

THE STUDY OF BARRIERS AND TRIGGER MOTIVATIONS TOWARD ONLINE USED CAR MARKETPLACE

 \mathbf{BY}

MR. NATTHAPHAT ITTHIWARANURAK

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
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INDEPENDENT STUDY

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MR. NATTHAPHAT ITTHIWARANURAK

ENTITLED

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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

Due to insufficient public transportation in Thailand, a car is considered the fifth necessity for living. A used car has become an alternative for lower to middle income citizens because of the high cost of living. However, customers perceive that purchasing a used car is full of risk, fear, and uncertainty. In the digital era, most consumers nowadays adopt the Internet to search the information and to purchase goods or services online. Although plenty of peer-to-peer classified online marketplaces have been launched to serve customer needs either buying or selling used car, none has been able to provide a trustworthy eco-system solution for used car consumers to mitigate their concern before purchasing a used car.

This study focuses on four main research objectives including 1) to generate customer profiles for those who visit online used car marketplaces, 2) to explore barriers obstructing customer purchase of used cars from online used car marketplaces, 3) to identify trigger motivations for converting website visitors into prospective used car customers and 4) to provide recommendations for online used car marketplaces to improve the key critical attributes aimed at customer expectations and perceptions. The findings from this research helps to respond the following questions including how many meaningful clusters of visitors on used car marketplace website? What their profile looks like? and how to redesign online used car marketplaces to enhance user experience, to overcome obstacles and to motivate them

(2)

to purchase used car from online marketplaces? Additionally, this work will try to

prioritize which key attributes in the website should be improved to increase customer

perception?

This research employed exploratory, qualitative and quantitative research

to obtain both primary and secondary data. The respondents in this research were

those who are experienced with used car purchases within the last five years and who

are capable of using the Internet to access online used car marketplaces. The study

divided the qualified respondents into two groups of customer segments: purchasers,

the persons who afforded purchasing used cars by themselves, and used car users, the

persons who owned but did not buy used car by themselves. The results conclude that

there are significant differences between experienced used car purchasers and users

with respect to their demographic profiles, the behavior and attitude they exhibit

throughout the online purchase funnel, and the customer expectations and perceptions

they have toward online used car marketplaces.

The most prevalent customer segment of used car purchaser is married

men aged 30-39. Alternatively, the user group is young single men or women aged

20-29. Three important attributes bring customers to visit online used car

marketplaces more regularly, they are car variety, ease of sight navigation and

completeness of car information. Moreover, the top three barriers that obstruct their

purchase of used cars from online websites are the potential for fraud and cheating by

sellers, no inspection service, and no post purchase service. On the other hand, time

constraint to visit dealership, trust of seller, and lower price are the top three reasons

that helped trigger visitors to purchase used cars from online website. Moreover, there

are numerous gaps between customer expectation and perception for online

marketplace providing a great opportunity to improve on multiple key critical

attributes.

Keywords: Used car, Second hand car, Automobile, Online marketplace

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Mr. Natthaphat Itthiwaranurak

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CHAPTER 1 INTRODUCTION

1.1 Overview

It is undeniable that automobile vehicles are considered one of the most common necessities of human life today. The importance of vehicles has significantly escalated due to inadequate and inconvenient public transportation in Thailand. To survive during the recent poor economy and high cost of living, consumers have become more amenable and interested in purchasing used cars. This has caused the incremental price of used cars to increase by 10% - 20% in 2016. The growth of used cars in Thailand is likely to continue for at least a couple years (http://www.thaiauto.or.th/2013/th/news/news-detail.asp?news_id=3308). Though used car has become an attractive alternative for low-middle income consumers. The customers perceive that purchasing used cars from car dealerships is full of fear, doubt and uncertainty. Consequently, some chooses new cars to avoid purchasing a lemon. Others have reluctantly admitted the risk of used cars had to be balanced against severe budget constraints.

Even though a number of peer-to-peer classified online used car marketplaces directly match prospect buyers with used car's owners (sellers) to purposely reduce the risks and anxieties of middlemen, the buyers' concerns remain. That is, such online marketplaces are unable to make buyers trust successfully. This unsolved crisis decelerates the potential growth of the used car industry, particularly in a booming era of ASEAN e-commerce. Regarding to Mr. Chaturon Komalmit, President of 8th used car show fair, the transactions of used car is forecasted to increase from 1 million car in 2015 to 1.5 million car in 2016. The overall, credit industry provided financing for used cars of approximately THB 200 billion a year (http://news.unseencar.com/usedcar-market-news-1.html).

1.2 Problem Statement

The used car industry offers a large market opportunity which is continuously expanding. However, challenging problems concerning fraud, uncertainty and purchase risk of used cars from the online marketplace show no current signs of a tangible solution. The barriers obstructing buyers and the trigger motivations for buyers to purchase used cars from online used car marketplaces were investigated to identify the gaps between customer expectations and perceptions of the key attributes regarding the online used car marketplaces. Suggests were presented to enhance and attract customers to purchase used cars online.

1.3 Research Objectives

Psychological barriers and trigger motivations of Thai customers toward purchasing used cars through the online used car marketplaces were examined. Four major research objectives were described as follows:

- To generate customer profiles for those who visit online used car marketplaces
- 2) To explore barriers obstructing customer purchase of used cars from online used car marketplaces
- 3) To identify trigger motivations for converting website visitors into prospective used car customers and
- 4) To provide recommendations for online online used car marketplaces to improve the key critical attributes aimed at customer expectations and perceptions.

CHAPTER 2

REVIEW OF LITERATURE

2.1 How does the online used car business currently operate?

Nowadays, the Internet is becoming the main information source of choice for used car buyers. In the used car market, sellers gain the upper hand over buyers who have less information, resulting in fewer transactions occurring than expected. For instance, the seller would like to sell a high-quality car at a reasonable price; however, the buyer might not expect to pay the top price as he/she cannot assess the true condition of the used car. If the seller refuses to reduce the sale price, the transaction fails. This issue of asymmetric information can be narrowed by increasing the transparency of used car information. (Cappemini Consulting Technology Outsourcing, 2007)

2.2 Why is it so difficult for customers to buy a high-quality used car?

In the used car market, sellers gain the upper hand over buyers who have less information, resulting in fewer transactions occurring than expected. For instance, the seller would like to sell a high-quality car at a reasonable price; however, the buyer might not expect to pay the top price as he/she cannot assess the true condition of the used car. If the seller refuses to reduce the sale price, the transaction fails. This issue of asymmetric information can be narrowed by increasing the transparency of used car information. (Scott A. Wolla, Ph.D, 2016)

2.3 What are the future trends and opportunities in the used car market?

Increasing availability of information will impact on 1) customers, as they can easily access information regarding the condition of the used car through online channels, 2) the market, as the competition will add more quality cars and force sellers to reduce their margins, and 3) online facilitating platforms, as customers will be willing to pay more for the convenience of both buying and selling used cars if the online platform can enhance trust. This upward trend will positively impact on all

individuals in the used car market value chain. (Parkin, R., Bakker, J., Hoppe, S., & Awad, S, 2015)

