BEHAVIOR AND ATTITUDE OF INTERNET USERS TOWARD
ELECTRONIC COMMERCE IN BANGKOK

by

Ms. Vimonrat Mongkalaapinun

A Final Report of the Six-Credit Course
CE 6998 - CE 6999 Project

Submitted in Partial Fulfillment
of the Requirements for the Degree of
Master of Science
in Computer and Engineering Management
Assumption University

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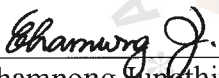CE 6998 – CE 6999 Project

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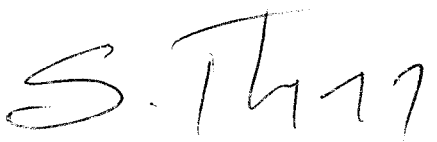November 2002

Project Title   Behavior and Attitude of Internet Users toward Electronic Commerce in Bangkok

Name   Ms. Vimonrat Mongkalaapinun

Project Advisor   Dr. Chamnong Jungthirapanich

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The Graduate School of Assumption University has approved this final report of the six-credit course, CE 6998 – CE 6999 PROJECT, submitted in partial fulfillment of the requirements for the degree of Master of Science in Computer and Engineering Management.

Approval Committee:

_____
(Dr. Chamnong Jungthirapanich)
Dean and Advisor

_____
(Prof.Dr. Srisakdi Charmonman)
Chairman

_____
(Assoc.Prof. Somchai Thayarnyong)
MUA Representative

November 2002

ABSTRACT

Although the Electronic commerce (E-commerce) has emerged for decades, the growth rate of users and the perception of people in Thailand is very slow. It is the main objective of the research "Behavior and Attitude of Internet Users toward E-commerce in Bangkok" to study the behavior in using Internet of the users in Bangkok area, the attitude and the trend of using the E-commerce as well as the factor that motivate the Internet users to use the service of E-commerce.

The research is performed by using the questionnaire as a tool. The 400 questionnaires are distributed to the Internet users in 10 representative districts in Bangkok area by using the multi-stage sampling method. The data is analyzed by the SPSS (the Statistical Package for Social Sciences) version 11.0 for Windows. The survey results are presented in form of tables.

It is only 25 percent of respondents who have the experience in using the E-commerce with the main reason of the convenience in finding the information and do the transaction. The average orders value is about 1,501 – 3,000 baht with the payment method by credit card. Book and hotel reservation is the most interested products and service of the respondents in using E-commerce. The main reason of the respondents in not using the E-commerce comes from the payment system as well as the trushfulness of the sellers.

In order to motivate the Internet users to use the service of E-commerce we should convince them about the safety of payment system. The inexpensive with standardized products or service is another factor to motivate them to use the service from E-commerce.

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I. INTRODUCTION

1.1 Background

It is the intelligence of humanity that makes advances of technology and Internet, to make the world globalized. The Internet is accepted as the universal technology which builds all sorts of new products, services, education, strategies and organizations. It can eliminate many technical, geographic and cost barriers obstructing the global flow of information. It also accelerated the information revolution, inspiring new uses of information systems and new business model.

The Internet enables instantaneous communication, interactive among individuals and organization and allows real-time global access to information, products and services. The word "Internet" has impacted on the workplaces and marketplaces also changed the way we do the business. With the advancement of technologies and prosperity of Internet era, the Electronic Commerce (E-commerce) is emerged as a choice for doing the business.

Electronic commerce is a general concept covering any forms of business transaction or information exchange executed using information and communication technologies. It is widely recognized that e-commerce reduces transaction costs, increases efficiency and generates important changes in the management and production processes of businesses. E-commerce is a multidisciplinary field that includes technical areas, such as networking and telecommunication, security, technical standards and protocol, and storage and retrieval of multimedia; business areas such as marketing, procurement and purchasing, billing and payment, and supply chain management; and legal aspects such as electronic transaction law, information privacy, intellectual property, taxation, contractual and legal settlements.

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The importance of electronic commerce is that in the world of informative technology and wireless communication, the quality of products and service is not enough for competitive. The accessibility is another key for survival. The entrepreneurs have to find the new strategies to apply in their businesses competition. Most select to use electronic media especially the web site and Internet.

The United States, currently the leading country in e-commerce showed impressive GDP and productivity growth rates during the 1990s. in particular between 1995 and 2000, productivity growth accelerated significantly, reaching an annual rate of 2.5 per cent, significantly higher than the rate of the previous two decades. Much of this growth is explained by the increased use of information technology, and in particular e-commerce. It is expected that European countries will catch up quickly with the United States in their use of e-commerce, and that developing countries, with a certain degree of preparation, could follow suit and converge in productivity with the developed counties. This could significantly boost their economic growth rates.

It is true that in theory the E-commerce gives small and medium-sized enterprises (SMEs) new opportunities to compete, because it reduces transaction costs and barriers of entry. For SMEs and enterprises in developing countries, E-commerce may create new opportunities to participate in international trade and enlarge the domestic competitiveness. However, the success of e-commerce in developing countries depends on many factors.

1.2   Statement of Problem

From the research of International Data Corporation in USA toward the E-commerce in South East Asia as shown in below table, the range of E-commerce in Thailand is on the fourth behind Singapore, Malaysia and Indonesia. The estimated

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value in million Thai baht, Thailand e-commerce is too far from Singapore at 1,229 and 38,380 respectively.

Table 1.1.   E-commerce Usage Value in South East Asia.

Country	Estimated Value (Million Thai baht)
Philippines	881
Thailand	1,229
Indonesia	1,323
Malaysia	2,237
Singapore	38,380

Source: www.thai-ecommerce.net

There are several factors contributing to the slowness of E-commerce in Thailand. The first factor is the lack of laws relating to e-commerce. The government has decided to introduce six laws, namely, E-commerce law, Digital Signature law, Data Protection law, Computer-Related Crime law, Electronic Funds Transfer law, and National Information Infrastructure law. However, the electronic transaction act takes effect on April 2002. The electronic transaction act will allow electronic documents to be used as evidence in court proceeding and will cover the use of electronic signature.

The second problem is the shortage of experienced manpower in E-commerce because it is a relatively new area.

The third problem is the lack of infrastructure for e-commerce, e.g. Certification Authority, and Business Sector Risk Assessment Database.

In order to promote the e-commerce to Thai entrepreneurs, the government has to put forward strategies and directions, namely: proactively participate in foreign trade policy, development and actively deployment of e-commerce SME policy, providing adequate and affordable IT infrastructure, developing legal framework, payment system

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and security and information management. Government should support and provide those measures facilitating private sectors and consumers' Electronic Commerce activities, aiming in building up trust and confidence among entrepreneurs and consumers. Government should enhance competitiveness of small and medium enterprises (SMEs) in the global economy. Government should lessen and avoid any restrictions that would obstruct such development.

1.3 Research Objectives

(1) To study the behavior in using the Internet of Internet users in Bangkok area.

(2) To study the attitude and trend of the Internet users in Bangkok area toward E-commerce.

(3) To study the behavior of the target customers who will use the service of E-commerce for the Internet users in the Bangkok area.

(4) To study the factor that motivate the prospective customers to use the service of E-commerce.

(5) To study the kinds of products and service that the Internet users in the Bangkok area will use.

(6) To test the relationship between the demographic data of respondents and the behavior in using Internet.

(7) To test the relationship between the demographic data of respondents and the behavior, attitude and trend in using E-commerce.

1.4 Scope of the Research

(1) The research will cover to the Internet users in the Bangkok area

(2) The research will concentrate on the Business-to-Consumer E-commerce only.

II.   LITERATURE REVIEW

2.1   History of Internet

2.1.1 Origins of the Internet

The Internet originated in the early 1970s as part of an Advanced Research Projects Agency (ARPA) research project on "internetworking." At that time, ARPA demonstrated the viability of packet switching for computer-to-computer communication in its flagship network, the ARPANET, which linked several dozen sites and perhaps twice that number of computers into a national network for computer science research. Extensions of the packet-switching concept to satellite networks and to ground-based mobile radio networks were also under development by ARPA, and segments of industry (notably not the traditional telecommunications sector) were showing great interest in providing commercial packet network services. It seemed likely that at least three or four distinct computer networks would exist by the mid-1970s and that the ability to communicate among these networks would be highly desirable if not essential.

In a well-known joint effort that took place around 1973, Robert Kahn, then at ARPA, and Vinton Cerf, then at Stanford, collaborated on the design of an internetwork architecture that would allow packet networks of different kinds to interconnect and machines to communicate across the set of interconnected networks. The internetwork architecture was based on a protocol that came to be known as TCP/IP. The TCP/IP protocol was used initially to connect the ARPANET, based on 50 kilobits per second (kbps) terrestrial lines; the Packet Radio Net (PRNET), based on dual rate 400/100 kbps spread spectrum radios; and the Packet Satellite Net (SATNET), based on a 64 kbps shared channel on Intelsat IV. The initial satellite Earth stations were in the United States and the United Kingdom, but subsequently additional Earth stations were

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activated in Norway, Germany, and Italy. Several experimental PRNETs were connected, including one in the San Francisco Bay area. At the time, no personal computers, workstations, or local area networks were available commercially, and the machines involved were mainly large-scale scientific time-sharing systems. Remote access to time-sharing systems was made available by terminal access servers.

The technical tasks involved in constructing this initial ARPA Internet revolved mainly around the configuration of "gateways," now known as routers, to connect different networks, as well as the development of TCP/IP software in the computers. By the mid-1980s, industry began offering commercial gateways and routers and started to make available TCP/IP software for some workstations, minicomputers, and mainframes. Before this, these capabilities were unavailable; they had to be handcrafted by the engineers at each site.

In 1979, ARPA established a small Internet Configuration Control Board (ICCB), most of whose members belonged to the research community, to help with this process and to work with ARPA in evolving the Internet design. The establishment of the ICCB was important because it brought a wider segment of the research community into the Internet decision-making process, which until then had been the almost-exclusive bailiwick of ARPA. Initially, the ICCB was chaired by a representative of ARPA and met several times a year. As interest in the ARPA Internet grew, so did interest in the work of the ICCB.

In 1980, the U.S. Department of Defense (DOD) adopted the TCP/IP protocol as a standard and began to use it. By the early 1980s, it was clear that the internetwork architecture that ARPA had created was a viable technology for wider use in defense.

2.2.2 Emergence of the Operational Internet

The DOD had become convinced that if its use of networking were to grow, it needed to split the ARPA Internet (called ARPANET) in two. One of the resulting networks, to be known as MILNET, would be used for military purposes and mainly link military sites in the United States. The remaining portion of the network would continue to bear the name ARPANET and still be used for research purposes. Since both would use the TCP/IP protocol, computers on the MILNET would still be able to talk to computers on the new ARPANET, but the MILNET network nodes would be located at protected sites. If problems developed on the ARPANET, the MILNET could be disconnected quickly from it by unplugging the small number of gateways that connected them. In fact, these gateways were designed to limit the interactions between the two networks to the exchange of electronic mail, a further safety feature.

By the early 1980s, the ARPA Internet was known simply as the Internet, and the number of connections to it continued to grow. Recognizing the importance of networking to the larger computer science community, the National Science Foundation (NSF) began supporting CSNET, which connected a select group of computer science researchers to the emerging Internet. This allowed new research sites to be placed on the ARPANET at NSF's expense, and it allowed other new research sites to be connected via a commercial network, TELENET, which would be gatewayed to the ARPANET. CSNET also provided the capacity to support dial-up e-mail connections.

The TCP/IP protocol adopted by DOD a few years earlier was only one of many such standards. Although it was the only one that dealt explicitly with internetworking of packet networks, its use was not yet mandated on the ARPANET. However, on January 1, 1983, TCP/IP became the standard for the ARPANET, replacing the older host protocol known as NCP. This step was in preparation for the ARPANET-MILNET

split, which was to occur about a year later. Mandating the use of TCP/IP on the ARPANET encouraged the addition of local area networks and also accelerated the growth in numbers of users and networks.

In 1983, ARPA replaced the ICCB with the Internet Activities Board (IAB). The IAB was constituted similarly to the old ICCB, but the many issues of network evolution were delegated to 10 task forces chartered by and reporting to the IAB. The IAB was charged with assisting ARPA to meet its Internet-related R&D objectives; the chair of the IAB was selected from the research community supported by ARPA. ARPA also began to delegate to the IAB the responsibility for conducting the standards-setting process.

By the mid-1980s, network connectivity had become sufficiently central to the workings of the computer science community that NSF became interested in broadening the use of networking to other scientific disciplines. The NSF supercomputer centers program represented a major stimulus to broader use of networks by providing limited access to the centers via the ARPANET. In this period, NSF formulated a strategy to assume responsibility for the areas of leadership that ARPA had formerly held and planned to field an advanced network called NSFNET. NSFNET was to join the NSF supercomputer centers with very high speed links, then 1.5 megabits per second (mbps), and to provide members of the U.S. academic community access to the NSF supercomputer centers and to one another.

Under a cooperative agreement between NSF and Merit, Inc., the NSFNET backbone was put into operation in 1988 and, because of its higher speed, soon replaced the ARPANET as the backbone of choice. In 1990, ARPA decommissioned the last node of the ARPANET. It was replaced by the NSFNET backbone and a series of regional networks most of which were funded by or at least started with funds from the

U.S. government and were expected to become self-supporting soon thereafter. The NSF effort greatly expanded the involvement of many other groups in providing as well as using network services. This expansion followed as a direct result of the planning for the High Performance Computing Initiative (HPCI), which was being formed at the highest levels of government. DOD still retained the responsibility for control of the Internet name and address space, although it continued to contract out the operational aspects of the system.

The opening of the Internet to commercial usage was a significant development in the late 1980s. As a first step, commercial e-mail providers were allowed to use the NSFNET backbone to communicate with authorized users of the NSFNET and other federal research networks. Regional networks, initially established to serve the academic community, had in their efforts to become self-sufficient taken on nonacademic customers as an additional revenue source. NSF's Acceptable Use Policy, which restricted backbone usage to traffic within and for the support of the academic community, together with the growing number of nonacademic Internet users, led to the formation of two privately funded and competing Internet carriers, both spin-offs of U.S. government programs. They were UUNET Technologies, a product of a DOD-funded seismic research facility, and Performance Systems International (PSI), which was formed by a subset of the officers and directors of NYSERNET, the NSF-sponsored regional network in New York and the lower New England states.

