CHAPTER 1

INTRODUCTION

1.1 Research Background

Internet technology has made a significant impact on the commercial sector. Internet technology is increasingly being adopted by firms and individuals to commercialize products or services. Clearly, the expenditure of the Internet is in the primary interest of IT spending the Internet technology especially for the retail industry (Brookes & Wahhaj, 2001). One implication of Internet technology is that it allows people to trade widely and internationally. It is accepted that it can drive the economy growing. Also, electronic commerce is, in fact, part of the commercial industry.

A number of developed countries have adopted electronic commerce regularly. Electronic commerce has been proved that it can enhance economic growth of developed nations such as the US and EU (Lund & McGuire, 2005). For example, Amazon is a giant electronic commerce, selling books and other merchandises for American people especially college students. Meanwhile, Rakuten is one successful electronic commerce company in Japan, and it is aiming to sell products or services worldwide. Using examples of electronic commerce companies in developed nations, the WTO aims to promote the use of electronic commerce in developing nations. However, doing so leads to an increase in digital divide and dependency on Western countries' technologies (Lund & McGuire, 2005). Knowing factors influencing electronic commerce adoption in developing countries would be helpful in supporting people in the developing world in using e-commerce.

Successful factors in one nation may be different in another nation. Take the case of Span, there are some factors that hamper electronic commerce to grow. A study in Spain indicates that 7.7 percent of people have used an internet shopping service on occasion, and 6.8 percent have used electronic commerce during the month before (Garitaonandía & Garmendia, 2009). These findings indicate that in some developed countries, electronic

commerce is rarely adopted. Not every developed nation is successfully adopted electronic commerce. For this reason, this study attempts to provide an understanding about electronic commerce among various groups of Thai people.

In Thailand, it is clear that the growth of electronic commerce is increasing continuously. The result of a survey by The National Statistical Office (2011a) shows that during the period between 2007 and 2010, the economies of electronic commerce, especially in three major types: B2B, B2C, and B2G are increasing rapidly. For instance, the size of the B2B market expanded from 79,726 to 217, 458 million Baht while that of the B2C market expanded from 47,501 to 67,783 million Baht during the same period. However, few studies have been conducted in Thailand in particularly, ones that investigate differences of groups of people. Therefore, the objective of this study is to find out how people in different groups adopt e-commerce differently.

1.2 Research Question

What are differences in adoption of electronic commerce among groups of people?

1.3 Research Objective

1.3.1 To study behaviours of people in adopting electronic commerce

1.3.2 To compare and contrast electronic commerce adoption behaviour among groups of people.

1.4 Research Scope

The scope of this research focuses on people who live in Bangkok Thailand only since Bangkok is the most important in terms of population and economics. According to Citypopulation, the number of people who live in Bangkok is about 12,390,000 people (www.citypopulation.de). Moreover, the scope of this research focuses on only B2C and C2C.

1.5 Research Contributions

There are prospective benefits from this research such as:

1.5.1 The study may present the differences among groups of people who adopt electronic commerce.

1.5.2 The study may be used in class especially for the electronic commence subject.

1.5.3 In Segmentation Target Positioning (STP), the study may be used as a guideline for marketers who would like to do businesses relating to electronic commerce, especially in targeting customers.

1.5.4 Other researchers can use this research and factors of this research in future research, especially in technology adopt studies.

CHAPTER 2

LITERATURE REVIEW

2.1 Theoretical Background

What is technology adoption? According to Rogers (1983, p. 21), Adoption means "A decision to make full use of innovation as the best course of action available." In information system theories, adoption means use behavior or actual use and it has been used as the final dependent variable of research relating to the Technology Acceptance Model (Davis, Bagozzi, & Warshaw, 1989). User behavior or actual use can be measured through the use behavior, or actual use of social media is the amount of time and frequency that information system is used by users (Davis, 1993). Use behavior is also an important aspect indicating the success of information systems (DeLone & McLean, 2003). A study of Lin (2007) uses the frequency of online shopping as a predictor of online behavior.

Electronic commerce or e-commerce is the commercial activity transacted by transferring information on the Internet (Dictionary.com, 2013); in other words, electronic commerce means the use of the Internet and the World Wide Web to do business (Laudon & Traver, 2012). In another definition, electronic commerce is the set of activities conducted through computer networks; these activities are purchasing, selling, transferring, or exchanging products, services, or information (Turban, King, Viehland, & Lee, 2006). Paviou and Fygenson (2006) present the adoption of e-commerce as customer behavior and divide it into two components: getting information and purchasing a product from the internet. In this study, behaviors such as checking, receiving email, and getting information about products and services can be counted as electronic commerce activities (Hwang, 2010).

Hence, we summarize the definition of the adoption of electronic commerce as a set of behaviors of customers in buying, selling, and searching information about products or services on the Internet, presenting themselves through frequency scores.

In this study, we are interested in the differences between groups of individuals in adopting electronic commerce. We classified people in groups associated with the following socio-economic variables: gender, age, education, occupation, personal income, and family income. In Ghana, the socio-economic status has an indirect effect on adoption of innovation in agriculture industry (Boahene, Snijders, & Folmer, 1999). Differences among user groups as gender, age, and ethnic background were also revealed, which can be used to guide design efforts for websites targeting special user groups (Ling & Salvendy, 2006). Information technology can widen the gap between groups of people (Arunachalam, 1999). The use of technology and innovation can be used to present social recognition and status (Bandura, 2001).In Thailand, the rich tend to adopt new technology faster than the poor. In China, a study demonstrates the significant effects of rural-urban inequality and socio-economic divisions on Internet access. Age, gender, education, and residency were identified as significant predictors for individual e-commerce use (Zhu & Chen, 2013). "The consequences of the adoption of innovations usually tend to widen the socioeconomic gap between the audience segments previously high and low in socioeconomic status (Rogers, 1983, p. 398)."

A study from Malaysia indicates that demographic factors are important for adoption behavior of electronic commerce. Age and intention of using electronic commerce are, in fact, correlated (Johar & Awalluddin, 2011). Also, there are a positive correlation between education level and intention of using electronic commerce (Johar & Awalluddin, 2011). Income level and intention of using e-commerce have correlations with each other (Johar & Awalluddin, 2011). So, the role of socio-economic status is vital. In this study, factors representing socio-economic status in the study include gender, age, education, occupation, personal income, and family income.

2.2 Gender

Conditions that influence the adoption behavior of male and female users are different. For instance, factor conditions that support users to use technology are important for women

especially older women. Technology infrastructure is important for them. In terms of price, the effect of price value is strong for older women (Venkatesh, L. Thong, & Xu, 2012). In the case of computer technology in China, Chinese women were proved to be significantly motivated by their computer attitudes while Chinese men were more influenced by their subjective norms than women. Men and women are different in mental conditions. The power of norms is stronger in women than in men   whereas the effect of enjoyment is stronger in men than in women (Hwang, 2010). These factors regulate human motivation to perform a specific behavior differently.

Based on the literature, hypotheses are created as follows:

H1a: The average scores of searching information about products or services on the Internet between male and female are significantly different.

