

## CHAPTER 4

### RESULTS

The results of the study, in this chapter, are divided into two parts. The first part reveals the demographic data of the respondents; the second part reports opinions of the respondents towards hybrid cars. The results are calculated from 100 samples which represent 100% of the subjects.

#### 4.1 DEMOGRAPHIC DATA OF THE RESPONDENTS

##### 4.1.1 Gender

The total respondents of this study are 100 Bangkok automobile users in which 55% are male and 45% are female. The frequency shows no significant difference in the gender of the respondents.

*Table 1. Gender*

Gender	Frequency	Percent
Male	55	55.0
Female	45	45.0
Total	100	100.0

##### 4.1.2 Age

The majority of the respondents were aged between 26-35 years which represents 53%, followed by 18-25 years old which represents 23%, the 36-45 years old which represents 19%, and those who over 45 years which represents 5%. From this result, 76% of respondents who were aged between 26-30 years old and 18-25 years represent the young generation and early adult group.

**Table 2. Age**

Age	Frequency	Percent
18-25 years old	23	23.0
26-35 years old	53	53.0
36-45 years old	19	19.0
Over 45 years old	5	5.0
Total	100	100.0

#### 4.1.3 Education

For the highest education level, most of the samples hold a bachelor degree at 60%, followed by those who have an education level below bachelor degree and above bachelor degree at 30% and 10%, respectively.

**Table 3. Education Level**

Education Level	Frequency	Percent
Below Bachelor degree	30	30.0
Bachelor degree	60	60.0
Above Bachelor degree	10	10.0
Total	100	100.0

#### 4.1.4 Marital Status

74% of the respondents were single, while 22% were married, and only 4% were separated or divorced or widowed. As the group are in their early adulthood, the majority of them were still single.

**Table 4. Marital Status**

Marital Status	Frequency	Percent
Single	74	74.0
Married	22	22.0
Separated/Divorced/Widowed	4	4.0
Total	100	100.0

#### 4.1.5 Occupation

Regarding the occupation, 48% are employees in private companies, followed by 20% who are entrepreneurs. Students make up the third group at 15% while other occupation represent 9%. Government or state enterprise officers represent the lowest rate of occupations at 8%. This result indicates that respondents working for private companies are the most potential group to buy hybrid cars.

**Table 5. Occupation**

Occupation	Frequency	Percent
Employee of private company	48	48.0
Government officer / State enterprise officer	8	8.0
Entrepreneur	20	20.0
Student	15	15.0
Others	9	9.0
Total	100	100.0

#### 4.1.6 Average Monthly Household Income

41% of the respondents have a household income of around 15,000-35,000 baht, while 34% have less than 15,000 baht. Those who have a household income of 35,001-60,000 and 60,001-100,000 were rated equally at 8% while 9% have more than 100,000 baht.

Considering household income, most respondents earn just moderate amounts of income which could be a detrimental factor when buying a hybrid car.

**Table 6. Average Monthly Household Income**

Monthly income	Frequency	Percent
Less than 15,000	34	34.0
15,001-35,000	41	41.0
35,001-60,000	8	8.0
60,001-100,000	8	8.0
More than 100,000	9	9.0
Total	100	100.0

#### 4.1.7 Amount of Family Members

The majority of the respondents or 57% live with a family of around 3-5 persons, followed by 25% who live alone. 13% lives with another one member while a family of around 6-8 persons accounts for 5%.

The result illustrates that family unit of the Bangkok respondents is rather small with only a few members living together.

**Table 7. Amount of Family Members**

Amount of family members	Frequency	Percent
Alone	25	25.0
2 persons	13	13.0
3-5 persons	57	57.0
6-8 persons	5	5.0
Total	100	100.0

#### 4.1.8 Ownership of Car

74% of the respondents own a car while another 26% don't. This result implies that respondents who can drive should own a car of their family.

**Table 8. Ownership of Car**

Ownership of car	Frequency	Percent
Not own	26	26.0
Own	74	74.0
Total	100	100.0

#### 4.1.9 Engine Type

Of the 74% respondents who own a car in Table 8, most of the engine types accounting for 62%, are benzene engines followed by diesel engine which represents 33.8%. 4.1% relate to other type of engines. This result confirms that a large amount of cars registered in Bangkok have to be fueled with fossil oil.

**Table 9. Engine Type**

Engine Type	Frequency	Percent
Benzene engine	46	62.2
Diesel engine	25	33.8
Others	3	4.1
Total	74	100.0

## 4.2 FACTORS INFLUENCING THE BUYING DECISION OF HYBRID CARS

This part was to study the buying decision of respondents towards hybrid cars in two keys activities. First is the opinion of the marketing activities which are product, price, place, and promotion. The second one is the influential behaviors to stimulate purchasing decisions which are, internal factors, situation factors, and society factors.