Beginning in 1990, Internet use was growing by more than 10 percent a month. This expansion was fueled significantly by the enormous growth on the NSFNET and included a major commercial and international component. NSF helped to stimulate this growth by funding both incremental and fundamental improvements in Internet routing technology as well as by encouraging the widespread distribution of network software

from its supercomputer centers. Interconnections between commercial and other networks are arranged in a variety of ways, including through the use of the Commercial Internet Exchange (CIX), which was established, in part, to facilitate packet exchanges among commercial service providers.

The Internet Society was formed in 1992 by the private sector to help promote the evolution of the Internet, including maintenance of the Internet standards process. In 1992, the IAB was reconstituted as the Internet Architecture Board, which became part of the Internet Society. It delegated its decision-making responsibility on Internet standards to the leadership of the IETF, known as the Internet Engineering Steering Group (IESG). While not a part of the Internet Society, the IETF produces technical specifications as possible candidates for future protocols. The Internet Society now maintains the Internet Standards Process, and the work of the IETF is carried out under its auspices. (www.nap.edu)

2.2 The History of Internet in Thailand

The Internet in Thailand started in 1987, when the Asian Institute of Technology (AIT) in Thailand entered into an agreement with the Department of Computer Science at the University of Melbourne in Australia to operate Internet email service on a regular basis. The Australian node would call AIT three times a day to send and collect mail.

AIT charged 200 baht (about US $8) per month for upto 15,000 characters transferred (counting both in and out messages combined) plus one baht for every additional 50 characters. One of the problems was the inability to control incoming mail, especially the lengthy Calls for Papers, list of reference, etc. which was not asked for, and had to be paid for because they had automatically entered the mailbox. This problem was later solved when the rate was changed to a fix amount per month rather

than varying with the number of characters. Another problem was that during the connection to Australia, usually three times a day at 02:30, 15:30 and 19:30, users were requested not to call the only dial-in number with the only modem available at that time.

In 1988, Prince of Songkhla University in the southern part of Thailand established an Internet node connected to Melbourne University a few times a day. Two dial-in telephone numbers were made available from 09:00 in the morning till 19:00 in the evening.

In 1991, Digital Equipment (Thailand) Ltd. acquired an Internet address for internal and research-related usage. No dial-in number was made available and user had to use the machine at the company.

A major breakthrough occurred in 1991 when Chulanlogkorn University became Internet gateway in Thailand. After sufficient testing, full operation was started in July 1992 with a 9600 baud leased line to Virginia, U.S.A. and later upgrades to 64 K line. The fees for the leased line with 25% educational discount from the Communications Authority of Thailand (CAT) were about 5.2 million baht per year (about US$ 468,000). Initially only one telephone line was made available but by 1993 twenty lines were accessible. The all day, all night and full Internet service at Chulalongkorn University were obviously much better than the email-only at AIT. Instead of waiting a day or so for the message to be routed through Australia, one could communicates as many times a day as necessary and desirable. One could use the "talk" command to enter into interactive communication. When calls for papers were received from the network, one could ask for and obtain clarification right way.

In January 1992, the National Electronics and Computer Technology Center (NECTEC) established the NECTEC E-mail Work Group (NWG). In February 1992, NWG established a network named ThaiSarn (Thai Social/scientific, Academic and

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Research Network) with a machine donated by IBM, two dial-in telephone lines available 24 hours a day for NWG connections. UUCP (UNIX-UNIX Copy) was made hourly with Thammasat University and Prince of Songkhla University, and international connection with Australia through AIT three times a day. The service was later upgraded to included six dial-in telephone lines and 24 hours per day international connection through Chulalongkorn University. Then in September 1993, NECTEC became the second gateway from Thailand and it was connected to Virginia, U.S.A. by a 64 K leased line.

In January 1992, Thammasat University (TU) Information Processing Institute for Education and Development (IPIED) also registered as an Internet node. One dial-in telephone number was made available 24 hours a day.

The Faculty of Engineering at King Mongkut's Institute of Technology Ladkarbang started experimenting with Internet in mid 1992 connected to at Thammasat. At the beginning, only about 40 users were approved. Later the Computer Research and Service Center that serves all the faculties established a central node for Ladkrabang. By October 1993, about 500 Internet addresses had been given. Digital Equipment (Thailand) joined ThaiSarn in January 1992 but was later disconnected because commercial organization was not allowed to use educational Internet in Thailand. Prince of Songkla University and AIT joined ThaiSarn in 1992 but AIT later installed a direct leased line to Chulalongkorn University. (www.internet.th.org)

2.3 History of Internet in Business

Although electronic commerce (E-commerce) has been taking place on a big scale for a few years, the current commercial free-for-all began in 1991 when the federal government of USA made it known that it no longer intended to limit the network's backbone for use in research.

That policy shift created an incentive for three major Internet access providers - Performance System International Inc. (PSI), Uunet Technologies Inc., and General Atomics' Cerfnet to create their on commercial backbones, allowing them to skirt the government-controlled National Science Foundation (NSFNet). These providers, along with nine others, formed the Commercial Internet Exchange (CIX). Today, virtually every form of commercial traffic is allowed to pass through CIX network providers, through unsolicited junk mailing are still frowned on by the Internet community.

In reality, the potential for commercial exploitation of the Internet was always present. Because many large corporations already have TCP/IP networks in place, it has been relatively simple for them to connect computers in distant offices via the Internet. For another, low connection cost provides a cost-effective alternative to building and maintaining expensive proprietary WANs, which also require leasing expensive long distance lines or hooking up with commercial networks such as CompuServe or MCI Mail.

These day, the Internet as a worldwide home shopping network where consumers will ultimately be able to order products displayed via their computer, palmtop either full-motion video, access interactive games, and chat "live" with other users who they see on their computer or television screens. What's more, the Internet's attractiveness to big corporations also makes it opportunities to direct marketers. Recent demographic studies indicate that the Internet community is affluent and well educated. Not only do the corporate executive who log onto the Internet have money to spend on goods and services, but so do the college kids who dial up to swap e-mail, research papers and play games. (ศรีศักดิ์ 2002)

2.4 Definition of E-Commerce

Electronic commerce is, like so much in the areas of business and information systems, the subject of numerous definitions.

E-commerce is a general concept covering any form of business transaction or information exchange executed using information and communication technologies (ICTs). E-commerce takes place between companies, between companies and their customers, or between companies and public administrations. E-commerce includes electronic trading of goods, services and electronic material. (Esprit 1997)

E-commerce is the seamless application of information and communication technology from its point of origin to its endpoint along the entire value chain of business processes conducted electronically and designed to enable the accomplishment of a business goal. These processes may be partial or complete and may encompass business to business as well as business to consumer and consumer to business transactions (Wigan 1997).

E-commerce may be defined as the entire set of processes that support commercial activities on a network and involve information analysis. These activities spawn product information and display events, services, providers, consumers, advertisers, support for transactions, brokering systems for a variety of services and action, security of transactions user authentication, etc. (Adam, Dogramaci, Gangopadhyay and Yesha 1999)

It can be concluded that electronic commerce is doing business online. It is about using the power of digital information to understand the needs and preferences of each customers and each partner; to customize products and services for them; and then to deliver the products and services as quickly as possible. Therefore, the meaning of e-commerce is an emerging concept that describes the process of buying and selling or

exchanges the product, services and information via the networks or Internet by companies and consumers.

There are many ways that Internet can be used as the business channel. Internet can be the transaction-based systems such as online storefronts that open 24 hours a day, 7 days a week. The entrepreneur can create corporate home page for providing information such as company background, profile, products/services, and a customer service information. It can be use as the distribution channel of product, advertising and promotion media. It can also be used to be the research tool for strategic planning and to be marketing tool.

E-commerce can be classified into four main types according to the type of buyer and seller in the transaction.

(1) Business-to-consumer (B2C): These have been the most highly publicized of e-business and are online stores or shopping sites. Examples include online retailers such as Amazon (www.amazon.com) and direct sales companies such as Dell (www.dell.com)

(2) Business-to-business (B2B): these have been less well publicized but in fact generate for larger revenues. Example include Cisco (www.cisco.com) and Intel (www.intel.com), both of which offer online procurement and customer support.

(3) Consumer-to-consumer (C2C): This has been one of the fastest growing sectors and one where the internet provides significant advantages over conventional channels. Examples include classified advertisement sites, such as Loot (www.loot.com), that allow individuals to post notices of items for sale as well as auction sites, such as e-Bay (www.ebay.com), that allow individuals to put items up for auction.

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(4)   Consumer-to-business (C2B): This category includes individuals offering

their services to businesses, for example, accountants and lawyers, as well

as sites that allow individuals to offer items for sale to businesses. (Chen

1999)

2.5   E-Commerce in Thailand

On December 9, 1997, the Thai Government's International Economic Policy

Committee appointed a Subcommittee to Establish the National Electronic Commerce

Policy headed by the Deputy Prime Minister.

In 1998, The Minister of Commerce approved a Pilot Project on E-Commerce for

Export Promotion and Professor Dr. Srisakdi Charmonman was appointed the Project

Manger. The pilot project homepage is www.thaiecommerce.net.

According to the survey by the Gartner Group, the current state IT revolution in

Thailand is advanceing and expected to be the most important part of developing the

country.   Gartner Asia Pacific expected that in 2004, the value of Thai e-commerce

would be $15 billion. The value will increase from 1 billion in 2001 to 3 billion in 2002

and will be up to 7 billion in 2003. (ศรีศักดิ์ 2002)

2.5.1 Benefits of E-commerce

E-commerce provides many benefits to both consumers and business

entrepreneurs as follows:

(1)   Global Accessibility and Sales Reach

An e-commerce can receive orders from just about any country in the

world. The global reach of local companies that have become e-commerce

may startle some firms that thought they were established in their markets.

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(2) Market Base Expansion

An E-commerce can open its critical information systems to entirely new groups of users, including employees, customers, suppliers, and business partners, who formerly did not have timely access to them. This ability enables companies to redesign and web-enable their core business processes and extend them to anyone of their choosing, inside or outside a company at any time of the day or night.

(3) Increased Profits

With e-commerce, companies reach more and different customers and gain exposure in new markets not covered by existing physical channels. Since the Internet is both a sales channel and a distribution channel (for example, for information, software, music, graphics, etc.), companies can sometimes leverage their existing customer relationships to offer new products and services.

By fully implementing e-commerce, a company can make every process that leads up to, surrounds, and follows an actual transaction more efficient and convenient.

(4) Improved Customer Service and Loyalty

E-commerce enables a company to be open for business whenever a customer needs it. This level of convenience is a differentiation today, but eventually it will be expected by customers. Up-to-date information about products can be offered on the Web, making it easier and more convenient for customers to serve themselves.

(5)   Shorter Time-to-Market

E-commerce makes for fast and flexible execution and response to market opportunities. The Web enables a company to introduce a new product into the market, get immediate customer reaction to it, and refine and perfect it, all without incurring huge investments in a physical distribution infrastructure or "buying" shelf space at a retailer or distributor. When the product is right, the company can launch it through traditional channels with much greater assurance of its success.

2.5.2 The Transaction Process of E-commerce

The transaction process in E-commerce starts from:

Process 1 Searching and advertising. The consumers will search the information of the products and services that they will buy through the web site in the Internet.

Process 2 Transaction process. After comparing the price and other factors, they will process the transaction to the selected vendor.

Process 3 Ordering process. In the ordering process the vendor required the customer to fill in the selected item and add to the cart.

Process 4 Payment process. The customers have to make the payment to the supplier as required. The payment can be in the form of providing the credit card number and details, transfer the money to the bank, etc.

Process 5 Delivery process. The last step is the delivery process. After the customer make the payment, the supplier will deliver the products or service to them.

2.6   Theory of Consumer Behavior

It is important to learn the consumer behavior because the aim of marketing is to meet and satisfy target customers' needs and wants. However, "knowing customers" is never simple. Customers may state their needs and wants but act otherwise. They may

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not be in touch with their deeper motivations. They may respond to influences that change their mind at the last minute.

Cultural	Social	Personal	Psychological	
Culture	Reference groups	Age and life cycle stage	Motivation	Buyers
Subculture	Family	Occupation	Perception	
		Economic circumstances	Learning	
		Life style	Beliefs and attitudes	
		Personality and Self-concept		
Social class	Roles and statuses			
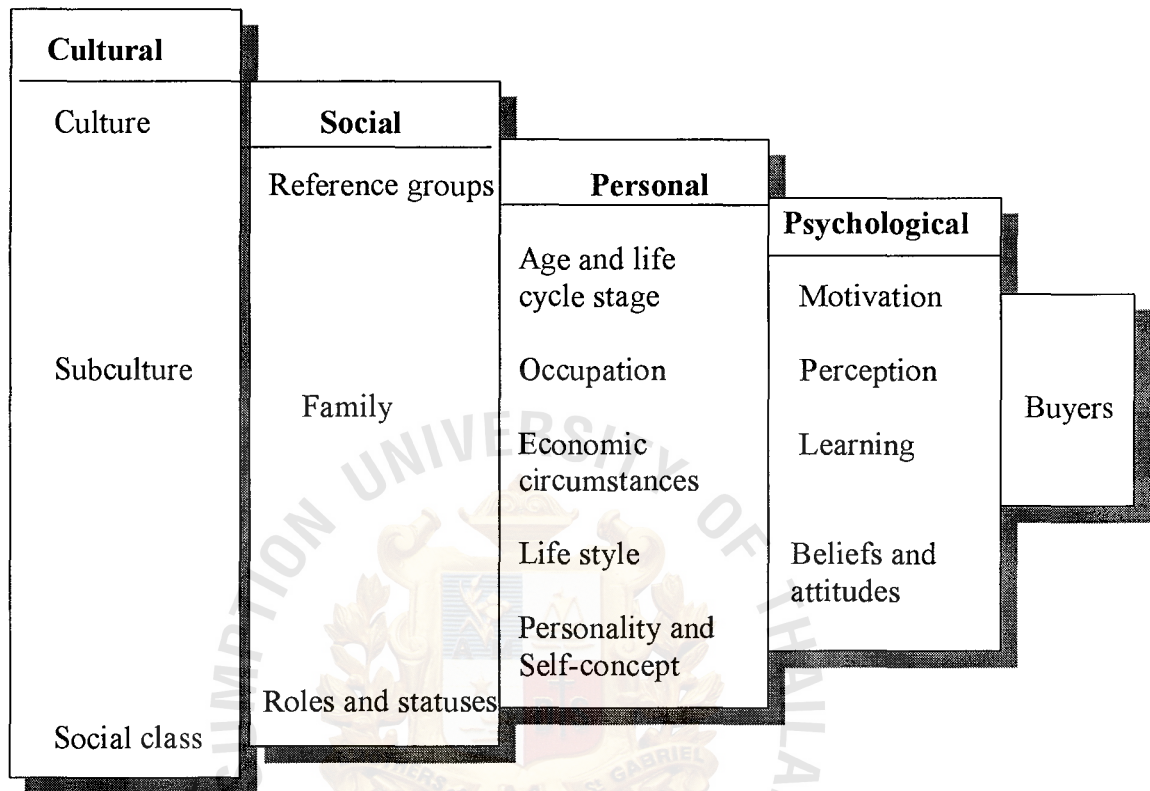
Figure 2.1.   Four Major Factors that Influence the Buyers' Behavior (Kotler 1994).