H1b: The average scores of buying products or services on the internet between male and female are significantly different.

H1c: The average scores of selling products or services on the internet between male and female are significantly different.

2.3 Age

Young people are major adopters of new technology since computer related technologies require skills and knowledge to use, and these people are well-educated to use computers. New technologies require new forms of human capital. Young people are also interested in learning new technology so that they are better in adapting new technologies (Weinberg, 2004).

H2a: The average scores of searching information about products or services on the Internet among age group are significantly different.

H2b: The average scores of buying products or services on the internet among age groups are significantly different.

H2c: The average scores of selling products or services on the internet among age groups are significantly different.

2.4 Education

Education is one of the most important factors influencing adoption decisions. Technology requires knowledge to use it. Education is a medium to increase the ability of users to obtain, create and react to innovation (Asfaw & Admassie, 2004). If the level of education is high enough the users of new technology may successfully adopt such technology (Chander & Thangavelu, 2004). In contrast, people who have low education cannot take benefits of high technologies (Bucciarelli, Odoardi, & Muratore, 2010). In South Africa, levels of ICT competence are important in order to make technology adoption in SME become successful (Mbahta, 2013). The respondents are divided into five levels: mid-high school and lower, high school, diploma, bachelor, and graduate based on National Statistical Office (2011b).

H3a: The average scores of searching the internet for information about products or services on the Internet among levels of education are significantly different.

H3b: The average scores of buying products or services on the internet among levels of education are significantly different.

H3c: The average scores of selling products or services on among the levels of education are significantly different.

2.5 Occupation

Occupations of Thai people are a form of socio-economic status. Occupation can represent differences in income and social classes. Occupations allow people who work in the same industry to communicate and exchange knowledge closely.

Occupations are grouped into seven forms: student, private employer, private employee, public employee, self-employed, family business, and other.

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H4a: The average scores of searching the Internet for information about products or services on the Internet among occupations are significantly different.

H4b: The average scores of buying products or services on the internet among occupations are significantly different.

H4c: The average scores of selling products or services on the internet among occupations are significantly different.

2.6 Personal Income and Family Income

Personal income is a form of socio-economic status. People, who have different income, may behave differently because they have superior power of purchase. Individual and family incomes are the most familiar and important economic factors dividing people into social groups based on their amount and source of revenue (Schiffman & Kanuk, 2000). Poor and rich customers tend to behave differently in buying products or services because of their resources (Figuié & Moustier, 2009). Customers make decisions to buy products or services based on their economic circumstances. Such factors have a direct impact on customer behavior (Kotler & Keller, 2006). In Thailand, there is a big gap between rich and poor people. Hence, the following hypothesizes are built.

H5a: The average scores of searching information about products or services on the Internet among personal income levels are significantly different.

H5b: The average scores of buying products or services on the internet among personal income levels are significantly different.

H5c: The average scores of selling products or services on the internet among personal income levels are significantly different.

H6a: The average scores of searching information about products or services on the Internet among family income levels are significantly different.

H6b: The average scores of buying products or services on the internet among family income levels are significantly different.

H6c: The average scores of selling products or services on the internet among family income levels are significantly different.

CHAPTER 3

METHODOLOGY

This study is a quantitative study which uses one way analysis of variance (one way ANOVA) to test the hypotheses because this study aims to study differences of the average scores of the three electronic commerce activities.

3.1 Variables Used in This Study

This study has six dependent variables: gender, age, education, occupation, personal income, and family income. Some variables such as age, personal income, and family income are naturally numerical variables. However, they are transformed to group variables for this study. The six dependent variables are shown as follows:

Gender is a variable with 2 sub groups: male and female.

Age is a variable with 4 sub groups: less than 20 years old, between 20 and 30 years old, between 30 and 40 years old, and more than 40 years old.

Education is a variable with 5 sub groups: mid-high school and below, high-school, diploma, bachelor, and graduate.

Occupation is a variable with 8 sub groups: student, business owner, private employee, government officer, state-owned enterprise's employee, independent, farmer, and others.

Personal income is a variable with 4 sub groups: 0-10,000 Baht, 10,001-20,000 Baht, 20,001-30,000 Baht, more than 30,000 Baht.

Family income is a variable with 4 sub groups: 0-30,000 Baht, 30,001-60,000 Baht, 60,001-90,000 Baht, and more than 90,000 Baht.

In the case of independent variables, this study has 3 independent variables. They are 1. The average scores of searching information about products or services on the Internet

(A1), 2. The average scores of buying products or services on the internet (A2), and 3.The average scores of selling products or services on the internet. The scores are 7 interval scales ranging from 0 (never use) to 7 (almost every day).

3.2 Research Instrument

The instrument in this study is a self-reported questionnaire divided into 2 parts:

3.2.1 Electronic commerce activities such as activities that respondents do on the Internet about electronic commerce activities.

3.2.2 Personal information such as gender, age, education, occupation, personal income, and family income.

3.3 Sample Size and Sampling Method

The sampling method and number of respondents. The researcher adopted an area sampling method, collecting 500 respondents from 15 locations in Bangkok Thailand. The minimum sample size calculated by G*Power 3.1.3 for one-way ANOVA (effect size = 0.25, power =0.95, and maximum number of the groups is eight) is about 360. Hence, the sample size of this study excesses the suggested minimum sample size. Table 3.1 shows the required sample size that is used in this study.

Table 3.1 The required sample size of one-way ANOVA

Input	Effect Size f	0.25
	α err prob	0.05
	Power (1- β err prob)	0.95
	Number of groups	9
Output	Non-centrality parameter λ	22.5
	Critical F	2.0356185
	Numerator df	7
	Denominator df	352
	Total sample size	360
	Actual power	0.9521702

3.4 Analysis

The researcher use one-way ANOVA to compare the differences among groups of people. ANOVA is used to investigate differences among three or more groups. ANOVA is a technique used to prove that two or more groups of population have an equal mean (Hair, Black, Babin, & Anderson, 2010). ANOVA can be shown in equation 1:

$$Y_1 = X_1 + X_2 + X_3 + ... + X_n \qquad \text{--- (1)}$$

Y is a metric variable and Xs are non-metric variables.

However, there are assumptions that must be achieved when ANOVA is used. Hair, Black, Babin, and Anderson (2010) point out basic assumptions of ANOVA as follows:

1. The responses in each group are independent on any other groups.
2. Variances must be equal for all groups.
3. The dependent variable must be normality

In terms of computer software, the computer software that is used in this research is IBM's SPSS 20.0.

CHAPTER 4

RESEARCH RESULTS

This research aims to find differences in adopting electronic commerce in three activities: searching the Internet for information about products or services (A1), using the Internet to buy products or services (A2), and using the Internet to sell products or services (A3).

4.1 Gender

The average score of each gender performing three activities is shown in table 4.1. Even though the male group seems to adopt all activities more than the female group, the results are not statistically significant.