2.4 What will improve customer satisfaction with automobile industry websites?

The Indian online used car marketplace is now emerging, and effective website strategy is crucial to ensure that customers who visit automobile websites are satisfied. Survey results indicated that the two most critical factors regarding customer satisfaction with used car marketplace websites were content quality and ease of navigation. Recommended used car information that should be provided in the online platform include product criteria and product descriptions that are transparent, easy to understand and precise for the buyer. (Nataraj, S. & Dr. Nagaraja, N, 2013)

2.5 Trust is a big deal, how can this be developed within e-commerce?

The consumer perceives online used car transactions as high risk, uncertain and complex, requiring more trust than traditional online purchases. Some techniques can promote Internet trust such as offering educational material, providing a seal of approval to certify the quality, generating a positive word of mouth community, facilitating direct transparent communication, and resolving customers' problems leading to brand loyalty. (Gustavsson, M. & Johansson, A, 2006)

2.6 What will improve customer satisfaction with automobile industry websites?

Results showed that intermediary companies redesigned themselves from traditional to online marketplaces to create transactions without seeing a physical online product. A product will be sold, negotiated, and offered electronically. This process provides beneficial advantages to the market and reduces product movement by completing the transaction online using computer communication technology. On the other hand, the risks are also increased. For example, production information provided through online platforms might be distorted and the payment process might be not sufficiently secure. Therefore, rules and policies for online transactions are required to ensure that customers receive the correct information and guarantee secure payment. (Ho Geun Lee, 1997)

2.7 How can electronic word of mouth to influence consumers' judgements?

Research results indicated the futility of spending money on marketer-generated websites, i.e., brand websites or non-marketer-generated websites i.e. personal blogs to write reviews to generate word of mouth because this cannot influence consumers' product judgments. On the other hand, spending money on a review from a stranger's blog, i.e., an unknown person can generate more impact on the customer to make a judgment on the product and generate word of mouth electronically (Lee, M. & Youn, S, 2009)

2.8 What are the best for used car e-commerce?

Five areas to develop used car e-commerce were suggested as 1) generating a standardized agency team consisting of technical, financial, legal and other sectors with authoritative and experienced practitioners to link and share resources in the country, and supervise and regulate the rules of the game, 2) improving the functions in e-commerce platforms by providing accurate information of cars, auction features, historical reports and trading procedure, 3) improving the functions in e-commerce platforms to develop the trust and confidence of customers using password protection and standardized transaction systems with enhancing security, 4) innovating better trading models to provide comprehensive information to both buyer and sellers, and 5) establishing better service systems to differentiate from competitors, i.e., providing mileage warranties or vehicle maintenance as one-step service centers. (Xujiao, Z, Lihua, C & Jing, L, 2014)

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Project Scope

The project scope of this research was divided into the following four areas:

- To generate customer profiles for those who visit online used car marketplaces
 - a. Gathering general information about customer segments from secondary data
 - b. Interviewing qualified respondents to explore the demographics of car customers who purchased and owned used cars
 - c. Identifying similarity of customers and grouping the similar characteristics to generate their customer profiles
 - d. Conducting quantitative research regarding the size and characteristics of each individual customer segment.
- 2) To explore barriers obstructing customer purchase of used cars from online used car marketplaces
 - Exploring barriers or negative complaints by used car owners on web boards
 - b. Conducting in-depth interviews to ascertain customer insights regarding the barriers that obstructed purchase in the online used car marketplaces
 - Quantifying the qualitative research findings into tangible numbers to identify the main activities blocking customers from online used car purchase
- 3) To identify trigger motivations for converting website visitors into prospective used car customers and
 - a. Exploring positive feedbacks on web boards from used car owners
 - b. Conducting in-depth interviews to determine the customer motivations that trigger purchase intentions from online used car marketplaces

- Quantifying the qualitative research findings into tangible numbers to identify the main activities triggering customer purchase intentions regarding online used cars
- 4) To provide recommendations for online online used car marketplaces to improve the key critical attributes aimed at customer expectations and perceptions.
 - a. Identifying the key attributes impacting on customer expectations and perceptions toward the online used car marketplaces
 - b. Surveying the levels of customer expectation and perception

3.2 Research Methodology

3.2.1 Research Design

The study was conducted using exploratory, qualitative and quantitative research. Exploratory research was applied to find source of secondary data from websites, web board forums, published journals, magazines, and research articles. A form of exploratory research, in-depth interviews (both face-to-face and by phone) was also conducted to gain consumer insights and to understand the generic behaviors of experienced used car purchasers. Quantitative research was subsequently developed based on the findings of the result of qualitative research to quantify attitudes, opinions, and motivations into measurable and explainable data. The sequence of researches is illustrated in Figure 3.1



Figure 3.1 Research Framework

3.2.1.1 Exploratory Research

Exploratory research was conducted to obtain secondary data and determine general information regarding the Thai used car industry by exploring market size, trends, and circumstances of the online used car marketplace. The customer profiles of used car were investigated to identify key important attributes toward customer satisfaction in the online used car marketplaces.

3.1.2.2 Qualitative Research

In-depth interviews were conducted to understand the different needs and generic behaviors of both used car users and non-users for ranges of gender and age in Table 3.1

Table 3.1 Type of interviewees by users, gender and age

Type of u	iser	20-29	30-39	40-49	50-59	Total
Users	Male	3	3	1	1	8
USEIS	Female	1	1	1	1	4
Non-user:	s			3		3

In-depth interviews were first piloted on five respondents to ensure that there were no ambiguous or non-logical questions, and then conducted with 15 respondents who had purchased a used car within the last five years; particularly adult men aged 20-39 as the dominant Thai used car purchasers in the online marketplace. Examples of interview questions are shown in Appendix B1. There were three key sections in the questionnaire as follows:

- Section B1.1 Questions to understand the overall purchasing experience of the customers
- Section B1.2 Questions to explore how customers accessed used car information before purchase, and
- Section B1.3 Questions to understand which barriers blocked and which motivations triggered customers to purchase used cars from the online marketplace

3.1.2.2 Quantitative Research

The target population for the quantitative research was experienced customers who had purchased a used car within the last five years and were capable of using the Internet to access the online used car marketplace. Findings from the in-depth interviews were analyzed and applied to develop the questionnaire and quantify the major important findings from the qualitative research. An example of the online survey questionnaire is presented as Appendix B2. There were four key sections in the questionnaire as follows:

- Section B2.1 Screening of the qualified respondents
- Section B2.2 The purchase process of the online used car marketplace. The
 questions followed a 3-step purchase funnel that respondents experienced
 when using the used car marketplace website such as awareness regarding
 websites, trial (or visit) a website, purchase a used car from the website in
 Figure 3.2
- Section B2.3 Customer perceptions toward the online used car marketplace, and
- Section B2.4 Customer demographics



Figure 3.2 Purchase funnel on used car marketplace website

The questionnaire survey was piloted to ten respondents to ensure correctness and logical flow, and distributed based on the convenience sampling snowball technique methodology through online channels such as social media, web boards, and referral to recruit at least 100 qualified respondents

3.2.2 Data Collection

Secondary data were gathered from various sources such as websites, web board forums, published journals, magazines, and research articles.

