58	60.40%
	Age between 25 to 30 years old	48	32.90%	40	41.70%
Age	Age between 31 to 35 years old	52	35.60%	32	33.30%
	Age between 36 to 40 years old	46	31.50%	24	25.00%
Status	Single	64	43.80%	50	52.10%
Status	Married	82	56.20%	46	47.90%
	1-2 member(s)	8	5.50%	22	22.90%
Household size	3-4 members	96	65.80%	56	58.30%
	5-6 members	42	28.80%	18	18.80%

Table 3: Respondents' Demographic Corresponding to Each Group

#### 4.2.2 Findings on the Respondents' Purchasing Behaviours

Levine's test and Independent Samples T-test were the analysis used to find whether these two group of respondents had any significant difference towards the external factors used in the decision making of the second car purchase. There were altogether three elements that were significantly different. Social Status was the first element that had a significant difference between these groups, *Repeat eco- car users* (Mean *Repeat eco- car user* =3.58) and *Non-repeat eco-car users* (Mean *Non-repeat eco- car users* = 4.27) (t=7.486, p<0.000). The second element was the Job Position, *Repeat eco- car users users* (Mean *Repeat eco- car user* =3.9) and *Non-repeat eco-car users* (Mean *Non-repeat eco-car users* (Mean *Repeat eco- car user* =3.9) users = 4.51) (t=5.454, p<0.000). The last element was Friends, *Repeat eco- car users* (Mean *Repeat eco- car user =*3.88) and *Non-repeat eco-car users* (Mean *Non-repeat eco-car user =* 4.29) (t=3.918, p<0.000). (See Appendix C: External factors on the second car decision making). The number of users, mean and standard deviation of each group toward each significant factor is shown in Table 4. With this finding, it could be implied that *Non-repeat eco-car users* were more concerned about their 'Social Status', 'Job Position' and 'Friends' when purchasing their second cars.

	A FILE	Ν	Mean	Std. Deviation	Std. Error Mean
Social Status	Repeat eco-car users	96	3.58	0.735	0.075
	Non-repeat eco-car users	146	4.27	0.649	0.054
Job Position	Repeat eco-car users	96	3.9	0.946	0.097
	Non-repeat eco-car users	146	4.51	0.687	0.057
Friends	Repeat eco-car users	96	3.88	0.886	0.09
	Non-repeat eco-car users	146	4.29	0.653	0.054

Table 4: Differences in the External Factors between the Groups

The key finding for the main decision maker is shown in Figure 2. It can be seen that the main decision maker for the second car would be the respondents themselves, followed by their parents.

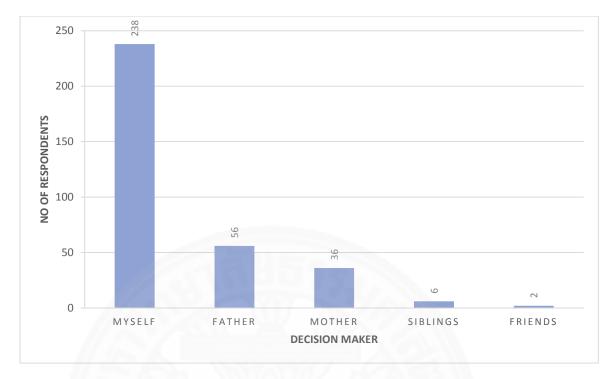


Figure 2: Decision Maker

The relationship between the decision periods between these two groups was shown to have no significant difference as the chi-square is 9.285 and p-value is more than 0.05. (See Appendix D: Results of Chi-square test on the decision period) From Figure 3, it can be seen that 2 - 4 months was the duration that majority of these respondents would use to make decision on purchasing their second car.

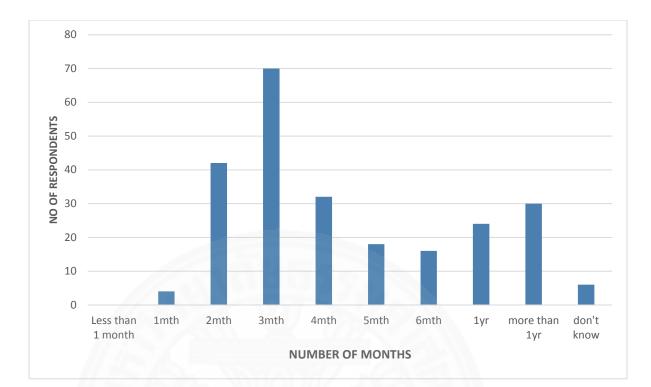


Figure 3: Decision Period and Number of months

# 4.2.3 Findings on the Marketing Mix for the Second Car <u>For product:</u>

An Independent Samples T-test was used to find the difference between each product factor that will be used in as part of the decision process between these groups. There was a significance difference between the product factors between *Repeat eco-car user* (Mean *Repeat eco- car user* =4.69) and *Non-repeat eco-car users* (Mean *Non-repeat eco-car users* = 4.49) (t=2.768, p<0.006) with respect to the product factor toward performance. Resell price was another factors that has significance difference for these groups, *Repeat eco- car users* (Mean *Repeat eco- car users* (Mean *Repeat eco- car users* =4.54) and *Non-repeat eco-car users* (Mean *Non-repeat eco- car users* (Mean *Repeat eco- car users* =4.36) (t=2.138, p<0.034). (See Appendix E: Product factors on the second car decision making) The findings showed that *Repeat eco-car users users* were more concerned about the car performance and resell price of their second car than the non-repeat eco-car users. Table 5 shows the details of the factors that have a significance difference between the groups with respect to the product factors.