Table 4.1: The average score of each gender

SES1		A1	A2	A3
Male	Mean	3.8350	2.8100	2.0550
	N	200	200	200
	Std. Deviation	2.32266	2.26928	2.21733
Female	Mean	3.9667	2.7733	1.8633
	N	300	300	300
	Std. Deviation	2.37720	2.21321	2.33585
Total	Mean	3.9140	2.7880	1.9400
	N	500	500	500
	Std. Deviation	2.35408	2.23361	2.28886

In terms of the analysis of variance (ANOVA), there is no significant difference between male and female groups in electronic commerce activities (A1-A3). Table 4.2 shows the analysis of variance between male and female groups.

Table 4.2: An analysis of variance (ANOVA) of gender

		Sum of Squares	df	Mean Square	F	Sig.
A1	Between Groups	2.080	1	2.080	.375	.541
	Within Groups	2763.222	498	5.549		
	Total	2765.302	499			
A2	Between Groups	.161	1	.161	.032	.857
	Within Groups	2489.367	498	4.999		
	Total	2489.528	499			
A3	Between Groups	4.408	1	4.408	.841	.359
	Within Groups	2609.792	498	5.241		
	Total	2614.200	499			

The researcher thus reject hypotheses: H1a, H1b, and H1c. Male and female are not significantly different in the three adoption behaviors: searching the Internet for products or services, using the Internet to buy products or services, and using the Internet to sell products or services.

4.2 Age

The average score of each age group performing the three activities is shown in table 4.3.

Table 4.3: The average score of each age group

Age group		A1	A2	A3
less than 20	Mean	4.1143	2.5714	1.6714
	N	70	70	70
	Std. Deviation	2.19712	2.13712	2.06925
20 to 30	Mean	4.5000	3.6731	2.7308
	N	208	208	208
	Std. Deviation	2.06185	2.08024	2.44052
30-40	Mean	3.9450	2.7248	1.7248
	N	109	109	109
	Std. Deviation	2.37204	2.14680	2.19794
more than 40	Mean	2.6814	1.3540	.8584
	N	113	113	113
	Std. Deviation	2.49738	1.84643	1.61393
Total	Mean	3.9140	2.7880	1.9400
	N	500	500	500
	Std. Deviation	2.35408	2.23361	2.28886

In terms of the analysis of variance (ANOVA), there are differences among age groups in electronic commerce activities (A1-A3). Table 4.4 shows the analysis of variance among age groups. Especially those who are in the age between 20 and 30 years old significantly adopt e-commerce more than the other groups (see Appendix A, table A1-A3).

Table 4.4: An analysis of variance (ANOVA) of age

		Sum of Squares	df	Mean Square	F	Sig.
A1	Between Groups	246.016	3	82.005	16.145	.000
	Within Groups	2519.286	496	5.079		
	Total	2765.302	499			
A2	Between Groups	399.032	3	133.011	31.559	.000
	Within Groups	2090.496	496	4.215		
	Total	2489.528	499			
A3	Between Groups	272.356	3	90.785	19.228	.000
	Within Groups	2341.844	496	4.721		
	Total	2614.200	499			

The researcher thus accepts hypotheses: H2a, H2b, and H2c. There are significant differences in adopting electronic commerce in the three activities among age groups. Tables A1-A3 in appendix A show Fisher's Least Significant Difference (LSD) tests of age groups.

4.3 Education

The average score of each education group performing the three activities is shown in table 4.5. Bachelor and graduate education groups adopt e-commerce more than the other groups, while people who graduated mid-high school and lower and high school adopt e-commerce less than the other groups.

Table 4.5: The average score of each education group

Education		A1	A2	A3
mid-high school and below	Mean	2.2439	1.4878	1.0244
	N	41	41	41
	Std. Deviation	2.65312	2.23743	2.07952
high-school	Mean	3.0137	2.1370	1.2329
	N	73	73	73
	Std. Deviation	2.49161	2.18781	1.88208
Diploma	Mean	3.2885	2.4615	1.2885
	N	52	52	52
	Std. Deviation	2.59967	2.40475	2.16330
Bachelor	Mean	4.4353	3.1295	2.3885
	N	278	278	278
	Std. Deviation	2.03075	2.10152	2.35331
Graduate	Mean	4.3036	3.1964	1.9107
	N	56	56	56
	Std. Deviation	2.22318	2.25162	2.19319
Total	Mean	3.9140	2.7880	1.9400
	N	500	500	500
	Std. Deviation	2.35408	2.23361	2.28886

In terms of the analysis of variance (ANOVA), there are differences among levels of education groups in electronic commerce activities (A1-A3). Table 6 shows the analysis of variance among levels of education groups.

Table 4.6: An analysis of variance (ANOVA) of education groups

		Sum of Squares	df	Mean Square	F	Sig.
A1	Between Groups	277.908	4	69.477	13.826	.000
	Within Groups	2487.394	495	5.025		
	Total	2765.302	499			
A2	Between Groups	147.553	4	36.888	7.797	.000
	Within Groups	2341.975	495	4.731		
	Total	2489.528	499			
A3	Between Groups	148.913	4	37.228	7.475	.000
	Within Groups	2465.287	495	4.980		
	Total	2614.200	499			

The researcher thus accepts hypotheses: H3a, H3b, and H3c. There are differences in adopting electronic commerce in the three activities among education groups. Tables A4-A6 in appendix A show Fisher's Least Significant Difference (LSD) tests of education groups.

4.4 Occupation

The average scores of each age group performing three activities are shown in table 4.7. Students and private employees adopt e-commerce more than other groups while farmers adopt e-commerce less than the others.

Table 4.7: The average score of each occupation group

Occupation		A1	A2	A3
Student	Mean	4.5088	3.1140	2.0789
	N	114	114	114
	Std. Deviation	2.04483	2.16062	2.28943
business owner	Mean	2.5122	2.0488	1.5122
	N	41	41	41
	Std. Deviation	2.74884	2.49951	2.31432
private employee	Mean	4.7374	3.3333	2.1010
	N	99	99	99
	Std. Deviation	1.91442	2.18529	2.38402
government officer	Mean	3.9720	2.6449	1.9252
	N	107	107	107
	Std. Deviation	2.11668	2.01996	2.16621
state own enterprise	Mean	4.1905	3.0238	2.3571
	N	42	42	42
	Std. Deviation	2.29780	2.19187	2.37694
Independent	Mean	3.1392	2.5570	1.9241
	N	79	79	79
	Std. Deviation	2.53556	2.37372	2.37385
Other	Mean	1.5556	1.1111	.4444
	N	9	9	9
	Std. Deviation	2.29734	1.53659	1.33333
Farmer	Mean	.8889	.3333	.2222
	N	9	9	9
	Std. Deviation	1.76383	.70711	.44096
Total	Mean	3.9140	2.7880	1.9400
	N	500	500	500
	Std. Deviation	2.35408	2.23361	2.28886

In terms of the analysis of variance (ANOVA), there are differences among occupations groups in electronic commerce activities (A1-A2) but no difference in activity A3. Table 4.8 shows the analysis of variance among occupations groups□

Table 4.8: An analysis of variance (ANOVA) of occupation groups

		Sum of Squares	df	Mean Square	F	Sig.
A1	Between Groups	371.424	7	53.061	10.905	.000
	Within Groups	2393.878	492	4.866		
	Total	2765.302	499			
A2	Between Groups	152.245	7	21.749	4.578	.000
	Within Groups	2337.283	492	4.751		
	Total	2489.528	499			
A3	Between Groups	66.310	7	9.473	1.829	.080
	Within Groups	2547.890	492	5.179		
	Total	2614.200	499			

The researcher thus accepts hypotheses: H4a and H4b, but we reject H4c. There are significant differences in adopting electronic commerce in two activities among occupations groups (A1-2). Tables A7-9 in appendix A show Fisher's Least Significant Difference (LSD) tests of occupation groups. However, the results of LSD show that farmers significantly adopted electronic commerce in activity three less than several other groups even though there is no significant difference in the F- test.