The buyer's behavior is influenced by four major factors as show in Figure 2.1. All of these provide clues as to how to reach and serve buyers more effectively. (Kotler 1994)

(1)   Cultural (culture, subculture, and social class)

(a)   Culture is the most fundamental determinant of a person's wants and behavior.

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(b) Subculture includes nationalities, religions, racial groups, and geographical regions. Many subcultures make up important market segments, and marketers often design products and marketing programs tailored to their needs.

(c) Social class is relatively homogeneous and enduring divisions in a society, which are hierarchically ordered, and whose members share similar values, interests, and behavior. Social classes show distinct product and brand preferences in such areas as clothing, home furnishings, leisure activities, and automobiles.

(2) Social (reference groups, family and roles and statuses)

(a) Reference groups consist of all the groups that have a direct (face-to-face) or indirect influence on the person's attitudes or behavior. Groups having a direct influence on a person are called membership groups. People are also influenced by groups in which they are not members. Groups to which a person would like to belong are called aspirational groups.

(b) Family members constitute the most influential primary reference group. The parents' influence on the buyer's behavior can be significant.

(c) Roles and statuses. The person's position in each group can be defined in terms of role and status. A role consists of the activities that a person is expected to perform. Each role carries a status. People choose products that communicate their role and status in society.

(3) Personal (age and life-cycle stage, occupation, economic circumstances, lifestyle, and personality and self-concept)

(a) Age and life-cycle stage. People buy different goods and services over their lifetime. Consumption is also shaped by the stage of the family life cycle. Marketers often choose life-cycle groups as their target market.

(b) Occupation. A person's occupation also influences his or her consumption pattern. A blue-collar worker will buy work clothes, work shoes, etc.

(c) Economic circumstances. People's economic circumstances consist of their spendable, income, saving and assets, debts, borrowing power, and attitude toward spending versus saving. Product choice is greatly affected by one's economic circumstances.

(d) Lifestyle. A person's lifestyle is the person's pattern of living in the world as expressed in the person's activities, interests, and opinions. Lifestyle portrays the "whole person" interacting with his or her environment.

(e) Personality and self-concept. Personality is the person's distinguishing psychological characteristics that lead to relatively consistent and enduring responses to his or her environment. The actual self-concept is how a person views herself, while ideal self-concept is how a person would like to view herself and other self-concept is how a person thinks others see her.

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(4) Psychological (motivation, perception, learning, and beliefs and attitudes).

    (a) Motivation. A person has many needs at any given time. A need becomes a motive when it is aroused to a sufficient level of intensity. A motive is a need that is sufficiently pressing to drive the person to act.

    (b) Perception is the process by which an individual selects, organizes, and interprets information inputs to create a meaningful picture of the world. Perception depends not only on the physical stimuli but also on the stimuli's relation tot he surrounding field and on conditions within the individual.

    (c) Learning describes changes in an individual's behavior arising from experience. Most human behavior is learned.

    (d) Beliefs and attitudes. Belief is a descriptive thought that a person holds about something. Attitude is a person's enduring favorable or unfavorable cognitive evaluations, emotional feeling, and action tendencies toward some object or idea. Attitudes lead people to behave in a fairly consistent way toward similar objects.

2.6.1 Types of Consumer Behavior

Four types of consumer behavior are identified, based on two dimensions – differences in features between brands and level of consumer involvement:

(1) Complex decision making and brand loyalty require a high level of involvement on the part of the consumer and sufficient differences between brands to sustain this involvement. Consumers form beliefs about brands, evaluate them, and choose. This think-before-you-act model conforms to a traditional hierarchy of effects.

(2) Dissonance reduction assumes a high level of involvement but the consumer sees few differences between the brands being considered. Since there is no firm basis for deciding on one brand or the other, dissonance or postpurchase doubt is likely to arise.

(3) Variety seeking assumes a low level of involvement yet assumes differences between brands. Given the low level of involvement, there is little risk in switching to another brand; given the differences between brands, there may be reasons for such a switch.

(4) Inertia assumes a low level of involvement and assumes few differences between brands. The consumer has found a reasonably satisfactory brand and will stick with it. Brand switching may be induced by price deals and coupons.

2.7 Consumer Attitudes Theory

Attitudes are an important influence on consumer behavior because attitude describes a person's enduring favorable or unfavorable cognitive evaluations, emotional feelings, and action tendencies toward some object or idea. Attitudes are learned predispositions to respond to an object or class of objects in a consistently favorable or unfavorable way. An attitude describes a person's enduring favorable or unfavorable cognitive evaluations, emotional feeling, and action tendencies toward some object or idea. People have attitudes toward almost everything: religion, politics, clothes, music, food, and so on. Attitudes put them into a frame of mind of liking or disliking an object, moving toward or away from it.

Attitudes lead people to behave in a fairly consistent way toward similar objects. Attitudes economize on energy and thought. For this reason, attitudes are very difficult

to change. A person's attitudes settle into a consistent pattern, and to change a single attitude may require major adjustments in other attitudes.

2.7.1 Attitude Components

It is general accepted that there are three related components establish consumer attitudes that are:

(1) Beliefs (The Cognitive Component)

What consumers believe about a brand becomes the characteristics they ascribe to the brand. There are two types of beliefs : informational beliefs and evaluative beliefs. Informational beliefs are associated with product attributes (e.g., gas mileage or horse power). Evaluative beliefs are associated with product benefits (e.g., economy, roominess). Benefits are a basis for defining opportunity for positioning a new product and for developing advertising strategy.

(2) Brand evaluation (Affective Component)

The second attitude component represents the consumer's overall evaluation of the brand. Beliefs about a brand are multidimensional because they represent the various brand attributes the consumer perceives. In contrast, the affective dimension is one-dimensional. A consumer's overall evaluation of a brand can be measured by rating it from poor to excellent or from prefer least to prefer most.

Ordinarily, when attitudes are referred to without further elaboration, it is the affective component that is being referred to.

(3) Tendency to Act (Behavioral Component)

The third attitude component is the consumer's predisposition to act toward an object, and this is generally measured in terms of intention to buy.

Measuring buying intent is particularly important in developing marketing strategy. Marketing managers frequently test the components of the marketing mix – alternative product concepts, ads, packages, or brand names – to determine what most effectively influences purchase behavior. Test of these alternatives are conducted under artificially controlled circumstances which try to hold all factors constant except the alternative marketing stimuli being tested. (Aaker, Kumar, Day 1998)

2.8 Buying Decision Process

The basic elements in the consumer decision process passes through five stages: problem recognition, information search, evaluation of alternatives, purchase decision and postpurchase behavior (Figure 2.2).

Need recognition	→	Information search	→	Evaluation of alternatives	→	Purchase Decision	→	Postpurchase behavior
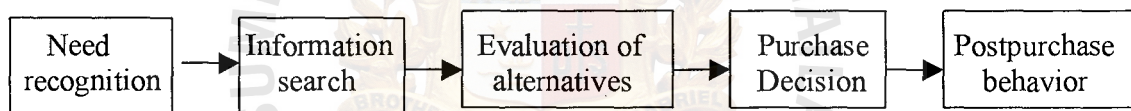
Figure 2.2. Buying Decision Process (Kotler 1994).

(1) Need Recognition: The buying process starts when the buyer recognizes a problem or need. The buyer senses a difference between his or her actual state and a desired state. The need can be triggered by internal or external stimuli. In the former case, one of the person's normal needs rises to a threshold level and becomes a drive. Or a need can be aroused by an external stimulus.

The marketer needs to identify the circumstances that trigger a particular need. By gathering information from a number of consumers, the

marketer can identify the most frequent stimuli that spark an interest in a product category. The marketer can then develop marketing strategies that trigger consumer interest.

(2)   Information Search: An aroused consumer will be inclined to search for more information. The amount of consumer search activity increases as the consumer moves from situations of limited problem solving to extensive problem solving. Consumer information sources fall into four groups :

(a)   Personal sources: Family, friends, neighbors, acquaintances

(b)   Commercial sources: Advertising, salespersons, dealers, packaging, displays

(c)   Public sources: Mass media, consumer-rating organizations

(d)   Experiential sources: Handing, examining, using the product

(3)   Evaluation of Alternatives: There is no simple and single evaluation process used by all consumers or even by one consumer in all buying situations. There are several decision evaluation processes.

Consumers differ as to which product attributes they see as relevant or salient. They will pay the most attention to the ones that will deliver the sought benefits. The market for a product can often be segmented according to the attributes that are salient to different consumer groups.

(4)   Purchase Decision: In the evaluation stage, the consumer forms preferences among the brands in the choice set. The consumer may also form a purchase intention to buy the most preferred brand. However, two factors can intervene between the purchase intention and the purchase decision.

The first factor is the attitudes of others. The extent to which another person's attitude reduces one's preferred alternative depends upon two

things: (1) the intensity of the other person's negative attitude toward the consumer's preferred alternative and (2) the consumer's motivation to comply with the other person's wishes. The more intense the other person's negativism, and the closer the other person is to the consumer, the more consumer will adjust his or her purchase intention.

Purchase intention is also influenced by unanticipated situational factors. The consumer forms a purchase intention on the basis of such factors as expected family income, expected price, and expected product benefits. When the consumer is about to act, unanticipated situational factors may erupt to change the purchase intention.

(5) Postpurchase Behavior: After purchasing the product, the consumer will experience some level of satisfaction or dissatisfaction. The consumer will also engage in postpurchase actions and product uses of interest to the marketer. The marketer's job does not end when the product is bought but continues into the postpurchase period. (Kotler 1994)

2.9 Case Study

The result of the survey of NECTEC (2544) found that percentage of male use the Internet is not much different from female, which is at 50.8 percent and 49.2 percent respectively. Most of the users is at 20 – 29 years old (49.10 percent), follow by the age at 30 – 39 years old (21.50 percent) and live in Bangkok highest to 52.2 percent. The education level of the users is at Bachelor degree (60.30 percent) follow by the Master degree (12.90 percent). The experience of most users is at more than 1 – 2 years and uses the Internet from home, only 9.70 percent use the Internet from the Internet café. Email and search information is the first 2 popular activities in using the Internet. The percentage in using the e-commerce is quite low at 19.60 percent. Book is the most

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popular products in E-commerce(56.60 percent) follow by the software (31.30 percent). The main reason that the Internet users does not want to use the service is that can not see or touch the products (41.70 percent), do not believe the unknown vendors (32.70 percent) and do not want to give the credit card information (27.20 percent).

Supranee Jariyaporn (สุปราณี 2542) has studied about the attitude and perceptions of electronic commerce for the Internet users in Bangkok area found that the three main purposes of Internet use is for entertainment, communication and for finding new information. There are only 8.30 percent of samples who use the service of electronic commerce, and the three most popular products and services are knowledge products such as the news, travel information, the entertainment products and food for home delivery.
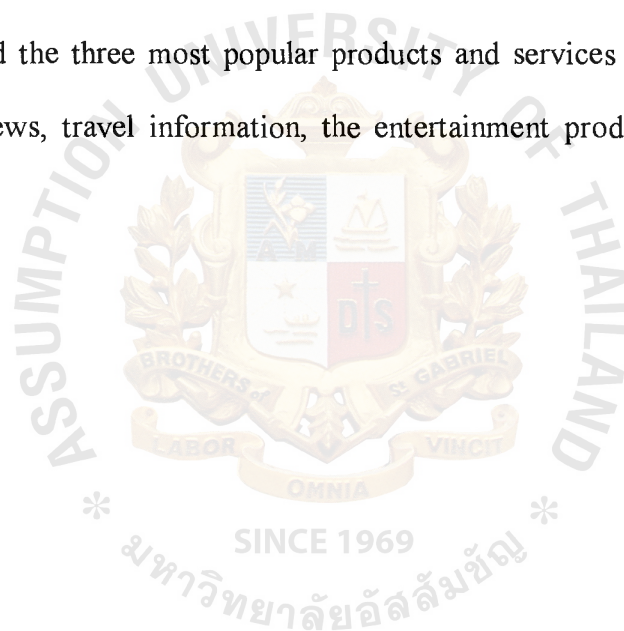
III. RESEARCH METHODOLOGY

3.1 Population

The purpose of this research is to study the behavior of the Internet users in the Bangkok area and their attitude towards the E-commerce those may be use or do not use the service of electronic commerce. Then the population is focused to Internet users only in the Bangkok area.

3.2 Sample Size

It is hard to mention the accurate population of the Internet users in the Bangkok area. However, refer to the statistic from National Information Technology Committee Secretariat (NITC) which post on the www.nitc.go.th, it can be estimated that there are 1,234,542 Internet users in the Bangkok area up to May 2001.

By using the theory of Taro Yamane with the confidential at 95% (0.05). The sampling population can be calculated from the following formula:

$$n = \frac{N}{1 + Ne^2}$$

Where

n = Sample size

N = Population

e = Allowed level of sampling error

Then the sample size is equal to

$$n = \frac{1,234,542}{1 + 1,234,542(0.05)^2}$$
$$= 399.87$$

Then the sample size is 400

3.3 Sampling

The research of "Behavior and Attitude of Internet Users toward Electronic Commerce in Bangkok" is the survey research by using the questionnaires as the tool.