		Ν	Mean	Std. Deviation	Std. Error Mean
	Repeat eco-car users	96	4.69	0.466	0.048
Performance	Non-repeat eco-car users	146	4.49	0.624	0.052
	Repeat eco-car users	96	4.54	0.579	0.059
Resell Price	Non-repeat eco-car users	146	4.36	0.768	0.064

Table 5: Differences in the Product Factors between the Groups

#### For price:

Looking at the finding for the type of payment that the respondents preferred, it was found that 97% of the total respondent paid for their first car through financing and the same number of respondents would continue to purchase their second car through financing as well, shown in Table 6. Also, 94.2% would also be paying for their second car by themselves, shown in Table 7.

	Ν	%
Pay in full by cash	8	3%
Pay through car financing	234	97%

Table 6: Respondents Preferred type of payment

45AT 11	Ν	%
Respondent	228	94.20%
Respondent's parents	6	2.50%
Both	8	3.30%

Table 7: Second Car Payer(s)

Both *Non-repeat eco-car users* and *Repeat eco-car users* preferred low down payment for their car. On the other hand, 60.3% of the *Non-repeat eco-car users* preferred a longer instalment period of 6 years or more whereas 60.4% of the *Repeat eco-car users* preferred only 5 years or lower, shown in Table 8 and Table 9. This relationship was shown to be statistically significant as the chi-square is 21.6 and pvalue is less than 0.05. (See Appendix F: Results of Chi-square test on the down payment period)

		Non-repeat e users N	eco-car %	Repeat e users N	co-car %
Preferred Percentage	15%	34	23.30%	12	12.50%
of the down payment?	20%	76	52.10%	42	43.80%
	25%	18	12.30%	16	16.70%
	30%	8	5.50%	18	18.80%
	35%	0	0.00%	0	0.00%
	40%	4	2.70%	0	0.00%
	Don't Know	2	1.40%	4	4.20%

Table 8: Preferred Down Payment Percentage

16-34-20		Non-repeat		Repeat	
		eco-ca	r users	eco-car users	
		Ν	%	Ν	%
How long do you	5 years and below	54	37.00%	58	60.40%
prefer your instalment to be?	6 years or more	88	60.30%	34	35.40%
	Don't Know	4	2.70%	4	4.20%

Table 9: Preferred Duration of Instalment

The relationship between the price ranges that the respondents were willing to pay for their second car between these two groups was shown to have a significant difference as the chi-square is 50.18 and p-value is less than 0.05. (See Appendix G: Results of Chi-square test on the price range) From Table 10, it can be seen that majority of the *Non-repeat eco-car users* were willing to pay between 800,001-1,100,000 Baht whereas majority of the *Repeat eco-car users* were willing to pay at a lower range of 450,000-800,000 Baht for their second car.

		Non-repeat eco- car users		Repeat eco-car users	
		N	%	N	%
Price for second car?	450,000-800,000 Baht	30	21%	56	58%
	800,001-1,100,000 Baht	94	64%	38	40%
	1,100,000-1,400,000 Baht	22	15%	2	2%

Table 10: Price Range for Second Car

#### For promotion:

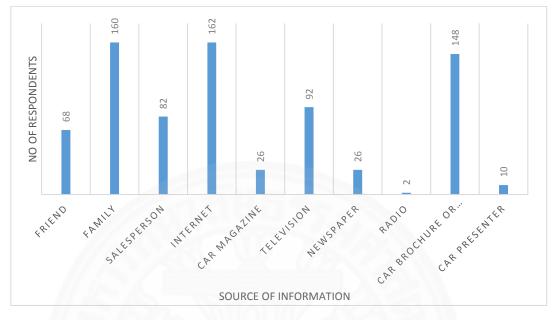
Respondents were asked to rate the type of promotions that they were interested in for their second car. An Independent Samples T-test was used to compare the mean between the groups with respect to the promotion and it was found that there was no significance difference between the groups. (Shown in Appendix H: Promotion factors on the second car decision making).

Therefore, the findings were ranked in the Table 11 to find the type of promotion factors that respondents preferred. From the research, it could be interpreted that the top two promotions that have influence on the respondents decisions based on the mean values were Full Coverage Insurance (Mean Full Coverage Insurance = 4.74) and Low Interest Rate (Mean Low Interest Rate = 4.66)

Sec.		Mean	Count	Standard Deviation
1	Full Coverage Insurance	4.74	242	.495
2	Low interest rate	4.66	242	.651
3	Provide Price Discount	4.64	242	.574
4	Aftersales warranty	4.60	242	.569
5	Clear information from salesperson	4.57	242	.559
6	Low down payment	4.51	242	.826
7	Provide free Gift	4.39	242	.788

Table 11: Promotional Factors

Figure 4 showed that internet was the top selected choice for the second car information search, followed by the family, car brochures and the television. Table 12



also showed that 73.6% of the respondents believed that they would get a better offer from Motor show events.

Figure 4: Source of Information

		Ν	%
Do you think you can get better	Yes	178	73.6%
offer at motor show?	No	64	26.4%

Table 12: Better Offers at Motor Show Event

#### For place:

There were two significance differences between the groups for place factors: the number of showrooms and the service received from the showroom. Firstly, there was a significant difference between *Repeat eco-car users* (Mean <sub>Repeat eco-car users</sub> =4.1) and *Non-repeat eco-car users* (Mean <sub>Non-repeat eco-car users</sub> = 4.4) (t=2.889, p<0.004) with respect to the 'number of showroom' factor. Secondly, there was also a significant difference between *Repeat eco-car users* (Mean <sub>Repeat eco-car users</sub> =4.73) and *Non-repeat eco-car users* (Mean <sub>Repeat eco-car users</sub> =4.73) and *Non-repeat eco-car users* (Mean <sub>Non-repeat eco-car users</sub> =4.73) and *Non-repeat eco-car users* (Mean <sub>Repeat eco-car users</sub> =4.73) and *Non-repeat eco-car users* (Mean <sub>Repeat eco-car users</sub> =4.73) and *Non-repeat eco-car users* (Mean <sub>Repeat eco-car users</sub> =4.53) (t=2.53, p<0.012) with respect to the 'service received from the showroom' factor. (Shown in Appendix I: Place factors on the second car decision making) Table 13 showed the details of the factor that were significance difference between the groups with respect to the place factors.