Primary data were collected from in-depth interviews as hand-written notes and analyzed to develop the questionnaire. The survey was developed and distributed to gather information using the online question form SurveyMonkey. A 5-point likert interval scale was used to ask questions to understand the difference between respondents' perceptions and attitudes among two groups of users. All respondents were recruited by the convenience sampling method and randomly interviewed.

3.2.3 Data Analysis

The in-depth interviews were interpreted and analyzed to determine the consumer insights that triggered and blocked their intentions to purchase used cars in the online marketplaces and identify the critical attributes that played important roles in driving purchase intentions. Qualitative results were then summarized in written form, whereas quantitative results were analyzed using the Statistical Package for the Social Sciences (SPSS) program.

CHAPTER 4

RESULTS AND DISCUSSION

4.1 Key Findings from Exploratory Research

Exploratory research was conducted to explore used car information from websites, web boards, articles, and journals and presented as a literature review in Chapter 2. Several studies were conducted regarding the criteria for purchasing used cars and used car online business models. Two critical factors leading to automobile website user satisfaction were suggested as content quality and ease of navigation. A key success for used car marketplaces was that used car information must be provided in the website, including product criteria and product description, and data must be transparent, easy to understand, and precise.

4.2 Key Findings from Qualitative Research

In-depth interviews were piloted by five respondents and then conducted with 15 respondents who had purchased a used car within the last five years. There were three sections of questions consisting of five main objectives including exploring the general behavior of purchasing used cars, identifying the methodology used to search for car information, determining purchasing criteria, identifying consumer online used car marketplace awareness and perception, and understanding insight perception toward inspection features. The key findings from the in-depth interviews were as follows:

1) All respondents perceived that it was risky to purchase used cars from car dealerships

All 15 interviewees perceived that purchasing used cars from car dealerships was high risk. Some mentioned that they would never purchase a used car from a car dealership. They would rather wait for a few months to buy a used car from someone who they knew personally and trusted. Some also mentioned that they realized that some online used car marketplaces were paid advertising revenue by used car dealerships; as a result, they blocked the sites and never revisited. They suggested that

online marketplaces should clearly and transparently indicate the owners of the used cars.

2) The paying customers was not always the used car user.

Many used car user owners did not make the decision to buy or select their used cars. This was because parents wanted their children to become familiar with their first car before purchasing a brand new car for them. They perceived that as their children were not familiar with driving, they might have an accident and damage their car. So, they did not want to damage a brand new car. It is important for online marketplaces to identify their customers clearly and know who they are, their preferences, and how to capture them correctly.

3) An inspection service might be an additional sale promotion for online used car marketplaces.

Most of the interviewees were not skilled mechanics. They usually asked their friends or family members to assist in inspecting the car to check the condition before purchase. An additional service as an inspection could encourage customers to visit the website, as they were looking for a trustworthy site that provided an inspection service to help them determine the condition of the car before making a purchasing decision. Limitations could be set for the inspection cost.

4) There is usually a period of a few months before the purchaser makes a decision.

Consumers who wanted to purchase used cars would regularly search for information from many online sources such as used car marketplaces, used car web boards, and used cars on social media. They usually took two months to search for information about brand, car performance, and review before making a decision to purchase. One interesting comment from many respondents was that they believed comments from experts on used car web boards more than those in the online marketplace.

5) Used car owners or users are unlikely to visit the online marketplace.

Consumers who wanted to purchase used cars visited the site to check prices and browse for cheap cars; however, the users rarely visited online used car marketplaces. They preferred to join a group on social media to chat with experts and read articles about car performances.

6) Transparency is the key to drive customers to the site.

The most important attribute that customers expected from an online used car marketplace was transparency. Secondary attributes were mentioned equally as finance, service, and a full description of car information. However, numerous customer expectations were not fulfilled by online marketplace websites.

4.3 Key Findings from Quantitative Research

The questionnaire was distributed to used car users, except for those who participated in the pilot test, using convenient sampling. A total of 102 respondents were sourced through online channels such as Facebook and car web boards. The purpose of the first three questions in the screening section (Appendix B2 Section B2.1) was to screen and group the respondents by asking questions about their experiences on purchasing, decision-making and using used cars. The screening questions were designed to segment the respondents into two groups as experienced used car purchasers and used car users. The first objective was to build customer profiles to understand the demographic characteristics of the respondents as follows:

Table 4.1 Type of respondent by gender (N=102)

Type of user	Male	Female	Total
Purchaser	36	26	62
User	19	21	40
Total	55	47	102

There is no significant difference between purchasers and users regarding gender (refer to Appendix A1, Pearson's chi-squared test = 0.004). Most respondents are men at 54%.

Table 4.2 Type of respondent by age (N=102)

Type of user	21-30	31-40	41-50	51-60	Total
Purchaser	10	27	15	10	62
User	17	20	3	0	40
Total	27	47	18	10	102

Most respondents are 21-40 years old at 73% of the total respondents, while the age of users is almost equally distributed between 21-30 and 31-40. Purchasers are mainly aged 30-39 at 44% of the total. There is a significant difference between purchasers and users regarding age range, as the purchasers are relatively older than the users. (refer to Appendix A2, Pearson Chi-Square = 0.001)

Table 4.3 Type of respondent by status (N=102)

Type of user	Single	Married	Total
Purchaser	38	24	62
User	35	5	40
Total	73	29	102

The majority of both used car purchasers and users are single at 72% of the total respondents. There is a significant difference between purchasers and users with respect to status since users were less likely to be married than purchasers. (refer to Appendix A3, Pearson Chi-Square = 0.004)

Table 4.4 Type of respondent by personal income (N=102)

Type of user	Less than	50k –	100k –	Greater than	Total
	50k	100k	150k	150k	
Purchaser	21	13	16	12	62
User	17	16	5	2	40
Total	38	29	21	14	102

People with higher personal income are less likely to own a used car but more likely to be used car purchasers. A total of 37% of the respondents has income less than 50,000 baht a month. There is also a significant difference between purchasers and users regarding personal income, with purchasers prone to be more affluent than users. (refer to Appendix A4, Pearson Chi-Square = 0.025)

Table 4.5 Descriptive table on used car acquisition (N=102)

Q4 Where did you acquire used	Purchaser	User	Total
car from?			
Acquaintance	36	22	58
Online used car marketplace	19	3	22
Automobile dealership	28	15	43
Automobile auction	7	5	12
Automobile fair and exhibition	2	0	2
Automobile company	2	2	4
The company I personally know	5	5	10

Multiple choice questions were asked to determine how the respondents acquired their used car(s). Results indicated that 57% of the purchasers and users purchase their used car from acquaintances. The online used car marketplace is ranked as the third channel for acquiring a used car. Moreover, results show a significant difference between purchaser and user regarding used car acquisition from the online marketplace. Purchasers are more likely to acquire their used car from online used car marketplaces than users who are likely to bought cars from other sources. (refer to Appendix A5, Pearson Chi-Square = 0.006)

