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Technological Acceptance and Consumer's Behavior on Buying Online Insurance

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Abstract: This research aims to study consumer's behavior on buying online car casualty insurance. The sample group was 400 respondents which were selected by convenience sampling method. Questionnaires were used as a research instrument while chi square was used as a statistical tool for the hypothesis testing. The research revealed two major findings which were 1)there were significant differences between customer's technological acceptance and consumer's behavior on buying online car casualty insurance and 2) there were significant differences between customer's trust and consumer's behavior as well.

Keywords: Consumer's Behavior, Online Insurance, Technological Acceptance

I. INTRODUCTION

In order to do the business in the past, firms mostly invested in infrastructures and location since these factors helped customers to easily access to firms, and this could lead firms to gain more profits. However, world technologies have been rapidly developed. The integration and the development of information technology create opportunities for both big and small firms to access their customers around the globe. Moreover, they also support those firms to work together as we could see many companies promoting their strategic alliances. It can be seen that e-Commerce appears to be a critical choice of companies in terms of improving their effective works, especially customer service matter. E-commerce furthermore creates customer responsiveness which helps companies to respond customer faster, and this could lead to customer's satisfaction. In addition, e-Commerce can also help companies to reduce dramatic costs. Therefore, it can be seen that companies gain various benefit from the e- Commerce mentioned earlier, and in the meantime, this could champion companies to gain sustainable competitive advantage.

Casualty insurance or disaster insurance is one of the businesses that has extremely growth. In Thailand, car insurance business is a very successful business since the demand of Thai drivers have increased every year [1] Many vehicle companies have tried to introduce various budget cars which stimulate consumer demand. The Thai insurance [2] reports that many casualty insurance companies tend to increase their sales volume by using e- Commerce as a channel of distribution. Nevertheless, there are still many people who do not trust this channel deal to different reasons such as its risks and quality. Therefore, this research aims to study consumer's behavior on buying online car casualty insurance by applying the technological acceptance model (TAM) to create acceptance framework focusing on customer's technological acceptance and customer's trust. This study will help insurance companies to have more comprehend on their customer's behavior on buying online business and it could definitely help companies to create their strategic plan in order to respond to the needs of customer.

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A. Objectives of the Study

This research has three main objectives as follows:

- 1) To study consumer's behavior on buying online car casualty insurance.
- 2) To study customer's technological acceptance which influences consumer's behavior on buying online car casualty insurance.

II. RESEARCH FRAMEWORK

3) To study customer's trust which influence consumer's behavior on buying online car casualty insurance.



Figure 1. Research Framework.

III. RESEARCH HYPOTHESIS

1) There were significant differences between customer's technological acceptance in terms of the acceptance of benefits and consumer's behavior in terms of reasons of buying and period of buying car

2) There were significant differences between customer's technological acceptance in terms of the acceptance of benefits and consumer's behavior

3) There were significant differences between customer's trust and the consumer's behavior

IV. RELEVANT CONCEPTS AND THEORIES

In order to create and support this research framework, the researcher has reviewed various concepts, theories, and information such as technology acceptance model [3], trust concept and theory [4], consumer behavior theory [5], service management and marketing concept [6], business to customer framework as well as all important information about the casualty insurance business and industry.

V. RESEARCH METHODOLOGY

A. Methodology

This is a survey research on consumer's behavior on buying online car casualty insurance. Research data came from both primary and secondary sources.

B. Population and Samples

The study population included all the customers of the car casualty insurance companies in Thailand which were uncountable. Thus, from the formula [7]

$$n = \frac{P(1-P)Z^2}{d^2}$$
(1)

According to the formula, the samples were 385 respondents (Level of confidence = 95%). However, for safety reason, four hundred respondents were conducted in this study. Questionnaires were distributed to respondents who lived in four different regions which were north, east, west, and south. After that, non-probability sampling was done using the convenience technique

Creating Research Tool

The research tool was created in the form of questionnaires, and it was divided into five parts.