		Ν	Mean	Std. Deviation	Std. Error Mean
	Repeat eco-car users	96	4.10	.747	.076
Number of showroom	Non-repeat eco-car users	146	4.40	.809	.067
Service received from	Repeat eco-car users	96	4.73	.492	.050
showroom	Non-repeat eco-car users	146	4.53	.706	.058

Table 13: Differences in the Showroom Factors between the Groups

It was also shown that there was statistically significant difference in the location of the showroom between the groups as the chi-square value was 18.04 and p-value is less than 0.05. (See Appendix J: Results of Chi-square test on the location of the showroom). *Repeat eco-car users* prefer to buy their second car from the showroom that provides the best offers, followed by showroom that is close to their home. *Non-repeat eco-car users*, however, would purchase their car from a showroom that is close to their home rather than a showroom that provides a better offer. Table 14 showed the details of the preferred showroom location between the groups.

1300		Non-repeat eco-car users		Repeat eco-ca users	
	1 MANNER	Ν	%	Ν	%
Where would you purchase your car?	showroom close to home	76	52.1%	34	35.4%
	showroom close to workplace	0	0.0%	4	4.2%
	showroom recommend from family and friend	4	2.7%	12	12.5%
	showroom with best offer	66	45.2%	46	47.9%

Table 14: Preferred Location of the Showrooms

# CHAPTER 5 CONCLUSION AND RECOMMENDATIONS

#### 5.1 Conclusion

#### **5.1.1 Total Respondent Profiles**

From the total of 242 respondents, there were 124 male respondents (51.2%) and 118 female respondents (48.8%). Every respondent who took part in this study had to be between 25 years old and 40 years old and only and live in Bangkok. 71% of the respondents were between 25 years old and 35 years old and 95% hold a bachelor's degree or higher. The top three occupations were employees (65.3%), Business Owners (19.8%) and Government Officials (9.9%).

These respondents were segmented into two smaller groups: *Repeat eco-car users* and *Non-repeat eco-car users*. This was done to provide a better overview of the customers purchasing behaviours and the marketing mix of both the eco-car and other types of cars. There were 146 respondents (60.3%) who would not repurchase an eco-car and 96 respondents (39.7%) who would continue to purchase an eco-car. From the study, the majority of the young female adults who are single and have a small household size will fall into *Repeat eco-car users* group. *Non-repeat eco-car users* were mostly older males who are already married.

#### 5.1.2 Consumers' Decision Process and Marketing Mix

From the study, it was found that *Non-repeat eco-car users* were more concerned about their 'Social Status', 'Job Position' and 'Friends' in their decision process of their second car. Thus, this showed that these people care about their personal image and how people perceived their image when purchasing their second car. It was also found that the main decision maker for the second car would be the respondents themselves and most of them will take approximately two to four months for the decision period. The reason for this long duration was that the respondents think that there would be high involvement and risk for them when purchasing their second cars.

The findings showed that *Repeat eco-car users* were more concern about the car performance and resell price of their second car than the *Non*-repeat eco-car users.

This, shows that the *Repeat eco-car users* were more conservative on their spending than the *Non-repeat eco-car users*. *Non-repeat eco-car users* were more willing to pay more for their second car than the *Repeat eco-car users*.

There was no significance difference in terms of payments between these groups, 94.2% would like to pay for their car through car financing and most respondents would be paying for their second car by themselves. The respondents also preferred to pay at low down payment with most respondents wanting to pay at only 20% of the total cost of the car. However, there was a significant difference between these two groups for the instalment period; the *Non-repeat eco-car users* preferred a longer instalment period of 6 years or more whereas for 60.4% of the *Repeat eco-car users* prefer only 5 years or lower.

For promotion, there was no significant difference between the groups and the respondents prefer 'Free Full Coverage Insurance', followed by 'Low Interest Rate' and 'Price Discount'. The Internet was ranked as the highest for the respondents' source of information search on their second car, followed by the family, car brochures and television. It was also found that car presenters also have no effect on the respondents' second car decision making.

For place, there were some differences for showroom factors when respondents choose to purchase their second car. *Repeat eco-car users* think that the service received from the showroom is very important and they would purchase at showroom that provides the best deal. *Non-repeat eco-car users* are more concerned about the availability of the showrooms and also prefer a showroom that is close to their home. This showed that *Repeat eco-car users* were very conservative and *non-repeat eco-car users* were willing to pay more for convenience.

In conclusion, there were both common and different purchasing criteria for these two groups of customers. Different marketing techniques need to be applied for each group to engage these groups of customers and also, boost their second car purchasing rate.

#### **5.2 Recommendations**

The first recommendation is that the exterior or the appearance of the car needs to be modernised and stylish as it is the first aspect that most respondents consider before they search for further information about the car. Car Companies should offer low down payments to customers and promote the message that their car can be owned with a small amount of money. Motor show events are also an events that customers think that they can get the best offer, so Car Companies should have two to three months lead time to promote the car prior to the event so that customers would have time to gain enough information about the car and purchase them in the event.