4.5 Personal Income

The average score of each age group performing the three activities is shown in table 4.9. The middle personal income groups (income between 20,001and 30,000 Baht a month)

adopt e-commerce most while the rich (income more than 30,000 Baht a month) adopt e-commerce less than the other groups.

Table 4.9: The average score of each personal income group

Individual Income		A1	A2	A3
0-10,000	Mean	3.8718	2.7009	1.7265
	N	117	117	117
	Std. Deviation	2.36183	2.28286	2.24616
10,001-20,000	Mean	4.2212	3.1298	2.2500
	N	208	208	208
	Std. Deviation	2.22614	2.13494	2.39867
20,001-30,000	Mean	4.0222	3.0000	2.2000
	N	90	90	90
	Std. Deviation	2.22336	2.23858	2.31847
more than 30,000	Mean	3.1059	1.8471	1.2000
	N	85	85	85
	Std. Deviation	2.61872	2.15752	1.83095
Total	Mean	3.9140	2.7880	1.9400
	N	500	500	500
	Std. Deviation	2.35408	2.23361	2.28886

In terms of the analysis of variance (ANOVA), there are differences among personal income groups in electronic commerce activities (A1-A3). Table 4.10 shows the analysis of variance among personal income groups.

Table 4.10: An analysis of variance (ANOVA) of individual income groups

		Sum of Squares	df	Mean Square	F	Sig.
A1	Between Groups	76.396	3	25.465	4.697	.003
	Within Groups	2688.906	496	5.421		
	Total	2765.302	499			
A2	Between Groups	104.491	3	34.830	7.243	.000
	Within Groups	2385.037	496	4.809		
	Total	2489.528	499			
A3	Between Groups	77.952	3	25.984	5.082	.002
	Within Groups	2536.248	496	5.113		
	Total	2614.200	499			

The researcher thus accepts hypotheses: H5a, H5b, and H5c. There are significant differences in adopting electronic commerce in the three activities among personal income groups. Tables A10-A12 in appendix A show Fisher's Least Significant Difference (LSD) tests of personal income groups.

4.6 Family Income

The average score of each age group performing the three activities is shown in table 4.11. The family income groups show a similar result. People who have middle-family income (between 30,001-60,000 Baht a month and between 60,001-90,000 Baht a month) adopt e-commerce most whereas people who are from the lowest family income group (between 0-30,000 Baht a month) adopt e-commerce less than the other groups. However, the richest family group (income more than 90,000 Baht a month) does not present much different from the lowest family income group.

Table 4.11: The average score of each family income group

Family Income		A1	A2	A3
0-30,000	Mean	3.8772	2.7281	1.7105
	N	114	114	114
	Std. Deviation	2.33913	2.33967	2.29167
30,001-60,000	Mean	4.1368	2.9481	2.1698
	N	212	212	212
	Std. Deviation	2.21267	2.05197	2.30175
60,001-90,000	Mean	3.9348	2.9674	2.2283
	N	92	92	92
	Std. Deviation	2.28615	2.16085	2.31148
more than 90,000	Mean	3.3659	2.2561	1.3415
	N	82	82	82
	Std. Deviation	2.72851	2.54738	2.11531
Total	Mean	3.9140	2.7880	1.9400
	N	500	500	500
	Std. Deviation	2.35408	2.23361	2.28886

In terms of the analysis of variance (ANOVA), there are differences among family income level groups in electronic commerce activity A3 but no difference in activities A1-A2. Table 4.12 shows the analysis of variance among family income level groups.

Table 4.12: An analysis of variance (ANOVA) of family income groups☐

		Sum of Squares	Df	Mean Square	F	Sig.
A1	Between Groups	35.355	3	11.785	2.141	.094
	Within Groups	2729.947	496	5.504		
	Total	2765.302	499			
A2	Between Groups	32.004	3	10.668	2.153	.093
	Within Groups	2457.524	496	4.955		
	Total	2489.528	499			
A3	Between Groups	54.220	3	18.073	3.502	.015
	Within Groups	2559.980	496	5.161		
	Total	2614.200	499			

We thus accept hypothesis H5c and reject hypotheses: H5a and H5b. Tables A13-A15 in appendix A show Fisher's Least Significant Difference (LSD) tests of personal income groups. Even though activities A1 and A2 do not have significant differences, after using LSD tests we found that people who have family income between 30,001 and 60,000 Baht are significantly different from those who have family income more than 90,000 Baht in using the Internet to search for information about products or services. Likewise, people who have family income between 30,001 and 60,000 Baht are significantly different from those who have family income more than 90,000 Baht in using the Internet to buy products or services.

CHAPTER 5

CONCLUSIONS AND DISCUSSIONS

5.1 Conclusions

This study shows that male and female are not different in the adoption of electronic commerce in three activities (A1-A3). However, we find that there are differences in the adoption of electronic commerce in three activities (A1-3) in various groups according to age, education level, occupation, individual income, and family income. This group of people presents itself as the group of the middle-class people. The groups that adopt electronic commerce most are people, who are age between 20-30 year old, who earn a bachelor degree, who are employees in the private sector, who have individual income between 10,001 and 20,000 Baht, and who have family income between 60,000 and 90,000 Baht. The groups that adopt electronic commerce less are people, who are age more than 40, who earn mid-high school and below, who are farmers, who have individual income more than 30,000 Baht, and who have family income more than 90,000 Baht. These people are mixed up between the rich and the poor. The rich who have high income are less likely to adopt electronic commerce as well as the poor who are farmers and have low-education levels. Consequently, we conclude that the primary group of people who adopt electronic commerce most is the middle-class people who have high education.

5.2 Discussions

The results show that people who adopt electronic commerce most are people are age between 20 and 30 years old, earn a bachelor degree, are employed in the private sector, have individual income between 10,001 and 20,000 Baht, and have family income between 60,000 and 90,000 Baht. They are the young middle class people with high education at least a bachelor degree. Our research is consistent with Electronic Transactions Development Agency (2014) that 32.9 % of the Internet users in Thailand are people are age between 20

and 29 years old. This organization also points out the similar results that 60.8 % of the Internet users are these people with a bachelor degree. However, the findings of the organization also contradict our research findings. It says that people who have family income between 10,000 and 30,000 Baht are the majority of the Internet users at 35.5 % (Electronic Transactions Development Agency, 2014). Our finds suggest that the majority of people have family income between 60,000 and 90,000 Baht. The reason may be because its findings are resulted from a national survey while our findings are from a survey of people who are in Bangkok.