The questionnaires are distributed by using the multi-stage sampling method.

The first step is using the lottery sampling method. By drawing 10 representative districts out of totally 50 districts in Bangkok, the result of drawing is:

(1) Sathon District

(2) Bangkoknoi District

(3) Phayathai District

(4) Bangkae District

(5) Jatujak District

(6) Bangrak District

(7) Bangkapi District

(8) Pathumwan District

(9) Thonburi District

(10) Pranakorn District

The second step is using the purposive sampling method. The 40 questionnaires each will be distributed to each representative district by searching from the different places.

3.4 Tool of Research

This research uses the questionnaire as a tool which composes of three parts.

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The first part: Demographic Data

This part will have 6 questions ask about the personal data which is sex, age, marital status, education, occupation and income. All questions are the multiple choices.

The second part: Behavior of the Internet users

This part will have 6 questions ask about the behavior in using the Internet. The questions compose of the multiple choices and ranking.

The third part: Behavior and attitude of the Internet users toward E-commerce

This part will have 12 questions to ask about the behavior and the attitude toward the e-commerce. The questions compose of the multiple choices, rating scale and end with the open idea.

The scale is weighed as

Strongly agree	=	5
Agree	=	4
Not sure	=	3
Disagree	=	2
Strongly disagree	=	1

3.5 Variable

It has two variables, the independent variable and dependent variable that use to analyze the hypothesis test. The independent variable of the research will be the demography data, which is

Sex	Age	Marital status
Education	Occupation	Income

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The dependent variable of the research will be the behavior of the Internet users and the behavior and attitude of the Internet users towards the E-commerce.

The hypothesis tests are set as follows

Hypothesis 1. The relationship between demography of the Internet users and the behavior in using Internet.

(1)   The relationship between demography and experience in using Internet.

(2)   The relationship between demography and time in using Internet (per week).

(3)   The relationship between demography and average hour in using Internet.

(4)   The relationship between demography and expense in using Internet.

(5)   The relationship between demography and the first purpose in using Internet.

Hypothesis 2. The relationship between demography of the Internet users and the behavior in using E-commerce.

(1)   The relationship between demography and experience in using E-commerce.

(2)   The relationship between demography and reason in using E-commerce.

(3)   The relationship between demography and frequency in using E-commerce.

(4)   The relationship between demography and average order value in using E-commerce.

(5)   The relationship between demography and payment method in using E-commerce.

(6)   The relationship between demography and preferred payment method in using E-commerce.

(7)   The relationship between demography and source of using E-commerce.

Hypothesis 3. The relationship between demography of the Internet users and the attitude towards E-commerce.

(1) The relationship between sex and the attitude towards E-commerce.

(2) The relationship between age and the attitude towards E-commerce.

(3) The relationship between education and the attitude towards E-commerce.

(4) The relationship between marital status and the attitude towards E-commerce.

(5) The relationship between occupation and the attitude towards E-commerce.

(6) The relationship between income and the attitude towards E-commerce.

Hypothesis 4. The relationship between demography of the Internet users and the trend in using E-commerce.

(1) The Relationship between demography and trend in using E-commerce.

Independent variable   **Dependent variable**

Personal Data
- Sex
- Age
- Marital status
- Education
- Occupation
- Income

Behavior of Internet users

Behavior, attitude and trend in using E-commerce
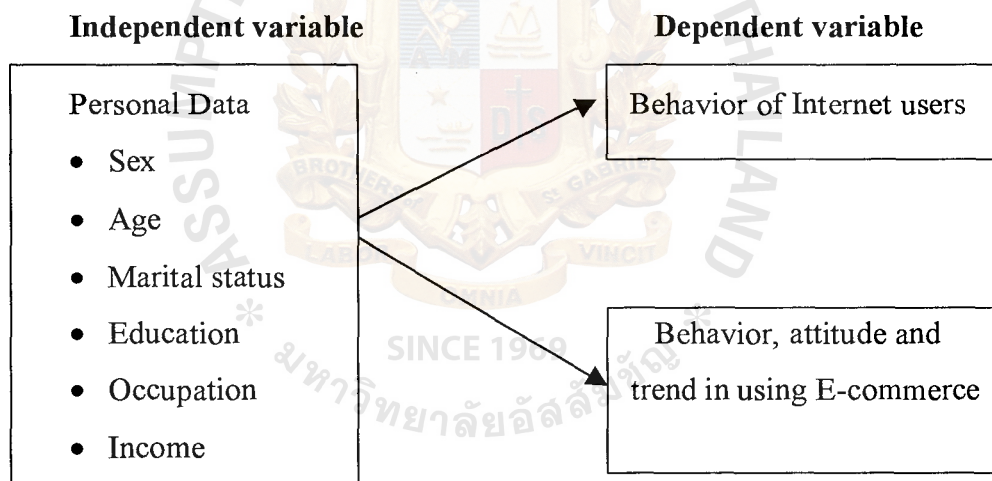
Figure 3.1.   The Relationship of Independent Variable and Dependent Variable.

3.6   Data Collection

The 400 questionnaires are collected from the Internet users in the Bangkok area at the 10 selected district from the different places such as office building, department stores, schools or universities, Internet cafés, etc.

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3.7 Data Analysis

The collected data is analyzed by using the Statistical Package for Social Sciences (SPSS). The data is analyzed by using the following statistics:

(1) Descriptive Analysis is presented in the table by using

    (a) Percentage which use in analyze the general data of sample size

    (b) Mean which use in find the average score of the data

    (c) Standard Deviation uses with mean to show the distribute of data

(2) Inferential Analysis is used in the hypothesis test by using

    (a) T-test which use in testing the difference mean between two groups

    (b) F-test which use in testing the difference mean of above two groups by using one – way ANOVA

The result of the questions that use the interval scales is found by using the following formula

$$\text{Interval (I)} = \frac{\text{Range (R)}}{\text{Class (C)}}$$

$$= \frac{5-1}{5}$$

$$= 0.80$$

where   R is the highest score – lowest score

           C is the number of class

Criteria

    Mean 4.21 - 5.00 is Strongly agree

    Mean 3.41 – 4.20 is Agree

    Mean 2.61 – 3.40 is Not sure

    Mean 1.81 – 2.60 is Disagree

    Mean 1.00 – 1.80 is Strongly disagree

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IV. RESULTS AND ANALYSIS

After collecting and checking the completion of data, the 400 copies of questionnaires have been analyzed and the result are shown as the follows:

4.1 The Analysis of the Demographic Characteristics

Table 4.1. Respondents Classified by Gender.

Sex	Frequency	Percent
Male	206	51.50
Female	194	48.50
Total	400	100.00

According to Table 4.1, there are 400 respondents. There is not much different percentage between gender. Male are 206 respondents, which is 51.50 percent follow by female at 194 respondents, which is 48.50 percent.

Table 4.2. Respondents Classified by Age.

Age	Frequency	Percent
Less than 20 years	25	6.30
21 - 25 years	62	15.50
26 - 30 years	216	54.00
31 - 35 years	61	15.30
36 - 40 years	28	7.00
Over 41 years	8	2.00
Total	400	100.00

According to Table 4.2, the majority age of the respondents is between 26 – 30 years which is at 54 percent, follow by the 21 – 25 years which is at 15.50 percent and at 31 – 35 years which is at 15.30 percent respectively.

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Table 4.3. Respondents Classified by Education.

Education	Frequency	Percent
Do not get education	4	1.00
High School or equivalent	14	3.50
Bachelor Degree or equivalent	213	53.30
Master Degree or equivalent	165	41.30
Higher than Master Degree	4	1.00
Total	400	100.00

According to Table 4.3, the education level of major respondents is the Bachelor Degree or equivalent, there are 213 respondents at 53.30 percent, follow by the Master Degree or equivalent which has 165 respondents or at 41.30 percent and then by High School or equivalent which has 14 respondents or at 3.50 percent respectively.

Table 4.4. Respondents Classified by Marital Status.

Marital Status	Frequency	Percent
Single	330	82.50
Married	63	15.80
Divorce	7	1.80
Total	400	100.00

According to Table 4.4, the marital status of most respondents is single which has totally 330 respondents or at 82.50 percent, follow by married with 63 respondents or at 15.80 percent. There are only 1.80 percent or 7 respondents, which is divorce.

According to Table 4.5, the major occupation of respondents are the employees, which has the highest frequency at 240 respondents or 60 percent follow by the

government officers with 51 respondents or at 12.80 percent. There are 46 respondents

or 11.50 percent do their personal business which is counted on the third range.

Table 4.5.   Respondents Classified by Occupation.

Occupation	Frequency	Percent
Student	37	9.30
Employee	240	60.00
Government officer	51	12.80
Personal Business	46	11.50
Freelance	26	6.50
Total	400	100.00

Table 4.6.   Respondents Classified by Income.

Income	Frequency	Percent
Less than 10,000 baht	50	12.50
10,001 – 20,000 baht	108	27.00
20,001 – 30,000 baht	113	28.30
30,001 – 40,000 baht	56	14.00
More than 40,001 baht	73	18.30
Total	400	100.00

From the 400 respondents, there are 113 respondents, which has the income

between 20,001 – 30,000 baht per month or 28.30 percent follow by 108 respondents

that has the income range between 10,001 – 20,000 baht or at 27.00 percent. The third

range of income is at more than 40,001 baht, which has 73 respondents, or at 18.30

percent as shown in Table 4.6.

4.2 The Analysis of the Behavior of Using Internet

Table 4.7. Place of Using the Internet of the Respondents.

Place of using Internet	Frequency	Percent
Home	279	43.10
Internet Café	36	5.60
Office	289	44.70
School / University	39	6.00
Others	4	0.60
Total	647	100.00

According to Table 4.7, the two major places of using Internet of the respondents are the office which is at 44.70 percent and at home which is at 43.10 percent. There are only 6 percent that use the Internet from the school or university.

Remarks : the respondents can choose more than one answers

Table 4.8. Respondents Classified by Experience in Using Internet.

Experience in using Internet	Frequency	Percent
Less than 1 year	7	1.80
1 - 3 years	84	21.00
3 - 4 years	111	27.80
More than 4 years	198	49.50
Total	400	100.00

According to Table 4.8, the highest experience of the respondents in using the Internet is more than 4 years. There are 198 respondents or 49.50 percent. There are 111 respondents or 27.80 percent that use the Internet about 3 – 4 years with the 84 respondents or 21.00 percent that use the Internet about 1 – 3 years.

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Table 4.9.   Respondents Classified by Time in Using Internet per Week.

Times in using Internet per week	Frequency	Percent
1 - 3 times per week	92	23.00
4 - 6 times per week	91	22.80
7 - 10 times per week	86	21.50
More than 10 times per week	131	32.80
Total	400	100.00

According to Table 4.9, the frequency in using the Internet of most respondents is more than 10 time per week, by 131 respondents or 32.80 percent.   The second frequency is at 1 – 3 times per week, by 92 respondents or 23.00 percent, and by 4 – 6 times per week by 91 respondents or 22.80 percent respectively.

Table 4.10.   Respondents Classified by Average Hour in Using Internet per Time.

Average hour in using Internet per time	Frequency	Percent
Less than 1 hour	76	19.00
1 - 2 hours per time	198	49.50
2 - 3 hours per time	62	15.50
More than 3 hours per time	64	16.00
Total	400	100.00

According to Table 4.10, the highest average hour in using the Internet per time is at 1 – 2 hours, by 198 respondents or 49.50 percent, follow by less than 1 hour by 76 respondents or 19.00 percent and then at more than 3 hours per time by 64 respondents or 16.00 percent.

Table 4.11. Respondents Classified by Expense in Using Internet.

Expense in using Internet (per month)	Frequency	Percent
Free of charge	285	71.30
Less than 250 baht	28	24.30
251 - 500 baht	43	37.40
501 - 750 baht	34	29.60
More than 750 baht	10	8.70
Total	400	100.00

According to Table 4.11, most respondents do not have the expense in using Internet, 285 respondents or at 71.30 percent. For the highest range of expense in using Internet is about 251 – 500 baht per month with 43 respondents or 37.40 percent follow by the range at 501 – 750 baht with 34 respondents or 29.60 percent respectively.

Table 4.12. Respondents Classified by the Purpose in Using Internet.

Purpose of using Internet	Frequency (first range)	Percent	Frequency (second range)	Percent	Frequency (third range)	Percent
Check mails	247	61.80	44	11.00	26	6.50
Chats	3	0.80	40	10.00	10	2.50
Search Information	91	22.80	173	43.30	64	16.00
Recreation/entertainment	-	-	25	6.30	84	21.00
Read or express opinion in the Web board	-	-	-	-	32	8.00
Collect the information about goods or services	4	1.00	14	3.50	30	7.50
Download program	3	0.80	29	7.30	49	12.30
Dealing business	48	12.00	39	9.80	11	2.80
Search and apply job	-	-	21	5.30	35	8.80
Use e-commerce service	-	-	4	1.00	11	2.80
Play games	4	1.00	7	1.80	9	2.30
Others	-	-	4	1.00	39	9.80
Total	400	100.00	400	100.00	400	100.00

According to Table 4.12, the first purpose of the respondents in using the Internet is for checking the mails with 247 respondents or 61.80 percent follow by searching the information with 91 respondents or 22.80 percent and then by dealing business with 48 respondents or 12 percent respectively.

The major second purpose in using Internet of the respondents is for searching the information with 173 respondents or 43.30 percent, follow by checking mails with 44 respondents or 11.00 percent and then by chat with 40 respondents or 10.00 percent.

The third purpose of most respondents in using Internet is for recreating or entertainment with 84 respondents or 21.00 percent, follow by searching information with 64 respondents or 16.00 percent and then by downloading program with 49 respondents or 12.30 percent respectively.

4.3 The Analysis of the Behavior in Using E-commerce

Table 4.13. Respondents Classified by the Experience in Using E-commerce.

Experience in using E-commerce	Frequency	Percent
Yes	102	25.50
No, but will try	141	35.30
No and do not want to try	157	39.20
Total	400	100.00

According to Table 4.13, there are only 102 respondents or 25.50 percent who use the E-commerce, the 141 respondents or 35.30 percent have never used the E-commerce but may try in the future and the 157 respondents or 39.20 percent have never used the E-commerce and do not want to try in the future.