To sell eco-car to these customers, it is recommended to start from the communication. These customers are very conservative on their spending on car. Car Companies need to convey the message that would make these customers see the value for money for what they are going to pay for their second cars. It would also be very attractive if the Car Companies could assure these customers with guarantees buyback price. Consistency in the showroom services and offering similar offers should take place at every single showroom to attract this group of customers.

To sell other types of cars (other than the eco-cars) to these customers, different marketing approaches would be recommended. This group of customers care a lot about their personal image and they are willing to invest more on their second cars. Car Companies need to communicate to the customers and make them feel the exclusiveness and privilege of owning the car. Zero-percent interest rate is also recommended for this group of people. Interest fee can be added as a hidden mark-up price as these customers would not notice the difference.

#### 5.3 Limitations of the Study

The target group for this research is very niche and this research study only represents the population in Bangkok and not the whole country. The limitation of this study would be the convenience sampling method used and the total number of participants in this study. It would be interesting to know these findings for the rest of the population so that the marketing campaign could be the same for the whole country.

#### REFERENCES

Patiwikraiwong, W. (2004, July). *Technologymedia*. Retrieved from Technologymedia:Articles: http://www.technologymedia.co.th/articledetail.asp?arid=208&pid=64 (Accessed on 9 October 2016)

Pugliese, T. (2015, October 6). ANALYSIS: Thailand looks to end first-time buyer overhang. Retrieved from Just Auto: http://www.justauto.com/analysis/thailand-looks-to-end-first-time-buyeroverhang\_id163604.aspx (Accessed on 9 October 2016)

Quadir, R. (2012, February 14). *Public Health Matters Blog*. Retrieved from Center for Disease Control and Prevention:
https://blogs.cdc.gov/publichealthmatters/2012/02/the-great-flood-of-2011-thailand-a-firsthand-account-3/ (Accessed on 9 October 2016)

Sanitthangkul, J. (2012). Factors Affecting Consumer Attitude toward the Use of Ecocar Vehicles. *The 2012 International (Spring) Conference on Asia Pacific Business Innovation and Technology Management*, p. 464. Retrieved from http://ac.els-cdn.com/S1877042812006830/1-s2.0-S1877042812006830main.pdf?\_tid=06e93cc8-b581-11e6-aa4b-00000aacb35d&acdnat=1480347825\_4b227f964aff09fe757bae52cd36b773)

(Accessed on 9 October 2016)

Siriprapanukul, P. (2014, July 09). First-car tax rebate policy not entirely bad for economy. Retrieved from Thailand Development Research Institute: http://tdri.or.th/en/tdri-insight/first-car-tax-rebate-policy-not-entirely-bad-foreconomy/ (Accessed on 10 October 2016) Sirisithichote, M. N. (2013). Community and buyer perceived perceptions of the firsttime car buyer tax rebate program in Thailand, 1. (Master's theses). Thammasat University, Thailand

Temphairojana, P. (2015, July 28). Article: Thailand auto sales to fall 9 pct this year -Toyota. Retrieved from Reuters: http://www.reuters.com/article/toyotathailand-sales-idUSL3N1083QJ20150728 (Accessed on 10 October 2016)

Thailand Board of Investment. (2011, October 21). *Thailand's Auto Boost*. Retrieved from Thailand Board of Investment: http://www.boi.go.th/tir/issue/201110\_21\_10/174.htm (Accessed on 9 October 2016)

Thailand Board of Investment. (2015, May 10). *Thailand:Global Green Automotive Production Base*. Bangkok: Thailand Board of Investment. Retrieved from http://aseanup.com/thailand-automotive-industry-overview/. (Accessed on 10 October 2016)

# APPENDICES

#### **APPENDIX A**

#### FOCUS GROUP AND IN-DEPTH INTERVIEW QUESTIONS

- 1. Did you bought your first car under the 'First-time Car Buyer Tax Rebate Program' in 2012?
- 2. Do you live and work in Bangkok?
- 3. What was your age at the time of your first car purchase?
- 4. What do you know about the 'First-time Car Buyer Tax Rebate Program'?
- 5. What is your definition of eco-car?
- 6. What brand of eco-car did you purchase?
- 7. What car model are you using at the moment?
- 8. Why did you choose to purchase this car model?
- 9. Who was the main decision maker at your first car purchase?
- 10. Who pay for your first car purchase in the scheme?
- 11. What are the factors that you would consider when purchasing a car?
- 12. How long would your decision period for purchasing a car be?
- 13. Does car presenter has any effect on your purchasing decision?
- 14. How often do you normally drive?

#### **APPENDIX B**

## **QUESTIONNAIRE QUESTIONS**

This questionnaire is a part of the independent study for the degree in Master of Science in Marketing, Faculty of Commerce and Accountancy, Thammasat University. It is intended to gather information regarding the consumer purchasing behaviours for purchasing their second car after their first car purchase through 'Firsttime Car Buyer Tax Rebate Program', in Bangkok. The questionnaire will take about 10-15 minutes.

Note: Information discloses in this questionnaire will only be kept confidential and used for educational purposes only.