The reasons why the young middle class people adopt electronic commerce most are perhaps that they just start their working careers with a small amount of salary. Much of their time is spent in work place. Furthermore, they are the people who use the Internet most according to Electronic Transactions Development Agency (2014). Consequently, electronic commerce is adopted by these people since buying and selling goods on the Internet.

There are groups that adopt electronic commerce less. 1) The poor who have personal income less than 10,000 Baht, have family income less than 30,000 Baht. 2) Senior people who have age more than 40 years old. 3) People who have low education mid-high school and below. 4) Farmers and 5) the rich who have personal income more than 30,000 Baht and family income more than 90,000 Baht. However, the reasons why these people adopt electronic commerce less are not clear.

This research points out that for researchers, marketers, companies or people who desire to study about adoption of electronic commerce, the middle-class people who are age between 20-30 year old, earn a bachelor degree or higher, are employees in the private sector, have individual income between 10,001 and 20,000 Baht, and who have family income between 60,000 and 90,000 Baht should be targeted as the primary group to study their behavior or do a marketing campaign. The rich and poor are not the primary target since they present that they adopt the electronic commerce activities (A1-A3) less than the middle class.

5.3 Recommendations for Future Research

The future research should be focused on why people in specific groups such as farmers, students, rich, middle class and poor people and employees in the private sector adopted the Internet in electronic commerce differently together with factors such as education and age. Moreover, the rich and the poor adopt electronic commerce less than the middle class is another interesting further research question. Causality should be included in future research. Another point is that a survey shows that urban people adopt the Internet more than people who are in urban areas (National Statistical Office, 2011a). Therefore, locations of respondents should be included in future research.

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APPENDICES

APPENDIX A

MULTIPLE COMPARISONS BY USING LSD

Table A1: Multiple comparisons by using LSD for Activity A1 among age groups

(I) Age group	(J) Age group	Mean Difference (I-J)	Std. Error	Sig.
less than 20	20 to 30	-.38571	.31142	.216
	30-40	.16933	.34519	.624
	more than 40	1.43287*	.34280	.000
20 to 30	less than 20	.38571	.31142	.216
	30-40	.55505*	.26649	.038
	more than 40	1.81858*	.26338	.000
30-40	less than 20	-.16933	.34519	.624
	20 to 30	-.55505*	.26649	.038
	more than 40	1.26354*	.30257	.000
more than 40	less than 20	-1.43287*	.34280	.000
	20 to 30	-1.81858*	.26338	.000
	30-40	-1.26354*	.30257	.000

Table A2: Multiple comparisons by using LSD for Activity A2 among age groups

(I) Age group	(J) Age group	Mean Difference (I-J)	Std. Error	Sig.
less than 20	20 to 30	-1.10165*	.28368	.000
	30-40	-.15334	.31445	.626
	more than 40	1.21745*	.31226	.000
20 to 30	less than 20	1.10165*	.28368	.000
	30-40	.94831*	.24276	.000
	more than 40	2.31909*	.23992	.000
30-40	less than 20	.15334	.31445	.626
	20 to 30	-.94831*	.24276	.000
	more than 40	1.37079*	.27562	.000
more than 40	less than 20	-1.21745*	.31226	.000
	20 to 30	-2.31909*	.23992	.000
	30-40	-1.37079*	.27562	.000

Table A3: Multiple comparisons by using LSD for Activity A3 among age groups

(I) Age group	(J) Age group	Mean Difference (I-J)	Std. Error	Sig.
less than 20	20 to 30	-1.05934*	.30025	.000
	30-40	-.05334	.33281	.873
	more than 40	.81302*	.33050	.014
20 to 30	less than 20	1.05934*	.30025	.000
	30-40	1.00600*	.25693	.000
	more than 40	1.87236*	.25393	.000
30-40	less than 20	.05334	.33281	.873
	20 to 30	-1.00600*	.25693	.000
	more than 40	.86636*	.29172	.003
more than 40	less than 20	-.81302*	.33050	.014
	20 to 30	-1.87236*	.25393	.000
	30-40	-.86636*	.29172	.003

Table A4: Multiple comparisons by using LSD for Activity A1 among education groups

(I) education	(J) education	Mean Difference (I-J)	Std. Error	Sig.
mid-high school and below	high-school	-.76980	.43749	.079
	Diploma	-1.04456*	.46819	.026
	Bachelor	-2.19135*	.37502	.000
	Graduate	-2.05967*	.46075	.000
high-school	mid-high school and below	.76980	.43749	.079
	Diploma	-.27476	.40678	.500
	Bachelor	-1.42155*	.29481	.000
	Graduate	-1.28987*	.39821	.001
Diploma	mid-high school and below	1.04456*	.46819	.026
	high-school	.27476	.40678	.500
	Bachelor	-1.14679*	.33869	.001
	Graduate	-1.01511*	.43170	.019
Bachelor	mid-high school and below	2.19135*	.37502	.000
	high-school	1.42155*	.29481	.000
	Diploma	1.14679*	.33869	.001
	Graduate	.13168	.32834	.689
Graduate	mid-high school and below	2.05967*	.46075	.000
	high-school	1.28987*	.39821	.001
	Diploma	1.01511*	.43170	.019
	Bachelor	-.13168	.32834	.689

Table A5: Multiple comparisons by using LSD for Activity A2 among education groups

(I) education	(J) education	Mean Difference (I-J)	Std. Error	Sig.
mid-high school and below	high-school	-.64918	.42451	.127
	Diploma	-.97373*	.45429	.033
	Bachelor	-1.64169*	.36389	.000
	Graduate	-1.70862*	.44708	.000
high-school	mid-high school and below	.64918	.42451	.127
	Diploma	-.32455	.39471	.411
	Bachelor	-.99251*	.28606	.001
	Graduate	-1.05944*	.38639	.006
Diploma	mid-high school and below	.97373*	.45429	.033
	high-school	.32455	.39471	.411
	Bachelor	-.66796*	.32864	.043
	Graduate	-.73489	.41889	.080
Bachelor	mid-high school and below	1.64169*	.36389	.000
	high-school	.99251*	.28606	.001
	Diploma	.66796*	.32864	.043
	Graduate	-.06693	.31860	.834
Graduate	mid-high school and below	1.70862*	.44708	.000
	high-school	1.05944*	.38639	.006
	Diploma	.73489	.41889	.080
	Bachelor	.06693	.31860	.834

Table A6: Multiple comparisons by using LSD for Activity A3 among education groups