According to Table 4.14, there are 102 respondents who use E-commerce, their major reason is convenience in find the information and doing the transaction which has

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65 respondents or 63.70 percent. The second reason is save the travel time which has 15 respondents or 14.70 percent and follow by time saving in buying the goods or services which has 10 respondents or 9.80 percent.

Table 4.14. Respondents Classified by Reason in Using E-commerce.

Reason in using E-commerce	Frequency	Percent
Convenience in find the information and doing the transaction	65	63.70
Time saving in buying the goods or services	10	9.80
Cheaper price	8	7.80
Save the travel time	15	14.70
Others	4	3.90
Total	102	100.00

Table 4.15. Respondents Classified by Time in Using E-commerce.

Time of using E-commerce	Frequency	Percent
1 time	20	19.60
2 - 3 times	33	32.40
4 - 5 times	4	3.90
More than 5 times	45	44.10
Total	102	100.00

According to Table 4.15, the 45 of 102 respondents who use the E-commerce, have used more than 5 times or 44.10 percent, follow by 33 respondents have used about 2 – 3 times or about 32.40 percent and 20 of them have ever used only 1 time or at 19.60 percent.

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Table 4.16. Respondents Classified by Average Value per Order in Using E-commerce.

Average value per order	Frequency	Percent
Less than 500 baht	4	3.90
501 - 1,500 baht	29	28.40
1,501 – 3,000 baht	38	37.30
3,001 - 4,500 baht	4	3.90
Over 4,501 baht	27	26.50
Total	102	100.00

According to Table 4.16, from 102 respondents who use E-commerce, the most average value per order that they paid is about 1,501 – 3,000 baht, which have 38 respondents or at 37.30 percent. The second average value per order is at 501 – 1,500 baht. There are 29 respondents who paid at this range or at 28.40 percent. The third average value per order is over 4,5001 baht with 27 respondents or 26.50 percent.

Table 4.17. Respondents Classified by Payment Method in Using E-commerce.

Payment method	Frequency	Percent
Via credit card	64	62.70
Via Bank account	30	29.40
Paid at the destination	8	7.80
Total	102	100.00

According to Table 4.17, the major payment method in E-commerce is using credit card with 64 respondents or 62.70 percent follow by using the bank account with 30 respondents or at 29.40 percent and by paid at the destination with 8 respondents or 7.80 percent respectively.

Table 4.18.   Respondents Classified by Preferred Payment Method in Using E-commerce.

Preferred payment method	Frequency	Percent
Via credit card	125	51.40
Via Bank account	57	23.50
Paid at the destination	54	22.20
Others	7	2.90
Total	243	100.00

According to Table 4.18, the highest preferred payment method of the 243 respondents who use E-commerce and will use in the future is via credit card with 125 respondents or 51.40 percent follow by transferring to the bank account with 57 respondents or 23.50 percent and then paid at the destination with 54 respondents or 22.20 percent respectively.

Table 4.19.   Respondents Classified by Source in Using E-commerce.

Source of using E-commerce	Frequency	Percent
Domestic web site	99	40.70
International Web site	42	17.30
Both sources	102	42.00
Total	243	100.00

According to Table 4.19, the most popular source of those who use E-commerce and will use E-commerce in the future is both from domestic web site and international web site, which has 102 respondents choose this answer or 42.00 percent. The second source is from domestic web site with 99 respondents or 40.70 percent and then by international web sites with 42 respondents or 17.30 percent.

Table 4.20. Respondents Classified by Interested Goods or Service in Using E-commerce.

Interested Goods or Service in using E-commerce	Frequency	Percent
Computer or accessories	77	6.40
Electronics goods	87	7.20
Medical	11	0.90
Gift or souvenir	49	4.10
Furniture or house decoration	3	0.20
CD, VCD, DVD, VDO	102	8.50
Jewelry	4	0.30
Software	44	3.60
Research	18	1.50
Education / E-learning	22	1.80
Air ticket reservation	85	7.00
Food ordering	33	2.70
International call via Internet	41	3.40
Costume	59	4.90
Books	143	11.90
Cosmetic	18	1.50
Flowers	18	1.50
Office supply	10	0.80
Musical instruments	7	0.60
Handicraft	6	0.50
Games / toys	36	3.00
Information / news	37	3.10
Music	39	3.20
Service payments	92	7.60
Booking/hotel reservation	135	11.20
Auction	22	1.80
Others	8	0.70
Total	1,206	100.00

According to Table 4.20, books are the most popular products that the respondents interested to buy from E-commerce represented by 143 respondents or 11.90 percent follow by booking or hotel reservation represented by 135 respondents or 11.20 percent and then buying CD, VCD, DVD or VDO represented by 102 respondents or 8.50 percent respectively.

Table 4.21.   Respondents Classified by Reason for not Using E-commerce.

Reason for not using E-commerce	Frequency	Percent
Do not interested	78	12.60
Do not know about the E-commerce web site	10	1.60
Can not see or touch the goods	86	13.90
Do not trust the sellers	98	15.90
Most goods are from the international web site	8	1.30
The complicate in order transaction	40	6.50
Do not believe in payment method	117	19.00
Do not want to provide the credit card information	80	13.00
Do not have credit card	17	2.80
Do not want to wait for the delivery	29	4.70
The damage which may occur during the delivery	44	7.10
Others	10	1.60
Total	617	100.00

According to Table 4.21, the main reason for the respondents who do not use the E-commerce is because they do not believe in payment method which has 117 respondents or 19.00 percent follow by do not trust the sellers with 98 respondents or 15.90 percent then by cab bit see or touch the goods with 86 respondents or 13.90 percent.

According to Table 4.22, most respondents have highest positive attitude toward E-commerce in the point that it is easily to find the details of goods and service with the mean at 4.185 and follow by the point of is an easy way in buying the goods and service with the mean at 3.810.

Remark: the mean intervals are as follow

Mean 4.21 - 5.00 =   Strongly agree

Mean 3.41 – 4.20 =   Agree

Mean 2.61 – 3.40 =   Not sure

46

Mean 1.81 – 2.60 =   Disagree

Mean 1.00 – 1.80 =   Strongly disagree

Table 4.22.   Respondents' Attitude toward E-commerce.

Attitude toward E-commerce	Mean	Std. Deviation	Frequency
Can easily find the details of goods and service	4.1850	0.70854	Agree
Is an easy way in buying the goods and service	3.8100	0.70721	Agree
Can save the time in selecting the goods and service	3.7925	0.77521	Agree
Can find and order the hard to find products	3.5125	0.75913	Agree
There are varieties of products	3.5825	0.78084	Agree
Easy to search and find the service providers	3.6075	0.80937	Agree
The products and service is according to what you are looking for	3.4900	0.74248	Agree
The price is cheaper than the market price	2.7975	0.74692	Not sure
The products are the quality products	2.9325	0.50356	Not sure
Can get the goods within short of time	3.0100	0.70792	Not sure
The quality of products are same as in the advertisement	3.0225	0.61477	Not sure
The interested homepage can attract to use the service	3.6750	0.82527	Agree
The safety of payment method	2.9225	0.87373	Not sure
The safety in keeping the record	2.7879	0.88901	Not sure
Help in getting the image of in trend	3.2075	0.96528	Not sure
Can replace the traditional buying method	3.1450	0.87228	Not sure
Appropriate to modern way of life	3.1925	0.82895	Not sure
The international service providers is more trustfully than the domestic service providers	2.9250	0.97814	Not sure
It is a buying method of up to date people	3.2125	0.88561	Not sure

Table 4.23.   Respondents' trend in Using E-commerce.

Trend in using E-commerce	Frequency	Percent
Yes	144	36.00
Do not sure	211	52.80
No	45	11.30
Total	400	100.00

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According to Table 4.23, there are 211 respondents who are not sure whether will they use the service of E-commerce or not, or at 52.80 percent. However, 144 respondents or at 36 percent will use the service of E-commerce and only 45 respondents or 11.30 percent will not use the service of E-commerce.

4.4 The Analysis of Comments from Open-end Questionnaire

The questionnaire is end with the open-end question ask about the additional comment toward E-commerce. We can group the comments from the respondents as follows:

(1) Payment - The payment is a major problem that the respondents do not want to use the service of E-commerce. A security payment method can convince the respondents to use the service of E-commerce. Some of them prefer the payment to be effective when receive the goods or service.

(2) Product - The seller should guarantee the quality of the products that will be the same as what they advertise. The guarantee should cover to the delivery service guarantee that the seller will response if the goods is damaged during the delivery.

(3) The security of the buyer's data - Some respondents do not want to do E-commerce transactions because they are not confident that the seller will keep confidentiality about their filled data.

(4) The legal - Even if there is the E-commerce law but some respondents still do not believe that the law can protect them from the fraud, which may occur during doing E-commerce transaction.

4.5 The Analysis of Hypothesis

It is Chi-Square, X^2, that is used to analyze the relationship between the independent variable and dependent variable of behavior and attitude of Internet users

toward E-commerce. The independent variable in this research is the demography data which include sex, age, education, marital status, occupation and income. The dependent variable in this research is the behavior in using Internet, behavior in using E-commerce and the attitude towards E-commerce. The standard significance level is set at 0.05 that is if the significance value is more than 0.05, Ho is accepted unless Ho is rejected and accepts H1.

Hypothesis 1: The relationship between demography of Internet and behavior in using Internet

The first hypothesis will test the relationship between the demography of the respondents and their behavior in using the Internet. The demography data include sex, age, education, marital status, occupation and income. The behavior in using the Internet includes the experience, time (per week), average hour per time, expense and the purpose of using Internet. The Hypothesis test is set as follows.

HO: there is no relationship between sex and behavior in using Internet

H1: there is the relationship between sex and behavior in using Internet

HO: there is no relationship between age and behavior in using Internet

H1: there is the relationship between age and behavior in using Internet

HO: there is no relationship between education and behavior in using Internet

H1: there is the relationship between education and behavior in using Internet

HO: there is no relationship between marital status and behavior in using Internet

H1: there is the relationship between marital status and behavior in using Internet

H0: there is no relationship between occupation and behavior in using Internet

H1: there is the relationship between occupation and behavior in using Internet

H0: there is no relationship between income and behavior in using Internet

H1: there is the relationship between income and behavior in using Internet

Table 4.24. The Relationship between Demography and Experience in Using Internet.

		Experience in using the Internet				X^2	P-Value
		Less than 1 year	1 - 3 years	3 – 4 years	more than 4 years		(Sig.)
Sex						7.602	0.055
Male	Count	-	44	59	103		
	Percent	-	21.40	28.60	50.00		
Female	Count	7	40	52	95		
	Percent	3.60	20.60	26.80	49.00		
Age						187.344	0.000
Less than 20 years	Count	-	18	7	-		
	Percent	-	72.00	28.00	-		
21 - 25 years	Count	-	18	18	26		
	Percent	-	29.00	29.00	41.90		
26 - 30 years	Count	-	17	60	139		
	Percent	-	7.90	27.80	64.40		
31 - 35 years	Count	-	20	15	26		
	Percent	-	32.80	24.60	42.60		
36 - 40 years	Count	7	11	7	3		
	Percent	25.00	39.30	25.00	10.70		
Over 41 years	Count	-	-	4	4		
	Percent	-	-	50.00	50.00		
Education						67.383	0.000
Do not get education	Count	-	4	-	-		
	Percent	-	100.00	-	-		
High School or equivalent	Count	-	7	7	-		
	Percent	-	50.00	50.00	-		
Bachelor Degree or equivalent	Count	-	52	58	103		
	Percent	-	24.40	27.20	48.40		
Master Degree or equivalent	Count	7	17	46	95		
	Percent	4.20	10.30	27.90	57.60		
Higher than Master Degree	Count	-	4	-	-		
	Percent	-	100.00	-	-		
Marital Status						21.505	0.001
Single	Count	3	63	90	174		
	Percent	0.90	19.10	27.30	52.70		
Married	Count	4	17	18	24		
	Percent	6.30	27.00	28.60	38.10		
Divorce	Count	-	4	3	-		
	Percent	-	57.10	42.90	-		

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Table 4.24. The Relationship between Demography and Experience in using Internet (Continued).

		Experience in using the Internet				X^2	P-Value
		Less than 1 year	1 - 3 years	3 – 4 years	more than 4 years		(Sig.)
Occupation						21.505	0.001
Student	Count	-	14	7	16		
	Percent	-	37.80	18.90	43.20		
Employee	Count	-	42	59	139		
	Percent	-	17.50	24.60	57.90		
Government officer	Count	3	16	14	18		
	Percent	5.90	31.40	27.50	35.30		
Personal Business	Count	4	12	15	15		
	Percent	8.70	26.10	32.60	32.60		
Freelance	Count	-	-	16	10		
	Percent	-	-	61.50	38.50		
Income						63.795	0.000
Less than 10,000 baht	Count	-	21	18	11		
	Percent	-	42.00	36.00	22.00		
10,001 - 20,000 baht	Count	-	38	26	44		
	Percent	-	35.20	24.10	40.70		
20,001 - 30,000 baht	Count	3	12	37	61		
	Percent	2.70	10.60	32.70	54.00		
30,001 - 40,000 baht	Count	-	7	11	38		
	Percent	-	12.50	19.60	67.90		
More than 40,001 baht	Count	4	6	19	44		
	Percent	5.50	8.20	26.00	60.30		

According to Table 4.24, the significance value of sex is at 0.055 which is higher than 0.05. Then Ho is accepted, there is no relationship between sex and experience in using Internet at the significance level 0.05.

From the age variable, the significance value is at 0.000 which is less than 0.05. Then H0 is rejected, there is the relationship between age and experience in using Internet at the significance level 0.05.

From the education variable, the significance value is at 0.000 which is less than 0.05. Then H0 is rejected, there is the relationship between education and experience in using Internet at the significance level 0.05.

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From the marital variable, the significance value is at 0.001 which is less than 0.05. Then H0 is rejected, there is the relationship between marital and experience in using Internet at the significance level 0.05.

From the occupation variable, the significance value is at 0.001 which is less than 0.05. Then H0 is rejected, there is the relationship between occupation and experience in using Internet at the significance level 0.05.