Table 4.6 Descriptive table on general characteristic of respondent's behavior (N=102)

Q5 How well these statements describe you?	Type of user	N	Mean	Std. Deviation	Std. Error Mean
I can inspect used car by myself	purchaser	62	2.79	1.345	.171
T can hispect used car by hissen	user	40	2.30	1.067	.169
I can afford used car by myself	purchaser	62	3.65	1.319	.168
	user	40	3.08	1.185	.187
I know someone who I can loan the	purchaser	62	1.92	1.106	.140
money	user	40	2.63	1.480	.234
I can handle the process of purchasing	purchaser	62	3.45	1.126	.143
used car by myself	user	40	2.83	1.196	.189

Eight selected questions about the general characteristics of used car purchasers and users were based on a 5-point likert scale. Four out of the eight questions showed significant differences between experienced purchasers and users on general characteristics (refer to Appendix A6). Firstly, experienced used car purchasers (Mean purchaser = 2.79) perceive that they are capable of inspecting the car by themselves (Mean user = 2.30)(t = 2.043, p = 0.44). However, the mean of purchasers regarding inspecting the used car themselves is less than the average at 3.00. Secondly, experienced purchasers (Mean purchaser = 3.65) could afford used cars while users could not (Mean user = 3.08)(t = 2.216, p = 0.029). Thirdly, users (Mean user = 2.63) know someone who they could borrow money from while experienced purchasers do not (Mean purchaser = 1.92)(t = -2.586, p = 0.012). Lastly, experienced purchasers (Mean purchaser = 3.45) could handle the process of used car purchasing better than users (Mean user = 2.83)(t = 2.678, p = 0.009).

The second and third objectives to identify barriers and trigger motivations were explained through the marketing framework of the purchase funnel. The questionnaire asked the respondents Yes-No questions regarding their experience at three stages of the online used car marketplace including awareness (knowing the website), trial (visiting the website) and purchase (purchasing a used car from the website). Results are explained in Table 4.7

Table 4.7 Descriptive table on online used car marketplace purchase funnel (N=102)

Type of user	Purchaser	User	Total
Total respondent	62	40	102
Awareness Phase	52	23	75
(Knowing the site)			
Trial Phase	51	22	73
(Visiting the site)			
Purchase Phase	19	0	0
(Purchasing used car from the site)			

Three-quarters of the respondents realize that online used car marketplaces are available on the Internet. Experienced purchasers are 84% aware that online used car marketplaces existed, while users accounted for 58%. Surprisingly, only a few people who know about the online used car marketplace omit the purchase funnel during the trial phase, as almost all of them visited these sites. Nevertheless, 74% of customers who visit the online used car marketplace finish their journey at the website trial phase and do not progress to the purchase phase. Many customers who omit the purchase funnel do not continue to purchase a used car from online used car marketplaces.

Table 4.8 Descriptive table on attributes toward respondents visiting online used car marketplace (N=73)

Q8 Why did you visit certain online used car marketplace website?	Type of user	N	Mean	Std. Deviation	Std. Error Mean
There are a variety of car in	purchaser	51	4.10	.671	.094
this site	user	22	3.59	.959	.204
This site is ease navigation	purchaser	51	4.18	.434	.061
use.		22	3.77	.869	.185
I usually love to visit used	purchaser	51	3.10	1.404	.197
car website regularly	user	22	2.27	.935	.199
This site provides complete	purchaser	51	3.51	.880	.123
car information	user	22	3.05	.844	.180

Only respondents who answered 'yes' that they are aware of the existence of the online used car marketplace could progress to answer these questions (N=73). Four out of the ten questions show significant differences between purchasers and users regarding attributes toward users visiting online marketplaces including variety of car, ease of navigation, regular visits, and completeness of information.

Table 4.9 Descriptive table on customer perception toward trigger motivations to purchase used car from online marketplace (N=19)

Q11 Why did you purchase a used car from online used car marketplace website?	N	Mean	Std. Deviation
Someone recommends me to buy used car from this website	19	2.87	1.486
I feel trust this website that I will get a good used car.	19	3.00	0.905
This website provides inspection service before purchasing used car	19	2.26	1.137
This website provides financial service after purchasing used car	19	2.13	1.14
This website provides insurance service after purchasing used car	19	2.26	1.214
I found cheapest used car from this website	19	3.04	1.261
This website provides good consultation	19	2.43	1.121
This website provides good after-sell service	19	2.22	1.085
This website help to handle the document for purchasing used car	19	2.35	1.265
I urgently need to purchase used car as soon as possible	19	2.26	1.251
I need to purchase used car but I can wait for 3 months	19	2.48	1.31
The seller seems to be trustworthy	19	3.22	1.126
I do not have sufficient time to visit car dealership	19	3.57	1.08

Thirteen questions were asked regarding customer perception toward trigger motivations to purchase used cars from online marketplaces. Only respondents who answered 'yes' that they have purchased used cars from online used car marketplaces could answer these questions (N=19). The top three factors that could help in triggering web visitors to purchase used cars from online websites are time constraint to visit a dealership (Mean = 3.57), trust of the seller (Mean = 3.22), and low price (Mean = 3.04).

Table 4.10 Descriptive table on customer perception toward barriers to purchase used car from online marketplace (N=54)

Q12 Why did you not purchase a used car from online used car marketplace website?	N	Mean	Std. Deviation
This website has poor reputation	54	2.54	0.762
I do not believe in this website	54	2.88	0.982
I am concerned that the used car seller will cheated on me	54	3.52	1.129
This website does not provide inspection service	54	3.08	1.047
This website does not provide finance service	54	2.44	0.929
This website does not provide insurance service	54	2.64	1.045
The price of used car in this website is expensive	54	2.98	0.845
This website does not provide consulting service	54	2.94	0.956
This website does not provide after-sell service	54	3.04	1.106
This website does not provide document handling service	54		
for purchasing used car		2.7	0.909
This website is complex and hard to navigate	54	2.48	1.015
I checked car condition and found that it is poor quality.	54	2.74	1.046
I changed my mind to purchase new car	54	2.78	1.13

Another 13 questions were asked about customer perception toward barriers to purchase used cars from online marketplaces. Only respondents who answered 'no' they never used online websites to purchase used cars could answer these questions (N = 54). The top three reasons that obstructs visitors to purchase used cars from online websites are fraud and cheating by the seller (Mean = 3.52), no inspection service (Mean = 3.08), and no after-sales service (Mean = 3.04).

The fourth objective was to provide recommendations to marketplaces to improve key critical attributes. Eleven questions were asked about customer expectations and perceptions regarding the key attributes on online used car marketplaces.