By using Likert Scale principles, opinions will be rated into 5 levels which are 1 point for least important, 2 points for little important, 3 points for moderately important, 4 points for much important, and 5 point is the most important. The result will be presented in average value which is represented by the symbol ( $\bar{x}$ ) where as:

Average value	Result
1.00 – 1.80	The least
1.81 – 2.60	Little
2.61 – 3.40	Moderate
3.41 – 4.20	Much
4.21 – 5.00	The Most

#### 4.2.1 Marketing Activities Factors

Respondents were asked to rate their interest in the assigned marketing factors that could affect their purchasing decision if they want to buy a hybrid car.

Based on the average values given in Chapter 3, respondents show “the most” interest in fuel consumption and emission rates at a 4.37 average value.

The rest of the marketing factors are given “much” interest according to their average score as follows: car performance is 4.09, exterior and interior design is 3.91, pricing is 4.13, showroom and after sales services is 4.10, and sales promotion activities is 4.04.

**Table 10. Respondents’ Interest to the Marketing Activities of Hybrid Car**

Marketing Activities	Opinion					$\bar{x}$	Rank
	The most	Much	Moderate	Little	The least		
1. Fuel consumption and emission rate	50 (50.0%)	37 (37.0%)	13 (13.0%)			4.37	1
2. Car performance, acceleration speed, handling	35 (35.0%)	40 (40.0%)	24 (24.0%)	1 (1.0%)		4.09	4
3. Exterior and interior design.	21 (21.0%)	50 (50.0%)	28 (28.0%)	1 (1.0%)		3.91	6
4. Pricing	44 (44.0%)	29 (29.0%)	24 (24.0%)	2 (2.0%)	1 (1.0%)	4.13	2
5. Showroom and after sales service.	37 (37.0%)	39 (39.0%)	22 (22.0%)	1 (1.0%)	1 (1.0%)	4.10	3
6. Interesting sales promotion	1 (1.0%)	34 (34.0%)	38 (38.0%)	27 (27.0%)	1 (1.0%)	4.04	5

#### 4.2.1.1 Summary of Marketing Activities Factors

In reply to the question “what is the most influential marketing factors toward the respondents’ buying decision”, the product attribute factors in questions numbered 1-3 were summarized first and then divided to see the average value and range which is in descending order.

To answer the research question, the most influential marketing activities is product attribution with a total mean of 4.12. Pricing followed in second place with 4.13 while place of purchase comes third and promotion activities is the last one with an average of 4.04.

**Table 11. Total Average Value of Marketing Activities of Hybrid Car**

Marketing activities	Average value	Meaning
Product	4.12	Much
Price	4.13	Much
Place	4.10	Much
Promotion	4.04	Much

#### 4.2.2 Behavioural Influences Factors

The result reveals three areas of influence; personal influences, situational influences, and social influences.

##### 4.2.2.1 Personal Influences

Regarding the internal factors that could influence the buying decision, the respondents were asked whether they agree with the given situation that would influence the hybrid car buying. Results are as follows:

For finding whether the respondents agreed that the hybrid car is an innovation that helps reduce air pollution and reduce fossil fuel, the average result is 4.24 which means this is “the most” agreeable factor that could influence their buying decision.

Regarding whether owning hybrid car contributes to saving the environment for the next generation, the average result is 4.18 which means this factor “much” influenced their buying decision.

In response to whether sufficient information of hybrid technology is important to buying decision, the average result shows 4.13 score which could reflect the fact that this factor has “much” influence on the respondents’ decision.

For the opinion whether purchasing or using a hybrid car would enhance the buyer’s image of environment-consciousness, the average result is 3.91 which represents “much” influence on respondents.

**Table 12. Personal Influences on Buying Decision**

Situations	Frequency					$\bar{x}$	Meaning
	Agree the most	Agree very much	Moderate	Agree little	Agree the least		
1. The hybrid car is an innovation that helps lessen air pollution and reduces fossil fuel.	37 (37.0%)	50 (50.0%)	13 (13.0%)			4.24	The most
2. Owning a hybrid car contributes to saving the environment for the next generation.	35 (35.0%)	48 (48.0%)	17 (17.0%)			4.18	Much
3. Sufficient information of Hybrid technology is important to the buying decision.	34 (34.0%)	45 (45.0%)	21 (21.0%)			4.13	Much
4. Purchasing or using a hybrid car will enhance your image of environment-consciousness.	24 (24.0%)	48 (48.0%)	24 (24.0%)	3 (3.0%)	1 (1.0%)	3.91	Much
Total						4.12	

#### 4.2.2.2 Situational Influences

This table attempted to explore how much certain situations affect the respondents’ buying decisions. Four situations were given to determine their opinion and results were as follows:

Upon a shortage of crude oil resulting in a rise of petrol prices in Thailand, the average result is 4.28 which reflects “the most” influence towards respondents’ buying decisions.