#### **Part1: Screening Questions**

- 1. Did you bought your first eco-car under the 'First-time Car Buyer Tax Rebate Program' in 2012
  - $\Box$ Yes  $\Box$  No (End of questionnaire)
- Are you going to purchase your second car after the 5 year retention ends?
   □Yes
   □ No (End of questionnaire)
- 3. Do you live and work in Bangkok?□Yes □ No (End of questionnaire)
- 4. Are you aged between 25 years old to 40 years old?
  □Yes □ No (End of questionnaire)

# Part2: To identify key factors that these target consumers use in their purchasing decision for their first cars.

#### Part 2.1: Consumer perception toward their first car purchase with the "Firsttime Car Buyer Tax Rebate Program"

1. Please rate the following statements below on a scale of one to five (1 = strongly disagree, 5 = strongly agree)

	Strongly disagree 1	2	Medium 3	4	Strongly agree 5
I think eco car has less fuel consumption.					
I think eco car has small engine size of					
about 1500 cc or less					
I think eco car is the smallest size car					
category					

Price of eco car is the cheapest among the			
rest of the model			
Eco car is suitable using in the city only			
Eco car has the best performance among			
the rest of the car categories			
Eco car has the lowest carbon emission			
among the rest of the car categories			
Eco car is considered the safest among			
the rest of the car categories			

- 2. What brand of eco-car did you purchase?
  □ Toyota □ Honda □ Mazda □ Suzuki □ Nissan □ Mitsubishi □ Ford
  □ Others, Please Specify\_\_\_\_\_
- 3. What model of eco-car did you purchase?

  Toyota Yaris
  Toyota Vios
  Honda Brio
  Honda Jazz
  Mazda 2

  Suzuki Swift
  Nissan March
  Nissan Almera
  Mitsubishi Mirage
  Ford Fiesta
  Othere Places Specific

□ Others, Please Specify\_\_\_\_

- 4. Did you buy the car by cash or financing?
  □ Full Cash Payment (Skip to Q.7) □ Car Finance
- 5. What was the percentage of the down payment?
  □ 15% □ 20% □ 25% □ 30% □ 35% □ 40% □ Others, Please Specify
- 6. How long is your instalment? (Objective 2.2)
  □ 4 years □ 5 years □ 6 years □ 7 years □ Others, Please Specify\_\_\_\_\_
- 7. Did you wish to sell the car before the 5 year holding end?
   □Yes □ No(skip to Q9)
- 8. Reason for keeping your first car:

Please rate the important of each factor for choosing your first car on the scale of one to five. (1 = least important, 5 = strongly important)

	Least important 1	2	Neutral 3	4	Strongly important 5
It is still in good condition					
I love my car					
I will pass my car to a family member					
I like the size of my car					
The resell price is low					

#### Part 2.2: Consumer purchasing behaviour toward their first car purchase

9. What was the reason for that make you purchase your first car?

 $\Box$  Transport to work  $\Box$  Transport to school

 $\Box$  'First-time Car Buyer Tax Rebate Program'  $\Box$  Others, Please Specify\_\_\_\_\_

10. Where did you find detail about your first car?

 $\Box$  Friend  $\Box$  Family  $\Box$  Salesperson  $\Box$  Internet  $\Box$  Car magazine  $\Box$  Television

 $\Box$  Newspaper  $\Box$  Radio  $\Box$  Car Brochure or catalogue  $\Box$  Car presenter  $\Box$  Others, Please Specify\_\_\_\_\_

11. Did you plan to purchase your first car before the 'First-time Car Buyer Tax Rebate Program' was initiated?

 $\Box$  Yes  $\Box$  No

- 12. Did 'First-time Car Buyer Tax Rebate Program' fast-forward your purchase?□ Yes □ No
- 13. Please rate the important of each factor for choosing your first car on the scale of one to five. (1 = least important, 5 = strongly important)

I F C	Least important 1	2	Neutral 3	4	Strongly important 5
Fuel consumption		l.			
Engine size					
Interior			ma		
Exterior		5	Y	$\sim //$	
Safety				~//	
Price		230	2/0	377	
Performance	V		200		
Warranty	10.0	100	0.97/		
Car insurance					
Security					
Salesperson					
Maintenance fee					
No of showroom					
Carbon emission					
Safety					
Resell Price					

14. How long did you used to decide to purchase your first car?
□ 1 month □ 2 months □ 3 months □ 4 months □ 5 months □ 6 months □ 1 year

□ Others, Please Specify\_

15. Who was the main decision maker at your first car purchase?

 $\Box$  Myself  $\Box$  Father  $\Box$  Mother  $\Box$  Siblings  $\Box$  Friends  $\Box$  Others, Please Specify\_\_\_\_\_

- 16. Who pay for your first car purchase in the scheme?
  - □ Self □ Parents □Both(Down payment- parents and Instalments-Self)
  - □ Others, Please Specify\_\_\_\_\_

# Part 3: To identify key drivers that these target consumers use in their purchasing decision for their second

- 17. Have you already purchase a new car before the scheme end?□Yes □ No(Skip to Q.19)
- 18. Who was the main decision maker at your second car purchase
  ☐ Myself □ Father □ Mother □ Siblings □ Friends □ Others, Please Specify\_\_\_\_\_
- 19. Do you still want to purchase eco-car? □Yes □ No (Skip to Q.21)
- 20. Which model do you wish to purchase for eco-car?
  □ Toyota Yaris □ Toyota Vios □ Honda Brio □ Honda Jazz □ Mazda 2 □ Suzuki Swift

□ Nissan March □ Nissan Almera □ Mitsubishi Mirage □ Ford Fiesta □ Others, Please Specify\_\_\_\_\_

21. Which model do you wish to purchase?

□ Toyota Altis □ Toyota Camry □ Toyota Fortuner □ Toyota Innova □ Honda civic □ Honda Accord □ Honda CRV □ Honda HRV □ Honda Freed

- 🗆 Mazda 3 🗆 Mazda CX-3 🗆 Mazda CX-5
- 🗆 Nissan Teana 🗆 Nissan Juke 🗆 Nissan X-trail
- Mitsubishi Pajero
- $\Box$  Ford Focus  $\Box$  Ford Ecosport  $\Box$  Ford Everest
- □ Benz A-class □ Benz C-class □ Benz E-class □ Benz S-class
- □ BMW Series 3 □ BMW Series 5 □ BMW Series 7
- □ Others, Please Specify\_\_\_\_
- 22. What would be the price range that you want to pay for your next car purchase?