Table 4.11 Descriptive table on customer perception toward expectation on online used car marketplace (N=102)

Q13 How much important on each attribute to online used car marketplace?	Type of user	N	Mean	Std. Deviation	Std. Error Mean
The finance service is important to	purchaser	62	2.92	1.245	.158
online used car marketplace website	user	40	3.43	1.130	.179
The after-sell service is important to	purchaser	62	3.84	1.059	.134
online used car marketplace website	user	40	4.25	.776	.123

There is a significant difference regarding customer expectations from online used car marketplaces between purchasers and users regarding two attributes. Finance services are more important to users (Mean user = 3.43) than purchasers (Mean purchaser = 2.92)(t = -2.075, p = 0.041), and after-sales service was more important to users (Mean user = 4.25) than purchasers (Mean purchaser = 3.84)(t =-2.116, p = 0.037). Therefore, customer expectations of users are higher than those of purchasers.

Table 4.12 Descriptive table on customer perception toward performance on online used car marketplace (N=102)

Q14 How much currently online used car marketplace can deliver on these attributes?	Type of user	N	Mean	Std. Deviation	Std. Error Mean
Current online used car marketplace	purchaser	62	3.32	.696	.088
website is trustworthy	user	40	3.03	.768	.121
Current online used car marketplace	purchaser	62	3.74	.599	.076
website provides variety of list car	user	40	3.45	.714	.113

There is a significant difference in customer perceptions regarding the performance of online used car marketplaces between purchasers and users for two points. Purchasers (Mean purchaser = 3.32) perceive that current websites are more trustworthy than users (Mean user = 3.03) (t = 2.025, p = 0.046). Furthermore, purchasers (Mean purchaser = 3.03) also perceive that current websites provide more variety of listed cars than users (Mean user = 3.03) (t = 2.227, p = 0.028).

Table 4.13 Descriptive table on mean of expectation and performance perception toward online used car marketplace

Attribute on customer	Purchaser				User		
expectation and performance	Mean of Q13	Mean of Q14	Gap	Mean of Q13	Mean of Q14	Gap	
1.Trustworthy of Website	4.10	3.32	-0.78	4.1	3.03	-1.07	
2.Trustworthy of seller	4.19	3.02	-1.17	4.38	3	-1.38	
3.Complete information	4.40	3.24	-1.16	4.43	3.23	-1.20	
4.Ease navigation	4.00	3.63	-0.37	3.98	3.5	-0.48	
5.Quick service	3.98	3.37	-0.61	3.95	3.35	-0.60	
6.Variety of car	4.06	3.74	-0.32	4.05	3.45	-0.60	
7.Finance service	2.92	3.13	0.21	3.43	3.15	-0.28	
8.Inspection service	3.97	3.15	-0.82	4.10	3.23	-0.87	
9.Insurance service	3.66	3.21	-0.45	3.80	3.15	-0.65	
10. Consulting service	3.71	3.18	-0.53	3.78	3.18	-0.60	
11.After-sell service	3.84	3.11	-0.73	4.25	3.18	-1.07	
Average	3.89	3.28	-0.61	4.02	3.22	-0.80	

A set of 11 questions asked respondents about customer expectations and perceptions toward online used car marketplaces. Findings show that online used car marketplaces do not deliver critical dimensions to meet both used car purchaser's and user's expectations, except for finance services for purchasers (gap for purchaser = 0.210). The two largest gaps for both purchaser and user are trustworthy seller (gap for purchasers = -1.17 and gap for users = -1.38), and completeness of information (gap for purchasers = -1.16 and gap for users = -1.20). Users perceived that the current marketplace deliver lower performance than purchasers, and also the average expectation of users is higher than that of purchasers.



Figure 4.1 Mean of expectation and performance perception toward online used car marketplaces for purchasers

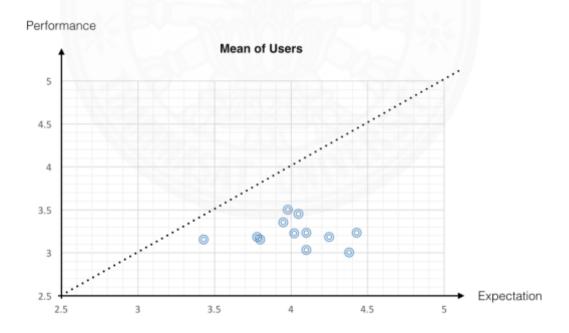


Figure 4.2 Mean of expectation and performance perception toward online used car marketplaces for users

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

There were several stages where customers could get more involved in purchasing used cars such as selecting, influencing, purchasing, and owning. In this research, emphasis was placed on the best method to convert used car users to purchase used cars from online marketplaces, as this customer segment had low barriers to minimize negative perception toward used cars. Respondents were divided into two groups: experienced used car purchasers and users, to study the differences between them. Both qualitative and quantitative findings concluded that there were significant differences in behavior and perception regarding several aspects between experienced used car purchasers and users.

Firstly, customer profiles between used car purchasers and users were significantly different. The persona of a typical used car purchaser was a married male aged 30-39 who was able to inspect the used car, could afford to buy the car and was familiar with the online used car marketplace, whereas that of a typical user was a young, single male or female aged 20-29 who knew someone that could loan money to buy the car and was not familiar with the online used car marketplace.

Furthermore, there were three main stages of the purchase funnel related to online used car marketplaces including awareness (knowing), trial (visiting), and purchase. Most used car purchasers were aware that the online used car marketplace existed, while about 60% of used cars users did not realize that there was an online used car marketplace. Three important key attributes why used car purchasers visited used car websites more regularly than users were the variety of cars, ease of navigation, and completeness of car information on the online marketplace platform. The trial phase showed highly promising results as almost all customers who knew that the online marketplace existed visited used car websites. However, less than half of the purchasers decided to buy used cars from the online marketplace. Three main barriers that obstructed them to purchase used cars from online websites were fraud and cheating by the seller, no inspection service, and no after-sales service. On the other

hand, time constraints to visit dealerships, trust in the seller, and low price were the top three reasons that helped to trigger visitors to purchase used cars from online websites.

Importantly, results demonstrated numerous gaps between customer expectation and perception for the online marketplace to improve on several key critical attributes. The two largest gaps requiring urgent improvement were trustworthy sellers and completeness of car information. This was an even more severe problem for used car users because the gaps on all eleven critical attributes toward customer expectation and perception of users were wider than that of purchasers.

5.2 Recommendations

To encourage used car users to purchase used cars online: 1) online used car marketplaces should promote their platforms to reach this valuable customer segment because the group of used car users has a low awareness that used car marketplaces exist, and 2) online used car marketplaces must understand their customers. Users fear cheating and deception by anonymous used car sellers in the online marketplace; therefore, a platform can minimize this obstacle by providing car inspection and aftersales service. Also, although users knew someone they could borrow money from to purchase used cars, they still looked for financial loan services in the marketplace.

To retain used car purchasers with a marketplace platform, the marketplace could reduce advertising cost to target this customer segment, as purchasers strongly recognized that online used car marketplaces existed. Three factors including the variety of cars, ease of navigation, and completeness of car information helped to attract used car purchasers to stay tuned and regularly visit the websites. However, the conversion rate to purchase used cars from the online marketplace still showed a gap for improvement. Even though the purchasers were competent and able to inspect used cars by themselves, they were still worried that they might be cheated by used car sellers and interested in inspection and after-sales services to ensure high quality of the used cars. Moreover, they were an important customer segment as they could afford to purchase used cars and understood the process of online purchasing well;

however, they experienced difficulty in visiting used car dealerships due to time limitations. A website that can handle the problem of trust of the seller with lower prices could reap beneficial advantages that triggered the purchase of used cars online.