From the income variable, the significance value is at 0.000 which is less than 0.05. Then H0 is rejected, there is the relationship between income and experience in using Internet at the significance level 0.05.

Table 4.25. The Relationship between Demography and Time in Using Internet (per week).

		Time in using Internet (per week)				X^2	P-Value (Sig.)
		1 – 3 times	4 – 6 times	7 – 10 times	More than 10 times		
Sex						6.511	0.089
Male	Count	55	41	38	72		
	Percent	26.70	19.90	18.40	35.00		
Female	Count	37	50	48	59		
	Percent	19.10	25.80	24.70	30.40		
Age						43.185	0.000
Less than 20 years	Count	12	10	3	-		
	Percent	48.00	40.00	12.00	-		
21 - 25 years	Count	13	15	16	18		
	Percent	21.00	24.20	25.80	29.00		
26 - 30 years	Count	48	38	48	82		
	Percent	22.20	17.60	22.20	38.00		
31 - 35 years	Count	12	18	15	16		
	Percent	19.70	29.50	24.60	26.20		
36 - 40 years	Count	7	10	-	11		
	Percent	25.00	35.70	-	39.30		
Over 41 years	Count	-	-	4	4		
	Percent	-	-	50.00	50.00		
Education						39.400	0.000
Do not get education	Count	4	-	-	-		
	Percent	100.00	-	-	-		
High School or equivalent	Count	4	7	3	-		
	Percent	28.60	50.00	21.40	-		
Bachelor Degree or equivalent	Count	47	40	47	79		
	Percent	22.10	18.80	22.10	37.10		
Master Degree or equivalent	Count	37	40	36	52		
	Percent	22.40	24.20	21.80	31.50		

Table 4.25. The Relationship between Demography and Time in Using Internet (per week). (Continued)

		Time in using Internet (per week)				X^2	P-Value (Sig.)
		1 – 3 times	4 – 6 times	7 – 10 times	More than 10 times		
Higher than Master Degree	Count	-	4	-	-		
	Percent	-	100.00	-	-		
Marital Status						25.839	0.000
Single	Count	79	77	78	96		
	Percent	23.90	23.30	23.60	29.10		
Married	Count	10	10	8	35		
	Percent	15.90	15.90	12.70	55.60		
Divorce	Count	3	4	-	-		
	Percent	42.90	57.10	-	-		
Occupation						24.695	0.016
Student	Count	8	14	11	4		
	Percent	21.60	37.80	29.70	10.80		
Employee	Count	46	54	53	87		
	Percent	19.20	22.50	22.10	36.30		
Government officer	Count	19	4	10	18		
	Percent	37.30	7.80	19.60	35.30		
Personal Business	Count	12	11	8	15		
	Percent	26.10	23.90	17.40	32.60		
Freelance	Count	7	8	4	7		
	Percent	26.90	30.80	15.40	26.90		
Income						52.785	0.000
Less than 10,000 baht	Count	4	10	19	4		
	Percent	10.80	27.00	51.40	10.80		
10,001 - 20,000 baht	Count	55	126	17	42		
	Percent	22.90	52.50	7.10	17.50		
20,001 - 30,000 baht	Count	3	25	12	11		
	Percent	5.90	49.00	23.50	21.60		
30,001 - 40,000 baht	Count	14	22	6	4		
	Percent	30.40	47.80	13.00	8.70		
More than 40,001 baht	Count	-	15	8	3		
	Percent	-	57.70	30.80	11.50		

According to Table 4.25 which shows the relationship of demography and the time in using the Internet. The significance value of sex is at 0.089 which is higher than 0.05. Then Ho is accepted, there is no relationship between sex and time in using Internet at the significance level 0.05.

From the age variable, the significance value is at 0.000 which is less than 0.05. Then H0 is rejected and accept H1, there is the relationship between age and time in using Internet at the significance level 0.05.

From the education variable, the significance value is at 0.000 which is less than 0.05. Then H0 is rejected and accept H1, there is the relationship between education and time in using Internet at the significance level 0.05.

From the marital variable, the significance value is at 0.000 which is less than 0.05. Then H0 is rejected and accept H1, there is the relationship between marital and time in using Internet at the significance level 0.05.

From the occupation variable, the significance value is at 0.016 which is less than 0.05. Then H0 is rejected and accept H1, there is the relationship between occupation and time in using Internet at the significance level 0.05.

From the income variable, the significance value is at 0.000 which is less than 0.05. Then H0 is rejected, there is the relationship between income and time in using Internet at the significance level 0.05.

Table 4.26.   The Relationship between Demography and Average Hour in Using Internet.

		Average hour in using Internet per time				X^2	P-Value (Sig.)
		Less than 1 hour	1 – 2 hours	2 – 3 hours	More than 3 hours		
Sex						3.644	0.303
Male	Count	34	111	31	30		
	Percent	16.50	53.90	15.00	14.60		
Female	Count	42	87	31	34		
	Percent	21.60	44.80	16.00	17.50		
Age						70.166	0.000
Less than 20 years	Count	4	10	11	-		
	Percent	16.00	40.00	44.00	-		
21 - 25 years	Count	7	25	19	11		
	Percent	11.30	40.30	30.60	17.70		
26 - 30 years	Count	39	103	29	45		
	Percent	18.10	47.70	13.40	20.80		
31 - 35 years	Count	22	31	-	8		
	Percent	36.10	50.80	-	13.10		
36 - 40 years	Count	4	21	3	-		
	Percent	14.30	75.00	10.70	-		
Over 41 years	Count	-	8	-	-		
	Percent	-	100.00	-	-		

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Table 4.26. The Relationship between Demography and Average Hour in Using Internet. (Continued)

		Average hour in using Internet per time				X^2	P-Value (Sig.)
		Less than 1 hour	1 – 2 hours	2 – 3 hours	More than 3 hours		
Education						77.039	0.000
Do not get education	Count	4	-	-	-		
	Percent	100.00	-	-	-		
High School or equivalent	Count	-	3	11	-		
	Percent	-	21.40	78.60	-		
Bachelor Degree or equivalent	Count	31	123	25	34		
	Percent	14.60	57.70	11.70	16.00		
Master Degree or equivalent	Count	41	68	26	30		
	Percent	24.80	41.20	15.80	18.20		
Higher than Master Degree	Count	-	4	-	-		
	Percent	-	100.00	-	-		
Marital Status						17.430	0.008
Single	Count	72	152	54	52		
	Percent	21.80	46.10	16.40	15.80		
Married	Count	4	39	8	12		
	Percent	6.30	61.90	12.70	19.00		
Divorce	Count	-	7	-	-		
	Percent	-	100.00	-	-		
Occupation						72.228	0.000
Student	Count	4	10	19	4		
	Percent	10.80	27.00	51.40	10.80		
Employee	Count	55	126	17	42		
	Percent	22.90	52.50	7.10	17.50		
Government officer	Count	3	25	12	11		
	Percent	5.90	49.00	23.50	21.60		
Personal Business	Count	14	22	6	4		
	Percent	30.40	47.80	13.00	8.70		
Freelance	Count	-	15	8	3		
	Percent	-	57.70	30.80	11.50		
Income						79.269	0.000
Less than 10,000 baht	Count	4	13	23	10		
	Percent	8.00	26.00	46.00	20.00		
10,001 - 20,000 baht	Count	22	60	15	11		
	Percent	20.40	55.60	13.90	10.20		
20,001 - 30,000 baht	Count	17	56	17	23		
	Percent	15.00	49.60	15.00	20.40		
30,001 - 40,000 baht	Count	21	31	4	-		
	Percent	37.50	55.40	7.10	-		
More than 40,001 baht	Count	12	38	3	20		
	Percent	16.40	52.10	4.10	27.40		

According to Table 4.26, we can analyze the relationship of demography and average hour in using the Internet as follows. The significance value of sex is at 0.303

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which is higher than 0.05. Then Ho is accepted, there is no relationship between sex and average hour in using Internet at the significance level 0.05.

From the age variable, the significance value is at 0.000 which is less than 0.05. Then H0 is rejected and accept H1, there is the relationship between age and average hour in using Internet at the significance level 0.05.

From the education variable, the significance value is at 0.000 which is less than 0.05. Then H0 is rejected and accept H1, there is the relationship between education and average hour in using Internet at the significance level 0.05.

From the marital variable, the significance value is at 0.008 which is less than 0.05. Then H0 is rejected and accept H1, there is the relationship between marital and average hour in using Internet at the significance level 0.05.

From the occupation variable, the significance value is at 0.000 which is less than 0.05. Then H0 is rejected and accept H1, there is the relationship between occupation and average hour in using Internet at the significance level 0.05.

From the income variable, the significance value is at 0.000 which is less than 0.05. Then H0 is rejected, there is the relationship between income and average hour in using Internet at the significance level 0.05.

Table 4.27.   The Relationship between Demography and Expense in Using Internet.

		Expense in using the Internet		X^2	P-Value
		Free of charge	Have the expense		(Sig.)
Sex				1.114	0.291
Male	Count	142	64		
	Percent	68.90	31.10		
Female	Count	143	51		
	Percent	73.70	26.30		
Age				21.858	0.001
Less than 20 years	Count	21	4		
	Percent	84.00	16.00		
21 - 25 years	Count	34	28		
	Percent	54.80	45.20		

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Table 4.27. The Relationship between Demography and Expense in Using Internet. (Continued)

		Expense in using the Internet		X^2	P-Value (Sig.)
		Free of charge	Have the expense		
26 - 30 years	Count	165	51		
	Percent	76.40	23.60		
31 - 35 years	Count	47	14		
	Percent	77.00	23.00		
36 - 40 years	Count	14	14		
	Percent	50.00	50.00		
Over 41 years	Count	4	4		
	Percent	50.00	50.00		
Education				30.458	0.000
Do not get education	Count	-	4		
	Percent	-	100.00		
High School or equivalent	Count	14	-		
	Percent	100.00	-		
Bachelor Degree or equivalent	Count	143	70		
	Percent	67.10	32.90		
Master Degree or equivalent	Count	128	37		
	Percent	77.60	22.40		
Higher than Master Degree	Count	-	4		
	Percent	-	100.00		
Marital Status				23.110	0.000
Single	Count	247	83		
	Percent	74.80	25.20		
Married	Count	38	25		
	Percent	60.30	39.70		
Divorce	Count	-	7		
	Percent	-	100.00		
Occupation				14.563	0.006
Student	Count	29	8		
	Percent	78.40	21.60		
Employee	Count	180	60		
	Percent	75.00	25.00		
Government officer	Count	30	21		
	Percent	58.80	41.20		
Personal Business	Count	34	12		
	Percent	73.90	26.10		
Freelance	Count	12	14		
	Percent	46.20	53.80		
Income				45.050	0.000
Less than 10,000 baht	Count	36	14		
	Percent	72.00	28.00		
10,001 - 20,000 baht	Count	51	57		
	Percent	47.20	52.80		
20,001 - 30,000 baht	Count	89	24		
	Percent	78.80	21.20		
30,001 - 40,000 baht	Count	49	7		
	Percent	87.50	12.50		
More than 40,001 baht	Count	60	13		
	Percent	82.20	17.80		

According to Table 4.27 we can analyze the relationship of demography and expense in using the Internet as follows. The significance value of sex is at 0.291 which is higher than 0.05. Then Ho is accepted, there is no relationship between sex and expense in using Internet at the significance level 0.05.

From the age variable, the significance value is at 0.001 which is less than 0.05. Then H0 is rejected and accept H1, there is the relationship between age and expense in using Internet at the significance level 0.05.

From the education variable, the significance value is at 0.000 which is less than 0.05. Then H0 is rejected and accept H1, there is the relationship between education and expense in using Internet at the significance level 0.05.

From the marital variable, the significance value is at 0.000 which is less than 0.05. Then H0 is rejected and accept H1, there is the relationship between marital and expense in using Internet at the significance level 0.05.

From the occupation variable, the significance value is at 0.006 which is less than 0.05. Then H0 is rejected and accept H1, there is the relationship between occupation and expense in using Internet at the significance level 0.05.

From the income variable, the significance value is at 0.000 which is less than 0.05. Then H0 is rejected, there is the relationship between income and income in using Internet at the significance level 0.05.

Table 4.28. The Relationship between Demography and the First Purpose in Using Internet.