(I) education	(J) education	Mean Difference (I-J)	Std. Error	Sig.
mid-high school and below	high-school	-.20849	.43554	.632
	Diploma	-.26407	.46610	.571
	Bachelor	-1.36410*	.37335	.000
	Graduate	-.88632	.45870	.054
high-school	mid-high school and below	.20849	.43554	.632
	Diploma	-.05558	.40497	.891
	Bachelor	-1.15561*	.29350	.000
	Graduate	-.67784	.39643	.088
Diploma	mid-high school and below	.26407	.46610	.571
	high-school	.05558	.40497	.891
	Bachelor	-1.10003*	.33718	.001
	Graduate	-.62225	.42978	.148
Bachelor	mid-high school and below	1.36410*	.37335	.000
	high-school	1.15561*	.29350	.000
	Diploma	1.10003*	.33718	.001
	Graduate	.47777	.32688	.144
Graduate	mid-high school and below	.88632	.45870	.054
	high-school	.67784	.39643	.088
	Diploma	.62225	.42978	.148
	Bachelor	-.47777	.32688	.144

Table A7: Multiple comparisons by using LSD for Activity A1 among occupation groups

(I) occupation	(J) occupation	Mean Difference (I-J)	Std. Error	Sig.
Student	business owner	1.99658*	.40169	.000
	private employee	-.22860	.30303	.451
	government officer	.53681	.29691	.071
	state own enterprise	.31830	.39816	.424
	Independent	1.36953*	.32291	.000
	Other	2.95322*	.76374	.000
	Farmer	3.61988*	.76374	.000
business owner	Student	-1.99658*	.40169	.000
	private employee	-2.22518*	.40966	.000
	government officer	-1.45977*	.40515	.000
	state own enterprise	-1.67828*	.48427	.001
	Independent	-.62705	.42457	.140
	Other	.95664	.81197	.239
	Farmer	1.62331*	.81197	.046
private employee	Student	.22860	.30303	.451
	business owner	2.22518*	.40966	.000
	government officer	.76541*	.30760	.013
	state own enterprise	.54690	.40620	.179
	Independent	1.59813*	.33277	.000
	Other	3.18182*	.76797	.000
	Farmer	3.84848*	.76797	.000
government officer	Student	-.53681	.29691	.071
	business owner	1.45977*	.40515	.000
	private employee	-.76541*	.30760	.013
	state own enterprise	-.21851	.40165	.587
	Independent	.83272*	.32720	.011
	Other	2.41641*	.76557	.002
	Farmer	3.08307*	.76557	.000
state own enterprise	Student	-.31830	.39816	.424

(I) occupation	(J) occupation	Mean Difference (I-J)	Std. Error	Sig.
	business owner	1.67828*	.48427	.001
	private employee	-.54690	.40620	.179
	government officer	.21851	.40165	.587
	Independent	1.05124*	.42123	.013
	Other	2.63492*	.81023	.001
	Farmer	3.30159*	.81023	.000
Independent	Student	-1.36953*	.32291	.000
	business owner	.62705	.42457	.140
	private employee	-1.59813*	.33277	.000
	government officer	-.83272*	.32720	.011
	state own enterprise	-1.05124*	.42123	.013
	Other	1.58368*	.77602	.042
	Farmer	2.25035*	.77602	.004
Other	Student	-2.95322*	.76374	.000
	business owner	-.95664	.81197	.239
	private employee	-3.18182*	.76797	.000
	government officer	-2.41641*	.76557	.002
	state own enterprise	-2.63492*	.81023	.001
	Independent	-1.58368*	.77602	.042
	Farmer	.66667	1.03983	.522
Farmer	Student	-3.61988*	.76374	.000
	business owner	-1.62331*	.81197	.046
	private employee	-3.84848*	.76797	.000
	government officer	-3.08307*	.76557	.000
	state own enterprise	-3.30159*	.81023	.000
	Independent	-2.25035*	.77602	.004
	Other	-.66667	1.03983	.522

Table A8: Multiple comparisons by using LSD for Activity A2 among occupation groups

(I) occupation	(J) occupation	Mean Difference (I-J)	Std. Error	Sig.
Student	business owner	1.06525*	.39691	.008
	private employee	-.21930	.29943	.464
	government officer	.46918	.29338	.110
	state own enterprise	.09023	.39342	.819
	Independent	.55707	.31907	.081
	Other	2.00292*	.75466	.008
	Farmer	2.78070*	.75466	.000
business owner	Student	-1.06525*	.39691	.008
	private employee	-1.28455*	.40479	.002
	government officer	-.59608	.40033	.137
	state own enterprise	-.97503*	.47852	.042
	Independent	-.50818	.41953	.226
	Other	.93767	.80232	.243
	Farmer	1.71545*	.80232	.033
private employee	Student	.21930	.29943	.464
	business owner	1.28455*	.40479	.002
	government officer	.68847*	.30395	.024
	state own enterprise	.30952	.40137	.441
	Independent	.77637*	.32882	.019
	Other	2.22222*	.75883	.004
	Farmer	3.00000*	.75883	.000
government officer	Student	-.46918	.29338	.110
	business owner	.59608	.40033	.137
	private employee	-.68847*	.30395	.024
	state own enterprise	-.37895	.39687	.340
	Independent	.08790	.32331	.786
	Other	1.53375*	.75647	.043
	Farmer	2.31153*	.75647	.002
state own enterprise	Student	-.09023	.39342	.819

(I) occupation	(J) occupation	Mean Difference (I-J)	Std. Error	Sig.
	business owner	.97503*	.47852	.042
	private employee	-.30952	.40137	.441
	government officer	.37895	.39687	.340
	Independent	.46685	.41622	.263
	Other	1.91270*	.80059	.017
	Farmer	2.69048*	.80059	.001
independent	Student	-.55707	.31907	.081
	business owner	.50818	.41953	.226
	private employee	-.77637*	.32882	.019
	government officer	-.08790	.32331	.786
	state own enterprise	-.46685	.41622	.263
	Other	1.44585	.76680	.060
	Farmer	2.22363*	.76680	.004
Other	Student	-2.00292*	.75466	.008
	business owner	-.93767	.80232	.243
	private employee	-2.22222*	.75883	.004
	government officer	-1.53375*	.75647	.043
	state own enterprise	-1.91270*	.80059	.017
	Independent	-1.44585	.76680	.060
	Farmer	.77778	1.02746	.449
Farmer	Student	-2.78070*	.75466	.000
	business owner	-1.71545*	.80232	.033
	private employee	-3.00000*	.75883	.000
	government officer	-2.31153*	.75647	.002
	state own enterprise	-2.69048*	.80059	.001
	Independent	-2.22363*	.76680	.004
	Other	-.77778	1.02746	.449

Table A9: Multiple comparisons by using LSD for Activity A3 among occupation groups