5.3 The Limitation

Research limitations might affect the accuracy of the findings. One limitation was the selection of a convenience sampling method to choose qualified respondents to answer the online questionnaire due to time constraints. Another was the distribution of the online questionnaire using snowball techniques; as a result, the findings might lead to similar clusters of respondents.

5.4 The Significance of Study

The study will be useful for online used car marketplaces to understand customer profiles, the barriers to purchase, and trigger motivations including potential strategic recommendations. The marketplace should adopt strategies to shift prospective customers from offline to online channels, resulting in unlocking the gap of customer behavior and enhancing the exponential growth of the used car industry.

REFERENCES

- Capgemini Consulting Techonology Outsourcing. (2007). *The Anatomy and Physiology of the Used Car Business* [Press Release]. Retrieved from https://www.capgemini.com/resources/anatomy and physiology of the used car-business
- Gustavsson, M. & Johansson, A. (2006). Consumer Trust in E-commerce. Kristianstad University
- Ho Geun Lee. (1997). *Electronic Intermediary for Used-Car Transactions*[Fact sheet] Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download/2doi=10.1.1.108.683&rep=rep1&type=pdf
- Lee, M. & Youn, S. (2009) How electronic word of mouth platform influence consumer product judgement. *International Journal of Advertising*, 28(3), pp. 473-499. https://www.scribd.com/document/1107761106/Electronic-Word-of-Mouth-eWOM-Platforms-Influence-Consumer-Product-Judgement
- Nataraj, S. & Dr. Nagaraja, N. (2013). Customer satisfaction in automobile industry an Indian online buyers' perspective of car manufacturers' websites.

 International Journal of Multidisciplinary Research Vol.2 Issue 6, 92-107
- Parkin, R., Bakker, J., Hoppe, S., & Awad, S. (2015) The future of the U.K. used car market & Trends and opportunities. *Strategy* & Retrieved from http://www.strategyand.pwc.com/reports/future-uk-used-car-market
- Scott A. Wolla, Ph.D. (2016). Why is it so difficult to buy a high-quality used car?

 [Fact sheet] Retrieved from https://research.stlouisfed.org/publications/page1-econ/2016-011-01/why-is-it-so-difficult-to-buy-a-high-quality-used-car_SE.pdf

Xujiao, Z, Lihua, C & Jing, L (2014) The Development Strategies of Used Cars E-commerce. *International Journal of Business and Social Science Vol.5, No.6*http://ijbssnet.com/journals/vol_5_no_6_may_2014/17.pdf





APPENDIX A RESULTS FROM QUANTITATIVE RESEARCH

APPENDIX A1 Chi-square tests between type of users and gender

	C	hi-Square Te	ests		
Q15 Gender	Value	df	Asymp. Sig. (2- sided)	Exact Sig. (2-sided)	Exact Sig. (1- sided)
Pearson Chi-Square	1.092a	1	.296		
Continuity Correction ^b	.708	1	.400		
Likelihood Ratio	1.092	1	.296		
Fisher's Exact Test				.316	.200
Linear-by-Linear Association	1.081	1	.298		
N of Valid Cases	102				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 18.43.

APPENDIX A2 Chi-square tests between type of users and age

	Chi-Square Tests											
Q16 Age	Value	df	Asymp. Sig. (2-sided)									
Pearson Chi-Square	16.898a	3	.001									
Likelihood Ratio	20.696	3	.000									
Linear-by-Linear Association	16.623	1	.000									
N of Valid Cases	102											

a. 1 cells (12.5%) have expected count less than 5. The minimum expected count is 3.92.

b. Computed only for a 2x2 table

APPENDIX A3 Chi-square tests between type of users and status

	C	Chi-Square Te	ests		
Q17 Status	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1- sided)
Pearson Chi-Square	8.208 ^a	1	.004		
Continuity Correction ^b	6.971	1	.008		
Likelihood Ratio	8.881	1	.003		
Fisher's Exact Test				.006	.003
Linear-by-Linear Association	8.128	1	.004		
N of Valid Cases	102				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 11.37.

APPENDIX A4 Chi-square tests between type of users and personal income

	Chi-Square T	Γests	My III
Q18 Personal Income	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.325 ^a	3	.025
Likelihood Ratio	9.934	3	.019
Linear-by-Linear Association	5.534	1	.019
N of Valid Cases	102		//
a 0 cells (0.0%) have expecte	ed count less than	5 The minim	im expected count is

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.49.

b. Computed only for a 2x2 table

APPENDIX A5 Chi-square tests between type of users and the acquisition of used car (online used car marketplace)

	(Chi-Square T	ests		
Q4.2 Online used car marketplace	Value	df	Asymp. Sig. (2- sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	7.699 a	1	.006		
Continuity	6.392	1	.011		
Correction ^b					
Likelihood Ratio	8.641	1	.003		
Fisher's Exact Test				.006	.004
Linear-by-Linear	7.624	1	.006		
Association		- [t b]			
N of Valid Cases	102	7.7.			

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 8.63.

APPENDIX A6 Independent sample t-test between type of users and general characteristic of user car

			Ind	epend	ent Sar	nples [Гest	0 2				
O5 Have	well those	Levene' for Equ of Vari	ality		t-test for Equality of Means							
Q5 How well these statements describe you?		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Confi Interva Diffe	dence l of the rence		
									Lower	Upper		
I can inspect	Equal variances assumed	4.249	.042	1.944	100	.055	.490	.252	010	.991		
used car by myself	Equal variances not assumed			2.043	95.655	.044	.490	.240	.014	.967		
I can afford	Equal variances assumed	.389	.534	2.216	100	.029	.570	.257	.060	1.081		
used car by myself	Equal variances not assumed			2.268	89.658	.026	.570	.251	.071	1.070		
I know someone	Equal variances assumed	15.477	.000	- 2.751	100	.007	706	.257	-1.215	197		
who I can loan the money	Equal variances not assumed			- 2.586	66.643	.012	706	.273	-1.250	161		

I can	Equal									
handle the	variances	.135	.714	2.678	100	.009	.627	.234	.162	1.091
process of	assumed									
purchasing	Equal									
used car	variances			2.643	79.707	.010	.627	.237	.155	1.098
by myself	not assumed									

APPENDIX A7 Independent sample t-test between type of users and attributes toward user visiting online marketplace