		The first purpose in using the Internet							X^2	P-Value (Sig.)
		Check mails	Chats	Search Infor mation	Find informa tion of goods or services	Down load pro gram	Deal ing busi ness	Play game		
Sex									14.195	0.028
Male	Count	127	-	46	-	3	26	4		
	Percent	61.70	-	22.30	-	1.50	12.60	1.90		
Female	Count	120	3	45	4	-	22	-		
	Percent	61.90	1.50	23.20	2.10	-	11.30	-		
Age									151.027	0.000
Less than 20 years	Count	18	-	3	-	-	-	4		
	Percent	72.00	-	12.00	-	-	-	16.00		
21 - 25 years	Count	35	-	15	-	-	12	-		
	Percent	56.50	-	24.20	-	-	19.40	-		
26 - 30 years	Count	132	-	49	-	3	32	-		
	Percent	61.10	-	22.70	-	1.40	14.80	-		
31 - 35 years	Count	32	-	21	4	-	4	-		
	Percent	52.50	-	34.40	6.60	-	6.60	-		
36 - 40 years	Count	22	3	3	-	-	-	-		
	Percent	78.60	10.70	10.70	-	-	-	-		
Over 41 years	Count	8	-	-	-	-	-	-		
	Percent	100.00	-	-	-	-	-	-		
Education									33.416	0.001
Do not get education	Count	4	-	-	-	-	-	-		
	Percent	100.00	-	-	-	-	-	-		
High School or equivalent	Count	7	-	3	-	-	-	4		
	Percent	50.00	-	21.40	-	-	-	28.60		
Bachelor Degree or equivalent	Count	121		58	4	3	27	-		
	Percent	56.80		27.20	1.90	1.40	12.70	-		
Master Degree or equivalent	Count	111	3	30	-	-	21	-		
	Percent	67.30	1.80	18.20	-	-	12.70	-		
Higher than Master Degree	Count	4	-	-	-	-	-	-		
	Percent	100.00	-	-	-	-	-	-		
Marital Status									132.587	0.000
Single	Count	196	3	84	-	3	40	4		
	Percent	59.40	0.90	25.50	-	0.90	12.10	1.20		
Married	Count	44	-	7	4	-	8	-		
	Percent	69.80	-	11.10	6.30	-	12.70	-		
Divorce	Count	7	-	-	-	-	-	-		
	Percent	100.00	-	-	-	-	-	-		
Occupation									94.806	0.000
Student	Count	26	-	7	-	-	-	4		
	Percent	70.30	-	18.90	-	-	-	10.80		
Employee	Count	131	-	58	4	3	44	-		
	Percent	54.60	-	24.20	1.70	1.30	18.30	-		
Government officer	Count	36	3	12	-	-	-	-		
	Percent	70.60	5.90	23.50	-	-	-	-		
Personal Business	Count	31	-	11	-	-	4	-		
	Percent	67.40	-	23.90	-	-	8.70	-		
Freelance	Count	23	-	3	-	-	-	-		
	Percent	88.50	-	11.50	-	-	-	-		

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Table 4.28. The Relationship between Demography and the First Purpose in Using Internet. (Continued)

		The first purpose in using the Internet							X^2	P-Value (Sig.)
		Check mails	Chats	Search Inform ation	Find infor mation of goods	Down load pro gram	Dealing busi ness	Play game		
Income									97.422	0.000
Less than 10,000 baht	Count	29	-	17	-	-	-	4		
	Percent	58.00	-	34.00	-	-	-	8.00		
10,001 - 20,000 baht	Count	79	-	18	-	3	8	-		
	Percent	73.10	-	16.70	-	2.80	7.40	-		
20,001 - 30,000 baht	Count	61	3	29	-	-	20	-		
	Percent	54.00	2.70	25.70	-	-	17.70	-		
30,001 - 40,000 baht	Count	32	-	7	4	-	13	-		
	Percent	57.10	-	12.50	7.10	-	23.20	-		
More than 40,001 baht	Count	46	-	20	-	-	7	-		
	Percent	63.00	-	27.40	-	-	9.60	-		

According to Table 4.28, we can analyze the relationship of demography and the first purpose in using the Internet as follows. The significance value of sex is at 0.028, which is less than 0.05. Then Ho is rejected and accepted H1, there is relationship between sex and the first purpose in using Internet at the significance level 0.05.

From the age variable, the significance value is at 0.000 which is less than 0.05. Then H0 is rejected and accept H1, there is the relationship between age and the first purpose in using Internet at the significance level 0.05.

From the education variable, the significance value is at 0.001 which is less than 0.05. Then H0 is rejected and accept H1, there is the relationship between education and the first purpose in using Internet at the significance level 0.05.

From the marital variable, the significance value is at 0.000 which is less than 0.05. Then H0 is rejected and accept H1, there is the relationship between marital and the first purpose in using Internet at the significance level 0.05.

From the occupation variable, the significance value is at 0.000 which is less than 0.05. Then H0 is rejected and accept H1, there is the relationship between occupation and the first purpose in using Internet at the significance level 0.05.

From the income variable, the significance value is at 0.000 which is less than 0.05. Then H0 is rejected, there is the relationship between income and the first purpose in using Internet at the significance level 0.05.

Hypothesis 2: The relationship between demographic of Internet users and behavior in using E-commerce

The second hypothesis tests the relationship between the demography of the respondents and their behavior in using E-commerce. The demography data include sex, age, education, marital status, occupation and income. The behavior in using the Internet includes the experience, reason, frequency, average order value, payment method, preferred payment method and source of using E-commerce. Tests are set as follows.

H0: there is no relationship between sex and behavior in using E-commerce

H1: there is the relationship between sex and behavior in using E-commerce

H0: there is no relationship between age and behavior in using E-commerce

H1: there is the relationship between age and behavior in using E-commerce

H0: there is no relationship between education and behavior in using E-commerce

H1: there is the relationship between education and behavior in using E-commerce

HO: there is no relationship between marital status and behavior in using E-commerce

H1: there is the relationship between marital status and behavior in using E-commerce

HO: there is no relationship between occupation and behavior in using E-commerce

H1: there is the relationship between occupation and behavior in using E-commerce

HO: there is no relationship between income and behavior in using E-commerce

H1: there is the relationship between income and behavior in using E-commerce

Table 4.29.   The Relationship between Demography and Experience in Using E-commerce.

| | | Experience in using E-commerce | | | X^2 | P-Value (Sig.) |
		Yes	No, but will try	No and do not want to try		
Sex					5.916	0.052
Male	Count	58	79	69		
	Percent	28.20	38.30	33.50		
Female	Count	44	62	88		
	Percent	22.70	32.00	45.40		
Age					105.632	0.000
Less than 20 years	Count	-	7	18		
	Percent	-	28.00	72.00		
21 - 25 years	Count	11	48	3		
	Percent	17.70	77.40	4.80		
26 - 30 years	Count	75	60	81		
	Percent	34.70	27.80	37.50		
31 - 35 years	Count	8	11	42		
	Percent	13.10	18.00	68.90		
36 - 40 years	Count	4	11	13		
	Percent	14.30	39.30	46.40		
Over 41 years	Count	4	4	-		
	Percent	50.00	50.00	-		

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Table 4.29. The Relationship between Demography and Experience in Using E-commerce. (Continued)

		Experience in using E-commerce			X^2	P-Value (Sig.)
		Yes	No, but will try	No and do not want to try		
Education					69.661	0.000
Do not get education	Count	-	-	4		
	Percent	-	-	100.00		
High School or equivalent	Count	-	3	11		
	Percent	-	21.40	78.60		
Bachelor Degree or equivalent	Count	47	109	57		
	Percent	22.10	51.20	26.80		
Master Degree or equivalent	Count	55	29	81		
	Percent	33.30	17.60	49.10		
Higher than Master Degree	Count	-	-	4		
	Percent	-	-	100.00		
Marital Status					35.399	0.000
Single	Count	70	126	134		
	Percent	21.20	38.20	40.60		
Married	Count	32	15	16		
	Percent	50.80	23.80	25.40		
Divorce	Count	-	-	7		
	Percent	-	-	100.00		
Occupation					7.852	0.448
Student	Count	8	15	14		
	Percent	21.60	40.50	37.80		
Employee	Count	64	84	92		
	Percent	26.70	35.00	38.30		
Government officer	Count	11	17	23		
	Percent	21.60	33.30	45.10		
Personal Business	Count	15	18	13		
	Percent	32.60	39.10	28.30		
Freelance	Count	4	7	15		
	Percent	15.40	26.90	57.70		
Income					34.787	0.000
Less than 10,000 baht	Count	3	29	18		
	Percent	6.00	58.00	36.00		
10,001 - 20,000 baht	Count	19	47	42		
	Percent	17.60	43.50	38.90		
20,001 - 30,000 baht	Count	41	34	38		
	Percent	36.30	30.10	33.60		
30,001 - 40,000 baht	Count	15	16	25		
	Percent	26.80	28.60	44.60		
More than 40,001 baht	Count	24	15	34		
	Percent	32.90	20.50	46.60		

According to Table 4.29, we can analyze the relationship of demography and the experience in using the E-commerce as follows. The significance value of sex is at

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0.052, which is higher than 0.05. Then Ho is accepted, there is no relationship between sex and the experience in using E-commerce at the significance level 0.05.

From the age variable, the significance value is at 0.000 which is less than 0.05. Then H0 is rejected and accept H1, there is the relationship between age and the experience in using E-commerce at the significance level 0.05.

From the education variable, the significance value is at 0.000 which is less than 0.05. Then H0 is rejected and accept H1, there is the relationship between education and the experience in using E-commerce at the significance level 0.05.

From the marital variable, the significance value is at 0.000 which is less than 0.05. Then H0 is rejected and accept H1, there is the relationship between marital and the experience in using E-commerce at the significance level 0.05.

From the occupation variable, the significance value is at 0.448 which is higher than 0.05. Then H0 is accepted, there is no relationship between occupation and the experience in using E-commerce at the significance level 0.05.

From the income variable, the significance value is at 0.000 which is less than 0.05. Then H0 is rejected, there is the relationship between income and the experience in using E-commerce at the significance level 0.05.

Table 4.30. The Relationship between Demography and Reason in Using E-commerce.

		Reason for using the E-commerce					X²	P-Value (Sig.)
		Convenience in finding information and do the transaction	Time saving in buying goods or services	Cheaper price	Save the travel time	Others		
Sex							37.398	0.000
Male	Count	46	-	-	12			
	Percent	79.30	-	-	20.70			
Female	Count	19	10	8	3			
	Percent	43.20	22.70	18.20	6.80			
Age							47.496	0.000
21 - 25 years	Count	8	-	-	3			
	Percent	72.70	-	-	27.30			
26 - 30 years	Count	49	6	4	12	4		
	Percent	65.30	8.00	5.30	16.00	5.30		
31 - 35 years	Count	-	4	4	-	-		
	Percent	-	50.00	50.00	-	-		
36 - 40 years	Count	4	-	-	-	-		
	Percent	100.00	-	-	-	-		
Over 41 years	Count	4	-	-	-	-		
	Percent	100.00	-	-	-	-		
Education							17.418	0.002
Bachelor Degree or equivalent	Count	31	4	-	12	-		
	Percent	66.00	8.50	-	25.50	-		
Master Degree or equivalent	Count	34	6	8	3	4		
	Percent	61.80	10.90	14.50	5.50	7.30		
Marital Status							16.824	0.002
Single	Count	37	6	8	15	4		
	Percent	52.90	8.60	11.40	21.40	5.70		
Married	Count	28	4	-	-	-		
	Percent	87.50	12.50	-	-	-		
Occupation							18.894	0.274
Student	Count	8	-	-	-	-		
	Percent	100.00	-	-	-	-		
Employee	Count	37	7	8	8	4		
	Percent	57.80	10.90	12.50	12.50	6.30		
Government officer	Count	8	-	-	3	-		
	Percent	72.70	-	-	27.30	-		
Personal Business	Count	8	3	-	4	-		
	Percent	53.30	20.00	-	26.70	-		
Freelance	Count	4	-	-	-	-		
	Percent	100.00	-	-	-	-		
Income							68.125	0.000
Less than 10,000 baht	Count	-	-	-	3	-		
	Percent	-	-	-	100.00	-		
10,001 - 20,000 baht	Count	15	-	-	4	-		
	Percent	78.90	-	-	21.10	-		
20,001 - 30,000 baht	Count	27	6	4	4	-		
	Percent	65.90	14.60	9.80	9.80	-		
30,001 - 40,000 baht	Count	3	4	-	4	4		
	Percent	20.00	26.70	-	26.70	26.70		
More than 40,001 baht	Count	20	-	4	-	-		
	Percent	83.30	-	16.70	-	-		

According to Table 4.30, we can analyze the relationship of demography and the reason in using the E-commerce as follows. The significance value of sex is at 0.000, which is lower than 0.05. Then H1 is accepted, there is the relationship between sex and the reason in using E-commerce at the significance level 0.05.

From the age variable, the significance value is at 0.000 which is less than 0.05. Then H0 is rejected and accept H1, there is the relationship between age and the reason in using E-commerce at the significance level 0.05.

From the education variable, the significance value is at 0.002 which is less than 0.05. Then H0 is rejected and accept H1, there is the relationship between education and the reason in using E-commerce at the significance level 0.05.

From the marital variable, the significance value is at 0.002 which is less than 0.05. Then H0 is rejected and accept H1, there is the relationship between marital and the reason in using E-commerce at the significance level 0.05.

From the occupation variable, the significance value is at 0.274 which is higher than 0.05. Then H0 is accepted, there is no relationship between occupation and the reason in using E-commerce at the significance level 0.05.

From the income variable, the significance value is at 0.000 which is less than 0.05. Then H0 is rejected, there is the relationship between income and the reason in using E-commerce at the significance level 0.05.

Table 4.31. The Relationship between Demography and Frequency in Using E-commerce.

		Frequency of using E-commerce				X^2	P-Value (Sig.)
		1 time	2 - 3 times	4 - 5 times	More than 5 times		
Sex						7.713	0.052
Male	Count	13	22	-	23		
	Percent	22.40	37.90	-	39.7%		
Female	Count	7	11	4	22		
	Percent	15.90	25.00	9.10	50.00		
Age						73.736	0.000
21 - 25 years	Count	3	4	-	4		
	Percent	27.30	36.40	-	36.40		
26 - 30 years	Count	11	27	-	37		
	Percent	14.70	36.00	-	49.30		
31 - 35 years	Count	-	-	4	4		
	Percent	-	-	50.00	50.00		
36 - 40 years	Count	4	-	-	-		
	Percent	100.00	-	-	-		
Over 41 years	Count	2	2	-	-		
	Percent	50.00	50.00	-	-		
Education						7.398	0.060
Bachelor Degree or equivalent	Count	6	14	4	23		
	Percent	12.80	29.80	8.50	48.90		
Master Degree or equivalent	Count	14	19	-	22		
	Percent	25.50	34.50	-	40.00		
Marital Status						9.248	0.026
Single	Count	14	23	-	33		
	Percent	20.00	32.90	-	47.10		
Married	Count	6	10	4	12		
	Percent	18.80	31.30	12.50	37.50		
Occupation						60.878	0.000
Student	Count	-	8	-	-		
	Percent	-	100.00	-	-		
Employee	Count	5	21	4	34		
	Percent	7.80	32.80	6.30	53.10		
Government officer	Count	7	-	-	4		
	Percent	63.60	-	-	36.40		
Personal Business	Count	8	-	-	7		
	Percent	53.30	-	-	46.70		
Freelance	Count	-	4	-	-		
	Percent	-	100.00	-	-		
Income						71.925	0.000
Less than 10,000 baht	Count	3	-	-	-		
	Percent	100.00	-	-	-		
10,001 - 20,000 baht	Count	4	4	-	11		
	Percent	21.10	21.10	-	57.90		
20,001 - 30,000 baht	Count	-	23	-	18		
	Percent	-	56.10	-	43.90		
30,001 - 40,000 baht	Count	7	4	4	-		
	Percent	46.70	26.70	26.70	-		
More than 40,001 baht	Count	6	2	-	16		
	Percent	25.00	8.30	-	66.70		

According to Table 4.31, we can analyze the relationship of demography and the frequency in using the E-commerce as follows. The significance value of sex is at 0.052, which is higher than 0.05. Then Ho is accepted, there is no relationship between sex and the frequency in using E-commerce at the significance level 0.05.