Part 1: The demographic information of respondents

Part 2: The technology acceptance model, adapted from a theory by David [3]

Part 3: Customer's trust, adapted from McKnight and Chervany's trust concept [4]

Part 4: Consumer's behavior on buying online car casualty insurance, adapted from Kotler and Keller's theory of marketing [5].

Part 5: Respondents' comments on buying online car casualty insurance.

Questions in part one were arranged in an nominal scale, asking generally demographic information of respondents such as sex, age, marital status, education, types of work, and salary while questions in part two, three, and four were arranged in an ordinal scale with five levels of rating scale: very high, high, neutral, low, and very low.

Scoring criteria of respondents' technological acceptance and trust are as follows:

Average score 4.21 - 5.00 means Very high

Average score 3.41 - 4.20 means High

Average score 2.61 - 3.40 means Neutral

Average score 1.81 - 2.60 means Low

Average score 1.00 - 1.80 means Very low

However, questions in part four are checklist type which are consisted of both nominal and ordinal scale.

Questionnaires were handed out to 5 specialists to verify the content validity by identifying the Index of Item Objective Congruence (IOC) by choosing questions with an index of higher than 0.50 [8]. In relation to the reliability of the research tool, a reliability analysis was done by determining Cronbach Alpha which equaled to 0.812.

VI. DATA ANALYSIS

All data were analyzed by both descriptive statistics and inferential statistics. In particular, descriptive statistics is a method used for general analysis on respondents, i.e. percentage, measures of central tendency such as mean, measures of dispersion such as standard deviation while chi square was conducted as inferential statistics in order to investigate the different between the technological acceptance, trust, and the consumers' behavior on buying online car casualty insurance.

VII. CONCLUSION

According to demographic information, the findings revealed that the majority of respondents were female (57.5 percent), aged between 25-35 years old (55 percent), single (65 percent), holding bachelor's degrees (67.5 percent), working for private companies (39.5 percent), earning approximately 20,001-30,000 baht per month (39.5 percent), and having experience on buying online car casualty insurance for about 1-3 years (44.75 percent).

In relation to the customer's technological acceptance, it was found that in terms of the acceptance of benefits, the acceptance hit a high level (x = 3.65). To illustrate the point, the respondents claimed that 1) buying the online insurance helped reducing the difficulty of making an appointment with insurance representatives (x = 3.74) 2) they did not feel uncomfortable to reject buying the insurance (x = 3.70), and 3) they could get insurance policies faster (x = 3.52). Moreover, according to the acceptance of the ease of use, the results showed that every acceptant level hit a high level (3.78). The first reason behind was that respondents could buy the insurance any time (x = 3.74). Secondly, most of insurance companies provided very common policies for customers and they were easy to be understood and to be bought by customers (x = 3.79), and thirdly, it was easy and convenient for them to buy insurances without any help from others (x = 3.72).

In relation to customer's trust on car insurance companies, it would found that customer's trust hit a high level. They relied on websites of the companies (x = 3.83). There were no mistake of policies (x = 3.72), and online car casualty insurances were reliable (x = 3.72).

Furthermore, according to the consumer's behavior on buying the car casualty insurance, the results revealed that the majority of respondents paid a lot of attention on speed of buying process (52.25 percent). Most of them decided to buy full coverage car casualty insurance (67 percent) during the fourth quarter of each year (40 percent). Normally, respondents preferred to do the online transaction during 12.00 - 5.59 pm (56 percent). Family members were quoted as influenced people. In relation to the payment, most of respondents used debit card as a payment method (29.5 percent). They normally received information about car insurance from television (27.38 percent).

A. Hypothesis Testing Results

TABLE I

RESULTS FROM CHI SQUARE TESTING DIFFERENCES BETWEEN CUSTOMER'S TECHNOLOGICAL ACCEPTANCE IN TERMS	S OF THE
ACCEPTANCE OF BENEFITS AND CONSUMER'S BEHAVIOR ON BUYING ONLINE CAR INSURANCE.	