 $\Box$  450,000-500,000  $\Box$  500,001-550,000  $\Box$  550,001-600,000  $\Box$  600,001-650,000

□ 650,001-700,000 □ 700,001-750,000 □ 750,001-800,000 □ 800,001-850,000

□ 850,001-900,000 □ 900,001-950,000 □ 950,001-1,000,000

□ Others, Please Specify\_\_\_

23. Who is going to pay for your second car?

□ Self □ Parents □ Both(Down payment- parents and Instalments-Self)

□ Others, Please Specify\_\_\_

- 24. Are you buy the car by cash or financing? □ Full cash payment(Skip to Q.27) □ Car finance
- 25. What was the percentage of the down payment? □ 15% □ 20% □ 25% □ 30% □ 35% □ 40% □ Others, Please Specify\_\_\_\_\_
- 26. How long do you prefer your instalment to be?
  □ 4 years □ 5 years □ 6 years □ 7 years □ Others, Please Specify\_\_\_\_
- 27. Where would you find detail about second car and its offer?
  □ Friend □ Family □ Salesperson □ Internet □ Car magazine □ Television
  □ Newspaper □ Radio □ Car Brochure or catalogue □ Car presenter
  □ Others, Please Specify\_\_\_\_\_
- 28. Please rate the important of each factor for choosing your second car on the scale of one to five. (1 = least important, 5 = strongly important)

	Least important 1	2	Neutral 3	4	Strongly important 5
Low fuel consumption		10			
Small engine size					
Elegance and luxurious interior design					
Stylish and modern exterior design					
Safety		-			
Price		DA-			
Performance		~~~			
Security					
Salesperson	14-16	$\sim$			
Maintenance fee	1011000007	/ a.			
Low carbon emission					
Resell Price					

29. How important will the following be when you are making the decision to purchase a second car?

Please rank the promotion you think is important for your second purchase from one to five where (1 is the most important and 5 is the least important)

	Least important 1	2	Neutral 3	4	Strongly important 5
Provide free Gift					
Provide Price Discount					
Free Full Coverage Insurance					
Low down payment					
Low interest rate					

Aftersales warranty			
Clear information from salesperson			

30. How important will the following be when you are making the decision to purchase a second car

Please rank the promotion you think is important for your second purchase from one to five where (1 is the most important and 5 is the least important)

	Least important	2_	Neutral 3	4	Strongly important 5
Showroom close to					
home					
Showroom close to					
work place					
Number of showroom			146		
Standard of the					
showroom					
Decoration of the		10/	TCA!		
showroom					
Service received from					
showroom					

31. Where would you purchase your car?

 $\Box$  Showroom close to your house  $\Box$  Showroom close to your work

 $\Box$  Showroom recommended from friends and family  $\Box$  Showroom that

provide the best offer □Other Please Specify\_\_\_

32. How long did you used to decide to purchase your second car?

 $\Box$  1 month  $\Box$  2 months  $\Box$  3 months  $\Box$  4 months  $\Box$  5 months  $\Box$  6 months  $\Box$  1 year

□ Others, Please Specify\_\_\_\_

33. Please rate the important of each external factor used for choosing your second car on the scale of one to five. (1 = least important, 5 = strongly important)

	Least important 1	2	Neutral 3	4	Strongly important 5
Social Status					
Job Position					
Friends					
Family size					
Type of House					
Car Park Size					

34. Which quarter of the year would you purchase your car?

 $\Box 1^{st}$  Quarter  $\Box 2^{nd}$  Quarter  $\Box 3^{rd}$  Quarter  $\Box 4^{th}$  Quarter 35. Do you think you can get better offer at motor show? □Yes

 $\Box$  No

# Part 4 Lifestyle and Demographic

36.	Do you normally drive to work?
	$\Box$ Yes $\Box$ No
37.	How many time do you drive per week?
	$\Box$ Everyday $\Box$ 6 times $\Box$ 5 times $\Box$ 4 times $\Box$ 3 times $\Box$ 2 times $\Box$ 1 times
38.	How do you normally travel in Bangkok?
	□Car □BTS or MRT □Public bus □Taxi □ Others, Please Specify
39.	Do you normally use navigation system when driving?
	$\Box$ Yes $\Box$ No
40.	Do you normally talk on the phone while driving?
	□Yes □No
41.	How do you normally travel to other city in Thailand?
	$\Box$ Car $\Box$ Plane $\Box$ Train $\Box$ Others, Please Specify
42.	How many hours per day do you use the internet?
	$\Box$ 1-2 hour $\Box$ 2-3 hours $\Box$ 3-4 hours $\Box$ 5-6 hours $\Box$ 7-8 hours
	□ Others, Please Specify
43.	Which social media do you use the most?
	$\Box$ Facebook $\Box$ Instagram $\Box$ Google+ $\Box$ Others, Please Specify
44.	Gender?
	□Male □ Female
45.	Status
	$\Box Single \Box Married with Children \Box Married with no Children \Box Divorce$
	Age
47.	Personal Income per month?
	□ Less than 15,000 baht □ 15,001-22,499 baht □ 22,500-29,999baht
	$\Box$ 30,000-34,999 baht $\Box$ 35,000-39,999 baht $\Box$ 40,000-49,999 baht
	$\Box$ 50,000-59,999 baht $\Box$ 60,000-79,999 baht $\Box$ 80,000-99,999 baht
	$\Box$ 100,000 and above
48.	Household Income per month?
	$\Box$ Less than 25,000 baht $\Box$ 25,001-32,499 baht $\Box$ 32,500-39,999 baht
	$\Box$ 40,000-44,999 baht $\Box$ 45,000-49,999 baht $\Box$ 50,000-59,999 baht
	$\Box$ 60,000-69,999 baht $\Box$ 70,000-89,999 baht $\Box$ 90,000-99,999 baht
	$\Box$ 100,000 and above
49.	Education Level?
	$\square$ Below Bachelor's Degree $\square$ Bachelor's Degree $\square$ Master's Degree
	□ Higher than Master's Degree
50.	Occupation