			Ind	epend	ent Sa	mples '	Test					
Q8 Why o		Leve Test Equal Varia	for ity of		t-test for Equality of Means							
used car marketpla website?	ce	F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	Confi Interva	dence l of the rence Upper		
There are a	Equal variances assumed	7.731	.007	2.590	71	.012	.507	.196	.117	.898		
variety of car in this site	Equal variances not assumed			2.254	30.237	.032	.507	.225	.048	.967		
This site is	Equal variances assumed	4.399	.040	2.653	71	.010	.404	.152	.100	.707		
ease navigation	Equal variances not assumed			2.070	25.633	.049	.404	.195	.003	.805		
I usually love to visit	Equal variances assumed	8.742	.004	2.522	71	.014	.825	.327	.173	1.478		
used car website regularly	Equal variances not assumed			2.948	58.463	.005	.825	.280	.265	1.386		
This site provides	Equal variances assumed	1.422	.237	2.093	71	.040	.464	.222	.022	.907		
complete car information	Equal variances not assumed			2.129	41.501	.039	.464	.218	.024	.905		

APPENDIX A8 Independent sample t-test between type of users and customer expectation toward online used car marketplace

			Inc	depen	dent Sa	mples	Test						
Q13 How important		Leve Test Equal Varia	for ity of		t-test for Equality of Means								
attribute to online used car marketplace?		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference		dence l of the			
The finance service is important	Equal variances assumed	3.321	.071	2.075	100	.041	506	.244	989	022			
to online used car marketplace website	Equal variances not assumed			2.119	89.104	.037	506	.239	980	032			
The after- sell service is important	Equal variances assumed	.984	.324	- 2.116	100	.037	411	.194	797	026			
to online used car marketplace website	Equal variances not assumed		N	2.259	98.283	.026	411	.182	773	050			

APPENDIX A9 Independent sample t-test between type of users and customer perception toward online used car marketplace

			In	depen	dent Sa	mples	Test						
Q14 How currently of		Leve Test Equal Varia	for ity of		t-test for Equality of Means								
used car marketplace can deliver on these attributes?		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Confi Interva Diffe	rence			
Current online used	Equal variances assumed	.041	.840	2.025	100	.046	.298	.147	Lower	Upper .589			
marketplace website is trustworthy	Equal variances not assumed			1.982	77.424	.051	.298	.150	001	.597			
Current online used car	Equal variances assumed	3.860	.052	2.227	100	.028	.292	.131	.032	.552			
marketplace website provides variety of list car	Equal variances not assumed			2.144	72.808	.035	.292	.136	.021	.563			

APPENDIX B

EXAMPLE QUESTIONS FOR RESEARCHES

APPENDIX B1 In-depth Interview Question Guide

Section B1.1 Overview Experience Section

- 1) How many used car did you purchased?
- 2) What brand and model used car did you purchased?
- 3) How much did used car cost?
- 4) What the specification of used car looked like?
- 5) Where and How do you purchased it?
- 6) How long did you use that used car?
- 7) How many used car did you purchased?
- 8) Why did you consider used car rather than new car?
- 9) What are you doing including other demographic question?
- 10) How much rating did you give for this used car?

Section B1.2 Searching Information Section

- 1) How do find information about used car?
- 2) Which source of information that you trust the most? Why?
- 3) How frequent did you visit and research used car?
- 4) How long did you research used car before buying used car?
- 5) Why did you visit and research used car on that platform?
- 6) What kind of information did you look for?

Section B1.3 Purchase Funnel Section

- 1) Do you know used car marketplace website?
- 2) Do you visit used car marketplace website? Why?
- 3) Do you purchase used car from used car marketplace website? Why?
- 4) Do you re-purchase used car from used car marketplace website? Why?
- 5) What is the expectation that you look from website?

APPENDIX B2 Online Survey Questionnaire

ALLE	VDIX B2 Omine Survey Questioning	inc				
Section	B2.1 Screening section					
	you purchase your used car by yours	elf?				
ŕ	o Yes, I paid		> (Go	to Q2)		
	o No, someone else paid		> (Go	to Q2)		
	o I have never involved with used of	ear.	> (Go	to Q2)		
2) Did	you select your used car's brand and	model b	y yourse	lf?		
	o Yes, I selected		> (Go			
	 No, someone else selected 		> (Go	o to Q3)		
	o I have never involved with used of	ear.	> (Go	to Q3)		
3) Did	you use or own used car?					
	o Yes	1///	> (Go	to Q4 S	Section	B2.2)
	o No		> (Te	erminate))	
	B2.2 Purchase Funnel_on Online use jective 3)	d car ma	ırketplace	e Section	ı (Objec	ctive 2
4) Wh	ere did you acquire used car from? (Y	ou can	select mo	re than o	one cho	oice)
	 Acquaintance 		> (Go			
	o Online used car marketplace		> (Go	o to Q5)		
	o Automobile dealership		> (Go	o to Q5)		
	o Automobile auction		> (Go	to Q5)		
	 Automobile fair and exhibition 		> (Go	to Q5)		
	 Automobile company 		> (Go	to Q5)		
	o The company I personally know		> (Go	o to Q5)		
5) Ho	w well these statements describe you?		> (G	o to Q6))	
Ho	w well these statements describe	Strongly	Disagree	Neutral	Agree	Strong

How well these statements describe you? (1 = Definitely No, It's not me, 5 = Definitely Yes, It's me)	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Q5.1 I can inspect used car by myself					
Q5.2 I know someone who can help					
me inspect used car that I want to buy					
Q5.3 I can afford used car by myself					
Q5.4 I know someone who I can loan					
the money					

Q5.5 I can loan the money by myself			
Q5.6 I can handle the process of purchasing used car by myself			
Q5.7 I know someone who can help			
me to handle the process of purchasing			
used car			
Q5.8 Used car is the primary car for			
myself or my family			

6	Dox	zou kno	w online	used c	ar mark	cetplace	website?
v.	י טע	you kiio	w ominic	uscu c	ai illair	<i>xcipiace</i>	w cosite:

0	Yes	> (Go to Q7)
0	No	> (Go to Q13 Section B2.3)

- 7) Have you ever visited online used car marketplace website?
 - $\circ \quad Yes \qquad \qquad ----> (Go \ to \ Q8)$
 - \circ No ----> (Go to Q9)
- 8) Why did you visit certain online used car marketplace website? ---> (Go to Q10)

Why did you visit certain online used car marketplace website? (1 = Definitely No, It's not me, 5 = Definitely Yes, It's me)	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Q8.1 Someone recommended me to visit this site					
Q8.2 There are a variety of car in this site					
Q8.3 This site is ease navigation					
Q8.4 There are numerous quality cars in this site					
Q8.5 I want to compare market price of used cars before dealing with car dealerships					
Q8.6 I usually love to visit used car website regularly					

Q8.7 I hope someone might sell a car cheaper than market price in this site. I will buy it for personal use or family use.			
Q8.8 I hope someone might sell a car cheaper than market price in this site. I will sell it to others			
Q8.9 This site separated used car from car dealership and car owner clearly			
Q8.10 This site provides complete car information			

9) Why did you not visit online used car marketplace website? ----> (Go to Q13 Section B2.3)