About the air pollution crisis, the respondents think that this factor “much” affects their opinion towards their buying decision of a hybrid car as the average value is 4.07.

For the situation that Thai Government raised a campaign to promote usage of hybrid cars such as income tax reduction, respondents display “much” affect toward their decision. Average value is 3.85.

When asked whether the pricing was supported by government from reduction of excise tax and import tax, respondents show “the most” influence from the average value of 4.22.

**Table 12. Situational Influences on Buying Decision**

Situations	Frequency					— x	Meaning
	Affect the most	Affect very much	Moderate	Affect little	Affect the least		
1. A shortage of crude oil resulting in a rise of petrol prices in Thailand.	37 (37.0%)	55 (55.0%)	7 (7.0%)	1 (1.0%)		4.28	The most
2. Air pollution crisis.	27 (27.0%)	56 (56.0%)	15 (15.0%)	1 (1.0%)	1 (1.0%)	4.07	Much
3. Thai Government raises a campaign to promote using hybrid cars such as income tax reduction.	22 (22.0%)	51 (51.0%)	19 (19.0%)	6 (6.0%)	2 (2.0%)	3.85	Much
4. Price is affordable from reduction of excise tax and import tax.	43 (43.0%)	40 (40.0%)	14 (14.0%)	2 (2.0%)	1 (1.0%)	4.22	The most
Total						4.11	

#### 4.2.2.3 Social Influences

In terms of social situation, the respondents were asked how much the environmental-conscious group influenced their buying decision of hybrid cars. Results are as follow:

According to the situation if Thailand had become an environment-conscious country that actively promotes the use of green car, the 3.90 average value reflects “much” influence on the respondents’ buying decision.

When asked whether being a member of specific environment conservation club such as Greenpeace will stimulate the respondents’ buying decision, the 3.60 average values show “much” influence on them.

For the situation if the respondents’ community or neighbors owned hybrid cars, the average values is 3.71 which means they think this situation will have “much” affect on their opinion.

For the situation if an influential person in society such as researcher, journalist, or celebrity recommended respondents to use hybrid cars, results show “much” influence on their buying decision with an average value of 3.71.

**Table 13. Social Influences on Buying Decision**

Situations	Frequency					$\bar{x}$	Meaning
	Affect the most	Affect very much	Moderate	Affect little	Affect the least		
1. Thailand has become an environment-conscious country that strongly promotes the use of green cars	21 (21.0%)	54 (54.0%)	20 (20.0%)	4 (4.0%)	1 (1.0%)	3.90	Much
2. Be a member of specific environment conservation club such as Greenpeace	19 (19.0%)	35 (35.0%)	38 (38.0%)	5 (5.0%)	3 (3.0%)	3.62	Much
3. Your community or neighbors all bought hybrid cars so you think you should own one	8 (8.0%)	31 (31.0%)	37 (37.0%)	18 (18.0%)	6 (6.0%)	3.17	Moderate
4. An influential person recommends hybrid cars eg. Researchers, celebrity, automobile journalists	14 (14.0%)	53 (53.0%)	26 (26.0%)	4 (4.0%)	3 (3.0%)	3.71	Much
Total						3.60	

#### 4.2.2.4 Suggestions on Promotion of Hybrid Cars in Thailand

Respondents were asked to give suggestions relating to the promotion of hybrid cars in Thailand. Most of them recommended the government to reduce import taxes which accounts for 24.3%. Then, 21.8% of the respondents suggested to provide society with more knowledge about hybrid cars. Following that, 20.9% thought that there should be sufficient after sales service centers, 18.2% agreed that Thailand should manufacture its own hybrid car to avoid import tax problems. Lastly, 14.8% would like the automobile company to study a possibility to introduce hybrid cars to the Thai market.

**Table 14. Suggestions on Promotion of Hybrid Car in Thailand**

Suggestions	Frequency	Percent	Rank
Government should reduce import tax	79	24.3	1
Thailand should manufacture its own hybrid car	59	18.2	4
Knowledge of hybrid car should be promoted more	71	21.8	2
There should be sufficient after sales service centers	68	20.9	3
Automobile company should study market possibility	48	14.8	5
Total	325	100.0	

The findings of the study on factors influencing Bangkok motorists' buying decisions of hybrid cars will be summarized and discussed in the next chapter.