Customer's technological acceptance in terms of the acceptance of benefits	Chi-Square	df	p-value
Consumer's behavior			
Reasons of buying online car insurance	22.890	12	.001*
Period of buying online car insurance	19.387	12	.006*

From the Table I, the results showed that there were significant differences between customer's technological acceptance in terms of the acceptance of benefits and consumer's behavior in terms of reasons of buying and period of buying car insurance at 0.05 level of significance.

Customer's technological acceptance in terms of the ease of use	Chi-Square	df	p-value
Consumer's behavior			
Reasons of buying online car insurance	15.433	12	.002*
Period of buying online car insurance	20.014	12	.000*

TABLE II TABLE 2: RESULTS FROM CHI SQUARE TESTING DIFFERENCES BETWEEN CUSTOMER'S TECHNOLOGICAL ACCEPTANCE IN TERMS OF THE EASE OF USE AND CONSUMER'S BEHAVIOR ON BUYING ONLINE CAR INSURANCE.

From the Table II, the results showed that there were significant differences between customer's technological acceptance in terms of the ease of use and consumer's behavior in terms of reasons of buying and period of buying car insurance at 0.05 level of significance.

TABLE III

RESULTS FROM CHI SQUARE TESTING DIFFERENCES BETWEEN CUSTOMER'S TRUST AND CONSUMER'S BEHAVIOR ON BUYING ONLINE CAR INSURANCE

Customer's trust	Chi-Square	df	p-value
Consumer's behavior			
Reasons of buying online car insurance	30.123	9	.000*
Period of buying online car insurance	28.014	9	.000*

From the Table III, the results showed that there were significant differences between customer's trust and the consumer's behavior in terms of reasons of buying and period of buying car insurance at 0.05 level of significance.

VIII. DISCUSSION

From the hypothesis testing results, it was found that there were significant differences between customer's technological acceptance and consumer's behavior, and this was in line with the study of Wang, Wang, Lin, & Tang [9] who studied the consumer's behavior on online banking, and the study of Kamarulzaman [10] who studied the e Commerce of travel services in United Kingdom, as well as in line with Amin [11] who researched about using credit card on mobile phone. The results showed that technological acceptance model played an important role in terms of influencing consumer's behavior on buying decision. Moreover, the results were also related to the theory of technological acceptance model (TAM) of Davis [3] and Davis, Bagozzi, Warshaw [12] who contended that TAM would influence buying decision together with attitude of users on information technology. For instance, consumers who highly accepted benefits of the process, tended to have more trust on the system, and this led to their using frequency. In contrast, consumers who had low acceptance on the process, tended to ignore the online products or services.

In addition, the hypothesis testing results also revealed that there were significant differences between consumer's trust and consumer's behavior, and this result was in line with the study of McKnight, Choudhury and Kacmar [13] who said that trust has definitely influenced consumers' behavior on buying products or services. The research findings were also in line with Jarvenpaa, Tractinsky and Saarinen [14] who studied consumer's trust on e-Commerce shops. Their research results showed that there was a positive correlation between trust and buying intention. According to these research findings, it can be concluded that consumers' trust has directly influenced consumers' buying behavior; thus, customers who highly trusted the online system of insurance companies, tended to buy online insurance rather than customers who had low trust on the online system.

IX. SUGGESTIONS FROM THIS RESEARCH

1) It was found that customers' technological acceptance has effected consumers' behavior, therefore, firms should stimulate their customer to aware and accept benefits and the ease of use of online buying process. Customer relationship management (CRM) strategy should be taken into consideration as a tool to create the technological acceptance of customers.

2) The findings showed that trust has impacted on consumer's behavior: thus, firms should create trust by ensuring them about online security system as well as trying to create customers' confidence on online buying.

X. SUGGESTIONS FOR FUTURE RESEARCH

1) A qualitative study could help a research to explore in-depth consumer's behavior.

2) The conceptual framework of this research can be applied to different types of industries.

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