Why did you not visit online used car marketplace website? (1 = Definitely No, It's not me,	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
5 = Definitely Yes, It's me) Q9.1 I feel it wastes my time					
•					
Q9.2 I will buy used car only from			- // /		
closed or known person					
Q9.3 I do not trust the website			11/		
Q9.4 I feel that used cars from car					
dealers					
Q9.5 I feel that I won't get a good car					
deal because I am not regularly visit					
these websites.					
Q9.6 I feel that it is full of bad quality					
car					
Q9.7 I prefer to see and touch car					
directly					

10) Have y	ou ever purchased from	n online used	l car marke	etplace web	osite'?
0	Yes			> (Go to Q	(11)
0	No			> (Go to Q	(12)

11) Why did you purchase a used car from online used car marketplace website? ----> (Go to Q13 Section B2.3)

Why did you purchase a used car from online used car marketplace website? (1 = Definitely No, It's not me, 5 = Definitely Yes, It's me)	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Q11.1 Someone recommends me to buy used car from this website					
Q11.2 I feel trust this website that I will					
get a good used car.					
Q11.3 This website provides inspection					
service before purchasing used car					
Q11.4 This website provides financial					
service after purchasing used car					
Q11.5 This website provides insurance	1000				
service after purchasing used car			A\\\		
Q11.6 I found cheapest used car from	/ 14		5111		
this website					
Q11.7 This website provides good					
consultation					
Q11.8 This website provides good after-					
sell service	$\mathcal{L}\mathcal{H}$				
Q11.9 This website help to handle the		\bigcirc	///		
document for purchasing used car		y_{A}			
Q11.10 I urgently need to purchase used					
car as soon as possible					
Q11.11 I need to purchase used car but I					
can wait for 3 months					
Q11.12 The seller seems to be					
trustworthy					
Q11.13 I do not have sufficient time to					
visit car dealership					

12) Why did you not purchase a used car from online used car marketplace website? ----> (Go to Q13 Section B2.3)

S = Definitely Yes, It's me) Q12.1 This website has poor reputation Q12.2 I do not believe in this website Q12.3 I am concerned that the used car seller will cheated on me Q12.4 This website does not provide inspection service Q12.5 This website does not provide finance service Q12.6 This website does not provide insurance service Q12.7 The price of used car in this website is expensive Q12.8 This website does not provide consulting service Q12.9 This website does not provide dafter-sell service Q12.10 This website does not provide document handling service for purchasing used car
Q12.2 I do not believe in this website Q12.3 I am concerned that the used car seller will cheated on me Q12.4 This website does not provide inspection service Q12.5 This website does not provide finance service Q12.6 This website does not provide insurance service Q12.7 The price of used car in this website is expensive Q12.8 This website does not provide consulting service Q12.9 This website does not provide after-sell service Q12.10 This website does not provide document handling service for
Q12.3 I am concerned that the used car seller will cheated on me Q12.4 This website does not provide inspection service Q12.5 This website does not provide finance service Q12.6 This website does not provide insurance service Q12.7 The price of used car in this website is expensive Q12.8 This website does not provide consulting service Q12.9 This website does not provide after-sell service Q12.10 This website does not provide document handling service for
seller will cheated on me Q12.4 This website does not provide inspection service Q12.5 This website does not provide finance service Q12.6 This website does not provide insurance service Q12.7 The price of used car in this website is expensive Q12.8 This website does not provide consulting service Q12.9 This website does not provide after-sell service Q12.10 This website does not provide document handling service for
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consulting service Q12.9 This website does not provide after-sell service Q12.10 This website does not provide document handling service for
Q12.9 This website does not provide after-sell service Q12.10 This website does not provide document handling service for
after-sell service Q12.10 This website does not provide document handling service for
Q12.10 This website does not provide document handling service for
document handling service for
nurchasing used car
parenasing asea car
Q12.11 This website is complex and
hard to navigate
Q12.12 I checked car condition and
found that it is poor quality.
Q12.13 I changed my mind to purchase
new car

Section B2.3 Customer Perceptions Toward Online used car marketplace Section (Objective 4)

13) How much important on each attribute to online used car marketplace? ----> (Go to Q14)

How much do you agree with these statements? (1 = Totally disagree, 5 = Totally agree)	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Q13.1 The trustworthy of website is					
important to online used car					
marketplace website					
Q13.2 The trustworthy of seller is	200				
important to online used car					
marketplace website					
Q13.3 Completeness of car information			J/I		
is important to online used car	1 4		- 111		
marketplace website			1741		
Q13.4 The easy and convenient is					
important to online used car		$^{\wedge}$			
marketplace website					
Q13.5 The quick service is important to	$M \rightarrow$				
online used car marketplace website	(44	N/A	. // /		
Q13.6 The variety of list car is		7/4	$\forall II$		
important to online used car			1//		
marketplace website					
Q13.7 The finance service is important		7//			
to online used car marketplace website					
Q13.8 The inspection service is					
important to online used car					
marketplace website					
Q13.9 The insurance service is					
important to online used car					
marketplace website					
Q13.10 The consulting service center is					
important to online used car					
marketplace website					
Q13.11 The after-sell service is					
important to online used car					
marketplace website					

14) How much currently online used car marketplace can deliver on these attributes? ----> (Go to Q15 Section B2.4)

How much do you agree with these	Strongly	Disagree	Neutral	Agree	Strongly
statements?	Disagree (1)	(2)	(3)	(4)	Agree (5)
(1 = Totally disagree, 5 = Totally agree)					
Q14.1 Current online used car					
marketplace website is trustworthy					
Q14.2 The seller in current online used					
car marketplace website is trustworthy					
Q14.3 Current online used car					
marketplace website provide complete					
car information					
Q14.4 Current online used car		100			
marketplace website is easy and	(////				
convenient		$\mathcal{M}_{\mathcal{M}}$	21/1		
Q14.5 Current online used car	7 -		3 1 1		
marketplace website is time saving					
(quick service)					
Q14.6 Current online used car					
marketplace website provides variety of	11/1/				
list car	ルン	<i></i>	9.57		
Q14.7 Current online used car			- //		
marketplace website provides good	1	YA			
finance service					
Q14.8 Current online used car					
marketplace website provides good					
inspection service					
Q14.9 Current online used car					
marketplace website provides good					
insurance service					
Q14.10 Current online used car					
marketplace website provides good					
consulting service					
Q14.11 Current online used car					
marketplace website provides good					
after-sell service					

Section B2.4 Demographic Section (Objective 1)

- 15) Gender ----> (Go to Q16)
 - o Male
 - o Female
- 16) Age ----> (Go to Q17)
 - o Under 20
 - 0 20-29
 - 0 30-39
 - 0 40-49
 - 0 50-59
 - o Over 60
- 17) Status ----> (Go to Q18)
 - o Single
 - o Married
- 18) Personal Income ----> (End of the questionnaire)
 - o Less than 15,000 baht/month
 - \circ 15,000 30,000 baht/month
 - \circ 30,001 50,000 baht/month
 - \circ 50,001 75,000 baht/month
 - o 75,001 100,000 baht/month
 - o 100,001 150,000 baht/month
 - o 150,001 200,000 baht/month
 - o More than 200,000 baht/month

BIOGRAPHY

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Work Experiences 2014-2016:

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