(I) occupation	(J) occupation	Mean Difference (I-J)	Std. Error	Sig.
Student	business owner	.56675	.41441	.172
	private employee	-.02206	.31263	.944
	government officer	.15371	.30631	.616
	state own enterprise	-.27820	.41076	.499
	Independent	.15490	.33314	.642
	Other	1.63450*	.78793	.039
	Farmer	1.85673*	.78793	.019
business owner	Student	-.56675	.41441	.172
	private employee	-.58881	.42263	.164
	government officer	-.41304	.41798	.324
	state own enterprise	-.84495	.49961	.091
	Independent	-.41186	.43802	.348
	Other	1.06775	.83768	.203
	Farmer	1.28997	.83768	.124
private employee	Student	.02206	.31263	.944
	business owner	.58881	.42263	.164
	government officer	.17578	.31735	.580
	state own enterprise	-.25613	.41906	.541
	Independent	.17696	.34331	.606
	Other	1.65657*	.79228	.037
	Farmer	1.87879*	.79228	.018
government officer	Student	-.15371	.30631	.616
	business owner	.41304	.41798	.324
	private employee	-.17578	.31735	.580
	state own enterprise	-.43191	.41437	.298
	Independent	.00118	.33757	.997
	Other	1.48079	.78981	.061
	Farmer	1.70301*	.78981	.032
state own enterprise	Student	.27820	.41076	.499

(I) occupation	(J) occupation	Mean Difference (I-J)	Std. Error	Sig.
	business owner	.84495	.49961	.091
	private employee	.25613	.41906	.541
	government officer	.43191	.41437	.298
	Independent	.43309	.43457	.319
	Other	1.91270*	.83589	.023
	Farmer	2.13492*	.83589	.011
independent	Student	-.15490	.33314	.642
	business owner	.41186	.43802	.348
	private employee	-.17696	.34331	.606
	government officer	-.00118	.33757	.997
	state own enterprise	-.43309	.43457	.319
	Other	1.47961	.80060	.065
	Farmer	1.70183*	.80060	.034
Other	Student	-1.63450*	.78793	.039
	business owner	-1.06775	.83768	.203
	private employee	-1.65657*	.79228	.037
	government officer	-1.48079	.78981	.061
	state own enterprise	-1.91270*	.83589	.023
	Independent	-1.47961	.80060	.065
	Farmer	.22222	1.07276	.836
Farmer	Student	-1.85673*	.78793	.019
	business owner	-1.28997	.83768	.124
	private employee	-1.87879*	.79228	.018
	government officer	-1.70301*	.78981	.032
	state own enterprise	-2.13492*	.83589	.011
	Independent	-1.70183*	.80060	.034
	Other	-.22222	1.07276	.836

Table A10: Multiple comparisons by using LSD for Activity A1 among personal income groups

(I) Individual Income	(J) Individual Income	Mean Difference (I-J)	Std. Error	Sig.
0-10000	10001-20000	-.34936	.26907	.195
	20001-30000	-.15043	.32645	.645
	more than 30000	.76591[*]	.33183	.021
10001-20000	0-10000	.34936	.26907	.195
	20001-30000	.19893	.29377	.499
	more than 30000	1.11527[*]	.29974	.000
20001-30000	0-10000	.15043	.32645	.645
	10001-20000	-.19893	.29377	.499
	more than 30000	.91634[*]	.35216	.010
more than 30000	0-10000	-.76591[*]	.33183	.021
	10001-20000	-1.11527[*]	.29974	.000
	20001-30000	-.91634[*]	.35216	.010

Table A11: Multiple comparisons by using LSD for Activity A2 among personal income

groups

(I) Individual Income	(J) Individual Income	Mean Difference (I-J)	Std. Error	Sig.
0-10000	10001-20000	-.42895	.25341	.091
	20001-30000	-.29915	.30745	.331
	more than 30000	.85380*	.31252	.007
10001-20000	0-10000	.42895	.25341	.091
	20001-30000	.12981	.27667	.639
	more than 30000	1.28275*	.28229	.000
20001-30000	0-10000	.29915	.30745	.331
	10001-20000	-.12981	.27667	.639
	more than 30000	1.15294*	.33166	.001
more than 30000	0-10000	-.85380*	.31252	.007
	10001-20000	-1.28275*	.28229	.000
	20001-30000	-1.15294*	.33166	.001

Table A12: Multiple comparisons by using LSD for Activity A3 among personal income
groups

(I) Individual Income	(J) Individual Income	Mean Difference (I-J)	Std. Error	Sig.
0-10000	10001-20000	-.52350[*]	.26132	.046
	20001-30000	-.47350	.31705	.136
	more than 30000	.52650	.32228	.103
10001-20000	0-10000	.52350[*]	.26132	.046
	20001-30000	.05000	.28531	.861
	more than 30000	1.05000[*]	.29110	.000
20001-30000	0-10000	.47350	.31705	.136
	10001-20000	-.05000	.28531	.861
	more than 30000	1.00000[*]	.34201	.004
more than 30000	0-10000	-.52650	.32228	.103
	10001-20000	-1.05000[*]	.29110	.000
	20001-30000	-1.00000[*]	.34201	.004

Table A13: Multiple comparisons by using LSD for Activity A1 among family income groups

(I) Family Income	(J) Family Income	Mean Difference (I-J)	Std. Error	Sig.
0-30000	30001-60000	-.25960	.27247	.341
	60000-90000	-.05759	.32879	.861
	more than 90000	.51134	.33971	.133
30001-60000	0-30000	.25960	.27247	.341
	60000-90000	.20201	.29289	.491
	more than 90000	.77094*	.30509	.012
60000-90000	0-30000	.05759	.32879	.861
	30001-60000	-.20201	.29289	.491
	more than 90000	.56893	.35630	.111
more than 90000	0-30000	-.51134	.33971	.133
	30001-60000	-.77094*	.30509	.012
	60000-90000	-.56893	.35630	.111

Table A14: Multiple comparisons by using LSD for Activity A2 among family income groups

(I) Family Income	(J) Family Income	Mean Difference (I-J)	Std. Error	Sig.
0-30000	30001-60000	-.22004	.25852	.395
	60000-90000	-.23932	.31196	.443
	more than 90000	.47197	.32231	.144
30001-60000	0-30000	.22004	.25852	.395
	60000-90000	-.01928	.27790	.945
	more than 90000	.69202[*]	.28947	.017
60000-90000	0-30000	.23932	.31196	.443
	30001-60000	.01928	.27790	.945
	more than 90000	.71129[*]	.33805	.036
more than 90000	0-30000	-.47197	.32231	.144
	30001-60000	-.69202[*]	.28947	.017
	60000-90000	-.71129[*]	.33805	.036

Table A15: Multiple comparisons by using LSD for Activity A3 among family income groups

(I) Family Income	(J) Family Income	Mean Difference (I-J)	Std. Error	Sig.
0-30000	30001-60000	-.45929	.26386	.082
	60000-90000	-.51773	.31839	.105
	more than 90000	.36906	.32896	.262
30001-60000	0-30000	.45929	.26386	.082
	60000-90000	-.05845	.28363	.837
	more than 90000	.82835*	.29544	.005
60000-90000	0-30000	.51773	.31839	.105
	30001-60000	.05845	.28363	.837
	more than 90000	.88680*	.34503	.010
more than 90000	0-30000	-.36906	.32896	.262
	30001-60000	-.82835*	.29544	.005
	60000-90000	-.88680*	.34503	.010