 $\Box$ Employee  $\Box$ Business Owner  $\Box$ Government Officials  $\Box$ Freelance  $\Box$ Housewife

□ Student □ Retired □ Others, Please Specify\_\_\_\_\_

51. Household size

 $\Box$  1-2 persons  $\Box$  3-4 persons  $\Box$  5-6 persons  $\Box$  More than 6 persons 52. House Type

□ Single House □ Town House □ Condominium/Apartments

53. Number of cars in the family

 $\Box$  1  $\Box$  2  $\Box$  3  $\Box$  4  $\Box$  Others, Please Specify\_\_\_\_\_



# **APPENDIX C**

# EXTERNAL FACTORS ON THE SECOND CAR DECISION MAKING

-	Independent Samples Test										
		Levene for Equ Varia	ality of								
					5.0	Sig. (2-	Mean Differ	Std. Error		% Confidence Interval	
		F	Sig.	t	df	tailed)	ence	Difference	Lower	Upper	
Social Status	Equal variances assumed	5.028	.026	-7.681	240	.000	691	.090	868	514	
	Equal variances not assumed			-7.486	185.38	.000	691	.092	873	509	
Job Position	Equal variances assumed	8.150	.005	-5.815	240	.000	611	.105	818	404	
	Equal variances not assumed	~		-5.454	159.81	.000	611	.112	832	390	
Friends	Equal variances assumed	21.291	.000	-4.166	240	.000	413	.099	608	218	
	Equal variances not assumed			-3.918	161.63	.000	413	.105	621	205	
Family size	Equal variances assumed	.035	.853	.082	240	.935	.007	.083	157	.171	
	Equal variances not assumed		1	.083	210.16	.934	.007	.082	156	.169	
Type of House	Equal variances assumed	.122	.727	-1.226	240	.221	113	.092	294	.068	
	Equal variances not assumed			-1.207	192.09	.229	113	.093	297	.072	
Car Park Size	Equal variances assumed	.448	.504	708	240	.479	070	.100	267	.126	
	Equal variances not assumed			719	213.12	.473	070	.098	264	.123	

Independent Samples Test

# **APPENDIX D**

# **RESULTS OF CHI-SQUARE TEST ON THE DECISION PERIOD**

Pearson Chi-Square Tests						
		Do you still want to purchase eco-				
		car?				
How long would you used to	Chi-square	9.285				
decide to purchase your second	df	8				
car?	Sig.	.319ª				

Results are based on nonempty rows and columns in each innermost subtable.

a. More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.

# **APPENDIX E**

# PRODUCT FACTORS ON THE SECOND CAR DECISION MAKING

	for Ec	e's Test quality riances			t-test	for Equality of	of Means			
		F	Sig.	t df		Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Low fuel	Equal variances assumed	0.031	0.861	0.457	240	0.648	0.035	0.078	-0.117	0.188
consumption	Equal variances not assumed		1	0.451	195.227	0.652	0.035	0.078	-0.119	0.19
G 11	Equal variances assumed	0.815	0.367	1.967	240	0.05	0.219	0.111	0	0.438
Small engine size	Equal variances not assumed	Ser.		2.009	217.308	0.046	0.219	0.109	0.004	0.434
Elegance and	Equal variances assumed	2.983	0.085	0.756	240	0.451	0.061	0.081	-0.098	0.22
luxurious interior design	Equal variances not assumed	3//		0.787	228.315	0.432	0.061	0.078	-0.092	0.214
Stylish and	Equal variances assumed	2.652	0.105	0.355	240	0.723	-0.028	0.078	-0.181	0.126
modern exterior design	Equal variances not assumed			0.366	222.11	0.715	-0.028	0.076	-0.177	0.122
	Equal variances assumed	1.888	0.171	1.762	240	0.079	0.139	0.079	-0.016	0.294
Safety	Equal variances not assumed			1.765	204.298	0.079	0.139	0.079	-0.016	0.294

Independent Samples Test

for			's Test ality of nces	t-test for Equality of Means									
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference				
									Lower	Upper			
	Equal variances assumed	2.61	0.108	0.07	240	0.944	0.006	0.09	-0.171	0.183			
Cheap Price	Equal variances not assumed			0.072	225.02	0.942	0.006	0.087	-0.165	0.177			
	Equal variances assumed	15.322	0.000	2.609	240	0.01	0.194	0.074	0.048	0.341			
Performance	Equal variances not assumed	No.	8/	2.768	236.096	0.006	0.194	0.07	0.056	0.333			
	Equal variances assumed	0.003	0.955	- 1.226	240	0.221	-0.112	0.091	-0.292	0.068			
Salesperson	Equal variances not assumed			1.233	207.011	0.219	-0.112	0.091	-0.292	0.067			
Mite	Equal variances assumed	0.363	0.548	0.004	240	0.997	0	0.08	-0.157	0.157			
Maintenance fee	Equal variances not assumed		31	0.003	186.761	0.997	0	0.082	-0.161	0.161			
Resell Price	Equal variances assumed	4.512	0.035	2.019	240	0.045	0.186	0.092	0.005	0.366			
	Equal variances not assumed			2.138	235.471	0.034	0.186	0.087	0.015	0.356			