Appendix: แบบสอบถามภาษาไทย   Questionnaire No   ☐☐-☐☐-☐☐☐

แบบสอบถามเรื่องการยอมรับการใช้งานการซื้อขายสินค้าและบริการบนอินเทอร์เน็ต

E1: ประสบการณ์ของท่านในการซื้อขายสินค้าหรือบริการบนอินเทอร์เน็ต...........ปี (ไม่เคยตอบ 0)

WH: ท่านเคยในการซื้อขายสินค้าหรือบริการบนอินเทอร์เน็ตท่านดำเนินการผ่านระบบใด

ช่องทางในการซื้อขายสินค้าหรือบริการบนอินเทอร์เน็ต	ไม่เคย	เคย
WH1: เวปไซต์ของบริษัทหรือร้านค้าโดยตรง	☐	☐
WH2: เวปไซต์ตลาดกลาง (เช่น ebay)	☐	☐
WH3: สื่อสังคมออนไลน์ (เช่น facebook, Instragram)	☐	☐
WH4: อื่นๆระบุ...........	☐	☐

โปรดทำเครื่องหมาย ◯ วงกลมลงบนตัวเลข 0 ถึง 7

โดยที่เลข   7   หมายถึง เห็นด้วยกับข้อความด้านขวามืออย่างมาก

                    0   หมายถึง เห็นด้วยกับข้อความด้านซ้ายอย่างมือมาก

<u>พฤติกรรมการใช้งานอินเทอร์เน็ต(โดยเฉลี่ยในหนึ่งสัปดาห์)</u>

A01: ฉันใช้อินเทอร์เน็ตเพื่อ<u>การหาข้อมูลเกี่ยวกับสินค้าและบริการ</u>

ไม่เคยเลย	0	1	2	3	4	5	6	7	ทุกวัน

A02: ฉันใช้อินเทอร์เน็ตเพื่อ<u>การซื้อสินค้าสินค้าและบริการ</u>

ไม่เคยเลย	0	1	2	3	4	5	6	7	ทุกวัน

A03: ฉันใช้อินเทอร์เน็ตเพื่อ<u>การขายสินค้าสินค้าและบริการ</u>

ไม่เคยเลย	0	1	2	3	4	5	6	7	ทุกวัน

ข้อมูลส่วนบุคคล

SES1:   เพศ   ☐ 1ชาย .   ☐ 2 หญิง .

SES2:   อายุ.................ปี

SES3: รหัสไปรษณีย์ของที่อยู่อาศัยของท่าน ☐ ☐ ☐ ☐ ☐

SES4: ระดับการศึกษาสูงสุด

☐ 1. ประถมศึกษาตอนต้นหรือต่ำกว่า   ☐ 2. ประถมศึกษาตอนปลาย   ☐ 3. มัธยมศึกษาตอนต้น

☐ 4. มัธยมศึกษาตอนปลาย/ปวช   ☐ 5. อนุปริญญา/ปวส/ปวท   ☐ 6. ปริญญาตรี

☐ 7. ปริญญาโท   ☐ 8. ปริญญาเอกหรือสูงกว่า

SES5: อาชีพ

☐ 1. นักเรียน/นักศึกษา   ☐ 2. นายจ้างเอกชน   ☐ 3. ลูกจ้างเอกชน

☐ 4. ข้าราชการ-เจ้าหน้าของรัฐ   ☐ 5. พนักงานรัฐวิสาหกิจ   ☐ 6. อาชีพอิสระ

☐ 7. ธุรกิจครอบครัว   ☐ 8. อื่นๆระบุ.................

SES6: อุตสาหกรรมที่ท่านทำงานอยู่

☐ 1. อุตสาหกรรมการศึกษา   ☐ 2. อุตสาหกรรมการผลิต   ☐ 3. อุตสาหกรรมการบริการ

☐ 4. อุตสาหกรรมค้าปลีก   ☐ 5. อุตสาหกรรมเกษตร   ☐ 6. อื่นๆ

ระบุ.................

SES7: รายได้ส่วนตัวของท่าน (จากทุกแหล่ง) โดยเฉลี่ย ………………………… บาท ต่อ เดือน

SES8: รายได้รวมของครอบครัวของท่าน (จากทุกแหล่ง) โดยเฉลี่ย………………………… บาท ต่อ เดือน

ประวัติส่วนตัว

ชื่อ-สกุล นางสาววอนชนก ไชยสุนทร

ตำแหน่งปัจจุบัน ผู้ช่วยศาสตราจารย์

ประวัติการศึกษา

ชื่อย่อปริญญา	สาขา	สถาบันที่จบ	ปีที่จบ
วท.บ.	วิทยาการคอมพิวเตอร์	สถาบันเทคโนโลยีพระจอมเกล้าเจ้าคุณทหารลาดกระบัง	2544
วท.ม.	การศึกษาวิทยาศาสตร์คอมพิวเตอร์	สถาบันเทคโนโลยีพระจอมเกล้าเจ้าคุณทหารลาดกระบัง	2546
Ph.D.	Human Resource Development (International Program)	Burapha University	2556

ผลงานวิจัย/งานสร้างสรรค์

ผลงานวิจัย/งานสร้างสรรค์ที่ตีพิมพ์เผยแพร่(ระดับชาติและนานาชาติ)

หัวหน้าโครงการ

1. Thai Tourists' Satisfaction: A CASE STUDY OF Talingchan Floating Market Tourism Management, *วารสารเกษตรพระจอมเกล้า*, 2552.

2. Using Delphi Techniques in Development of Teaching and Learning Database System Management Subject in Governments' Institution in Bangkok and Boundaries, *วารสารเกษตรพระจอมเกล้า*, 2552.

3. Factors Affecting Knowledge Sharing Behavior of Students in A University, Bangkok, Thailand, RBAC International Management Conference 2011, Creative Economy, Creative Business, Creative People: Human Capital as a Key Driver for Sustainable Success 3-4 March 2011, Golden Tulip Sovereign Hotel, Bangkok, Thailand.

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ผู้ร่วมโครงการ

1. ปัจจัยที่มีผลต่อความสำเร็จในการพัฒนาทรัพยากรมนุษย์ของธุรกิจเกษตรอินทรีย์เพื่อสร้างให้เป็นองค์การแห่งการเรียนรู้โดยรับการจากสาขาวิชาบริหารธุรกิจและพัฒนาการเกษตร ปีงบประมาณ 2552

2. ติดตาม ประเมินโครงการการจัดให้มีการบริการโทรคมนาคมพื้นฐานโดยทั่วถึงและบริการเพื่อสังคมโดยรับทุนจากสำนักงานคณะกรรมการกิจการโทรคมนาคมแห่งชาติ ในนามสำนักส่งเสริมและบริการวิชาการพระจอมเกล้าลาดกระบัง สถาบันเทคโนโลยีพระจอมเกล้าเจ้าคุณทหารลาดกระบัง

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