Independent Samples Test

### **APPENDIX F**

# RESULTS OF CHI-SQUARE TEST ON THE DOWN PAYMENT PERIOD

**Pearson Chi-Square Tests** 

		Do you still want
		to purchase eco-
		car?
How long do you prefer your	Chi-square	21.607
instalment to be?	df	4
1/232/	Sig.	.000 <sup>*,b</sup>

Results are based on nonempty rows and columns in each innermost subtable.

\*. The Chi-square statistic is significant at the .05 level.

b. More than 20% of cells in this subtable have expected cell counts

less than 5. Chi-square results may be invalid.

### **APPENDIX G**

# **RESULTS OF CHI-SQUARE TEST ON THE PRICE RANGE**

Pearson Chi-Square Tests

		Do you still want
		to purchase eco-
		car? (Objective
		3.2)
What would be the price range	Chi-square	50.180
that you want to pay for your	df	8
next car purchase? (Objective 3.2.2)	Sig.	.000 <sup>*,b</sup>

Results are based on nonempty rows and columns in each innermost subtable.

\*. The Chi-square statistic is significant at the .05 level.

b. More than 20% of cells in this subtable have expected cell counts

less than 5. Chi-square results may be invalid.

# **APPENDIX H**

# PROMOTION FACTORS ON THE SECOND CAR DECISION MAKING

			Indep	pendent	Samples	Test				
		Levene's Test for Equality of Variances				t-tes	t for Equality	y of Means		
						Sig. (2-	Mean	Std. Error		onfidence erval
		F	Sig.	t	df	tailed )	Differenc e	Differenc e	Lower	Upper
Provide free Gift	Equal variances assumed	11.101	.001	-1.554	240	.121	160	.103	364	.043
	Equal variances not assumed			-1.466	163.26	.145	160	.109	376	.056
Provide Price Discount	Equal variances assumed	2.507	.115	-1.349	240	.179	102	.075	250	.047
	Equal variances not assumed	1		-1.348	202.91	.179	102	.075	250	.047
Full Coverage Insurance	Equal variances assumed	.525	.469	.368	240	.713	.024	.065	104	.152
	Equal variances not assumed			.372	210.30	.711	.024	.065	103	.151
Low down payment	Equal variances assumed	.049	.825	189	240	.850	021	.109	235	.194
	Equal variances not assumed			187	198.09	.851	021	.110	237	.196
Low interest rate	Equal variances assumed	.479	.490	.509	240	.611	.044	.086	125	.212
	Equal variances not assumed	1	2	.501	191.12	.617	.044	.087	128	.216
Aftersales warranty	Equal variances assumed	3.200	.075	.481	240	.631	.036	.075	111	.183
	Equal variances not assumed			.504	232.18	.614	.036	.071	104	.176
Clear information	Equal variances assumed	3.563	.060	1.237	240	.217	.091	.073	054	.235
from salesperson	Equal variances not assumed			1.260	215.68	.209	.091	.072	051	.233

# **APPENDIX I**

# PLACE FACTORS ON THE SECOND CAR DECISION MAKING

		Indep Levene's Test for Equality of										
		Varia	inces	t-test for Equality of Means								
						Sig. (2- tailed	Mean Differenc	Std. Error Differenc	Interv	onfidence al of the erence		
		F	Sig.	t	df	)	е	e	Lower	Upper		
Showroom close to home	Equal variances assumed	.415	.520	661	240	.509	068	.102	269	.134		
	Equal variances not assumed			649	191.19	.517	068	.104	273	.138		
Showroom close to work	Equal variances assumed	3.945	.048	1.993	240	.047	.205	.103	.002	.407		
place	Equal variances not assumed			2.057	223.58	.041	.205	.100	.009	.401		
Number of showroom	Equal variances assumed	5.218	.023	-2.841	240	.005	293	.103	496	090		
	Equal variances not assumed			-2.889	214.57	.004	293	.101	493	093		
Standard of the showroom	Equal variances assumed	1.234	.268	.740	240	.460	.069	.093	114	.252		
	Equal variances not assumed			.761	221.68	.447	.069	.090	109	.247		
Decoration of the showroom	Equal variances assumed	.002	.961	-1.092	240	.276	124	.113	347	.100		
	Equal variances not assumed	<		-1.079	194.97	.282	124	.115	350	.103		
Service received from	Equal variances assumed	15.58 0	.000	2.354	240	.019	.195	.083	.032	.358		
showroom	Equal variances not assumed		21	2.530	239.19	.012	.195	.077	.043	.347		

### **APPENDIX J**

# RESULTS OF CHI-SQUARE TEST ON THE LOCATION OF THE SHOWROOM

Pearson	Chi-Square Tests	
	STAL	Do you still want to purchase eco- car? (Objective 3.2)
Where would you purchase your car? (Objective 3.2.4)	Chi-square df	18.048
144	Sig.	$.000^{*,b}$

Results are based on nonempty rows and columns in each innermost subtable.

\*. The Chi-square statistic is significant at the .05 level.

b. More than 20% of cells in this subtable have expected cell counts

less than 5. Chi-square results may be invalid.

## BIOGRAPHY

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