From the age variable, the significance value is at 0.000 which is less than 0.05. Then H0 is rejected and accept H1, there is the relationship between age and the frequency in using E-commerce at the significance level 0.05.

From the education variable, the significance value is at 0.060 which is higher than 0.05. Then H0 is accepted, there is no relationship between education and the frequency in using E-commerce at the significance level 0.05.

From the marital variable, the significance value is at 0.026 which is less than 0.05. Then H0 is rejected and accept H1, there is the relationship between marital and the frequency in using E-commerce at the significance level 0.05.

From the occupation variable, the significance value is at 0.000 which is lower than 0.05. Then H0 is rejected and accepted H1, there is the relationship between occupation and the frequency in using E-commerce at the significance level 0.05.

From the income variable, the significance value is at 0.000 which is less than 0.05. Then H0 is rejected, there is the relationship between income and the frequency in using E-commerce at the significance level 0.05.

Table 4.32.   The Relationship between Demography and Average Order Value in Using E-commerce.

		Average value per order (baht)					X^2	P-Value (Sig.)
		Less than 500	501-1,500	1,501-3000	3,001-4,500	Over 4,501		
Sex							11.098	0.025
Male	Count	4	19	23	-	12		
	Percent	6.90	32.80	39.70	-	20.70		
Female	Count	-	10	15	4	15		
	Percent	-	22.70	34.10	9.10	34.10		
Age							93.199	0.000
21 - 25 years	Count	-	3	-	-	8		
	Percent	-	27.30	-	-	72.70		
26 - 30 years	Count	4	18	38	-	15		
	Percent	5.30	24.00	50.70	-	20.00		
31 - 35 years	Count	-	-	-	4	4		
	Percent	-	-	-	50.00	50.00		
36 - 40 years	Count	-	4	-	-	-		
	Percent	-	100.00	-	-	-		
Over 41 years	Count	-	4	-	-	-		
	Percent	-	100.00	-	-	-		
Education							10.407	0.034
Bachelor Degree or equivalent	Count	4	11	16	4	12		
	Percent	8.50	23.40	34.00	8.50	25.50		
Master Degree or equivalent	Count	-	18	22	-	15		
	Percent	-	32.70	40.00	-	27.30		
Marital Status							13.845	0.008
Single	Count	4	17	30	-	19		
	Percent	5.70	24.30	42.90	-	27.10		
Married	Count	-	12	8	4	8		
	Percent	-	37.50	25.00	12.50	25.00		
Occupation							60.328	0.000
Student	Count	-	-	8	-	-		
	Percent	-	-	100.00	-	-		
Employee	Count	-	14	27	4	19		
	Percent	-	21.90	42.20	6.30	29.70		
Government officer	Count	-	7	-	-	4		
	Percent	-	63.60	-	-	36.40		
Personal Business	Count	4	4	3	-	4		
	Percent	26.70	26.70	20.00	-	26.70		
Freelance	Count	-	4	-	-	-		
	Percent	-	100.00	-	-	-		
Income							52.159	0.000
Less than 10,000 baht	Count	-	3	-	-	-		
	Percent	-	100.00	-	-	-		
10,001 - 20,000 baht	Count	-	7	8	-	4		
	Percent	-	36.80	42.10	-	21.10		
20,001 - 30,000 baht	Count	4	11	19	-	7		
	Percent	9.80	26.80	46.30	-	17.10		
30,001 - 40,000 baht	Count	-	-	7	4	4		
	Percent	-	-	46.70	26.70	26.70		
More than 40,001 baht	Count	-	8	4	-	12		
	Percent	-	33.30	16.70	-	50.00		

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According to Table 4.32, we can analyze the relationship of demography and the average order value in using the E-commerce as follows. The significance value of sex is at 0.025, which is less than 0.05. Then Ho is rejected and accept H1, there is the relationship between sex and the average order value in using E-commerce at the significance level 0.05.

From the age variable, the significance value is at 0.000 which is less than 0.05. Then H0 is rejected and accept H1, there is the relationship between age and the average order value in using E-commerce at the significance level 0.05.

From the education variable, the significance value is at 0.034 which is less than 0.05. Then H0 is rejected and accept H1, there is the relationship between education the average order value in using E-commerce at the significance level 0.05.

From the marital variable, the significance value is at 0.008 which is less than 0.05. Then H0 is rejected and accept H1, there is the relationship between marital the average order value in using E-commerce at the significance level 0.05.

From the occupation variable, the significance value is at 0.000 which is lower than 0.05. Then accepted H1, there is the relationship between occupation and the average order value in using E-commerce at the significance level 0.05.

From the income variable, the significance value is at 0.000 which is less than 0.05. Then H0 is rejected, there is the relationship between income and the average order value in using E-commerce at the significance level 0.05.

Table 4.33.   The Relationship between Demography and Payment Method in Using E-commerce.

		Payment method			X^2	P-Value (Sig.)
		Via credit card	Via Bank account	Paid at the destination		
Sex			1.163	0.559		
Male	Count	39	15	4		
	Percent	67.20	25.90	6.90		
Female	Count	25	15	4		
	Percent	56.80	34.10	9.10		
Age					69.611	0.000
21 - 25 years	Count	4	7	-		
	Percent	36.40	63.60	-		
26 - 30 years	Count	56	15	4		
	Percent	74.70	20.00	5.30		
31 - 35 years	Count	4	4	-		
	Percent	50.00	50.00	-		
36 - 40 years	Count	-	-	4		
	Percent	-	-	100.00		
Over 41 years	Count	-	4	-		
	Percent	-	100.00	-		
Education					17.011	0.000
Bachelor Degree or equivalent	Count	20	23	4		
	Percent	42.60	48.90	8.50		
Master Degree or equivalent	Count	44	7	4		
	Percent	80.00	12.70	7.30		
Marital Status					53.618	0.000
Single	Count	60	10	-		
	Percent	85.70	14.30	-		
Married	Count	4	20	8		
	Percent	12.50	62.50	25.00		
Occupation					31.075	0.000
Student	Count	4	4	-		
	Percent	50.00	50.00	-		
Employee	Count	45	15	4		
	Percent	70.30	23.40	6.30		
Personal Business	Count	11	-	4		
	Percent	73.30	-	26.70		
Freelance	Count	-	4	-		
	Percent	-	100.00	-		
Income					35.992	0.000
Less than 10,000 baht	Count	-	3	-		
	Percent	-	100.00	-		
10,001 - 20,000 baht	Count	12	7	-		
	Percent	63.20	36.80	-		
20,001 - 30,000 baht	Count	29	12	-		
	Percent	70.70	29.30	-		
30,001 - 40,000 baht	Count	11	4	-		
	Percent	73.30	26.70	-		
More than 40,001 baht	Count	12	4	8		
	Percent	50.00	16.70	33.30		

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According to Table 4.33, we can analyze the relationship of demography and the payment method in using the E-commerce as follows. The significance value of sex is at 0.559, which is higher than 0.05. Then Ho is accepted, there is no relationship between sex and the payment method in using E-commerce at the significance level 0.05.

From the age variable, the significance value is at 0.000 which is less than 0.05. Then H0 is rejected and accept H1, there is the relationship between age and the payment method in using E-commerce at the significance level 0.05.

From the education variable, the significance value is at 0.000 which is lower than 0.05. Then H0 is rejected and accept H1, there is the relationship between education and the payment method in using E-commerce at the significance level 0.05.

From the marital variable, the significance value is at 0.000 which is less than 0.05. Then H0 is rejected and accept H1, there is the relationship between marital and the payment method in using E-commerce at the significance level 0.05.

From the occupation variable, the significance value is at 0.000 which is lower than 0.05. Then H0 is rejected and accepted H1, there is the relationship between occupation and the payment method in using E-commerce at the significance level 0.05.

From the income variable, the significance value is at 0.000 which is less than 0.05. Then H0 is rejected, there is the relationship between income and the payment method in using E-commerce at the significance level 0.05.

Table 4.34.   The Relationship between Demography and Preferred Payment Method in Using E-commerce.

		Preferred payment method				X^2	P-Value (Sig.)
		credit card	Bank account	Paid at the destination	Others		
Sex						10.812	0.013
Male	Count	61	38	31	7		
	Percent	44.50	27.70	22.60	5.10		
Female	Count	64	19	23	-		
	Percent	60.40	17.90	21.70	-		
Age						71.051	0.000
Less than 20 years	Count	-	3	4	-		
	Percent	-	42.90	57.10	-		
21 - 25 years	Count	8	26	21	4		
	Percent	13.60	44.10	35.60	6.80		
26 - 30 years	Count	87	20	25	3		
	Percent	64.40	14.80	18.50	2.20		
31 - 35 years	Count	15	4	-	-		
	Percent	78.90	21.10	-	-		
36 - 40 years	Count	11	-	4	-		
	Percent	73.30	-	26.70	-		
Over 41 years	Count	4	4	-	-		
	Percent	50.00	50.00	-	-		
Education						39.958	0.000
High School or equivalent	Count	-	3	-	-		
	Percent	-	100.00	-	-		
Bachelor Degree or equivalent	Count	62	47	40	7		
	Percent	39.70	30.10	25.60	4.50		
Master Degree or equivalent	Count	63	7	14	-		
	Percent	75.00	8.30	16.70	-		
Marital Status						24.662	0.000
Single	Count	114	37	42	3		
	Percent	58.20	18.90	21.40	1.50		
Married	Count	11	20	12	4		
	Percent	23.40	42.60	25.50	8.50		
Occupation						49.159	0.000
Student	Count	4	3	16	-		
	Percent	17.40	13.00	69.60	-		
Employee	Count	89	32	20	7		
	Percent	60.10	21.60	13.50	4.70		
Government officer	Count	10	11	7	-		
	Percent	35.70	39.30	25.00	-		
Personal Business	Count	19	7	7	-		
	Percent	57.60	21.20	21.20	-		
Freelance	Count	3	4	4	-		
	Percent	27.30	36.40	36.40	-		
Income						55.212	0.000
Less than 10,000 baht	Count	7	10	15	-		
	Percent	21.90	31.30	46.90	-		
10,001 - 20,000 baht	Count	23	15	25	3		
	Percent	34.80	22.70	37.90	4.50		
20,001 - 30,000 baht	Count	41	20	10	4		
	Percent	54.70	26.70	13.30	5.30		
30,001 - 40,000 baht	Count	27	4	-	-		
	Percent	87.10	12.90	-	-		
More than 40,001 baht	Count	27	8	4	-		
	Percent	69.20	20.50	10.30	-		

According to Table 4.34, we can analyze the relationship of demography and the preferred payment method in using the E-commerce as follows. The significance value of sex is at 0.013, which is higher than 0.05. Then H0 is rejected and accept H1, there is the relationship between sex and the preferred payment method in using E-commerce at the significance level 0.05.

From the age variable, the significance value is at 0.000 which is less than 0.05. Then H0 is rejected and accept H1, there is the relationship between age and the preferred payment method in using E-commerce at the significance level 0.05.

From the education variable, the significance value is at 0.000 which is less than 0.05. Then H0 is rejected and accept H1, there is the relationship between education and the preferred payment method in using E-commerce at the significance level 0.05.

From the marital variable, the significance value is at 0.000 which is less than 0.05. Then H0 is rejected and accept H1, there is the relationship between marital and the preferred payment method in using E-commerce at the significance level 0.05.

From the occupation variable, the significance value is at 0.000 which is less than 0.05. Then accepted H1, there is the relationship between occupation and the preferred payment method in using E-commerce at the significance level 0.05.

From the income variable, the significance value is at 0.000 which is less than 0.05. Then H0 is rejected, there is the relationship between income and the preferred payment method in using E-commerce at the significance level 0.05.

Table 4.35.   The Relationship between Demography and Source of Using E-commerce.

		Source of E-commerce			X^2	P-Value
		Domestic web	International web	Both sources		(Sig.)
Sex					0.056	0.973
Male	Count	56	23	58		
	Percent	40.90	16.80	42.30		
Female	Count	43	19	44		
	Percent	40.60	17.90	41.50		
Age					30.929	0.001
21 - 25 years	Count	4	-	3		
	Percent	57.10	-	42.90		
26 - 30 years	Count	36	8	15		
	Percent	61.00	13.60	25.40		
31 - 35 years	Count	44	30	61		
	Percent	32.60	22.20	45.20		
36 - 40 years	Count	7	4	8		
	Percent	36.80	21.10	42.10		
Over 41 years	Count	8	-	7		
	Percent	53.30	-	46.70		
Education					25.448	0.000
High School or equivalent	Count	-	-	3		
	Percent	-	-	100.00		
Bachelor Degree or equivalent	Count	75	15	66		
	Percent	48.10	9.60	42.30		
Master Degree or equivalent	Count	24	27	33		
	Percent	28.60	32.10	39.30		
Marital Status					2.932	0.231
Single	Count	75	34	87		
	Percent	38.30	17.30	44.40		
Married	Count	24	8	15		
	Percent	51.10	17.00	31.90		
Occupation					29.566	0.000
Student	Count	12	8	3		
	Percent	52.20	34.80	13.00		
Employee	Count	48	24	76		
	Percent	32.40	16.20	51.40		
Government officer	Count	17	4	7		
	Percent	60.70	14.30	25.00		
Personal Business	Count	14	3	16		
	Percent	42.40	9.10	48.50		
Freelance	Count	8	3	-		
	Percent	72.70	27.30	-		
Income					23.337	0.003
Less than 10,000 baht	Count	19	7	6		
	Percent	59.40	21.90	18.80		
10,001 - 20,000 baht	Count	35	8	23		
	Percent	53.00	12.10	34.80		
20,001 - 30,000 baht	Count	30	11	34		
	Percent	40.00	14.70	45.30		
30,001 - 40,000 baht	Count	7	8	16		
	Percent	22.60	25.80	51.60		
More than 40,001 baht	Count	8	8	23		
	Percent	20.50	20.50	59.00		

According to Table 4.35, we can analyze the relationship of demography and the source of using the E-commerce as follows. The significance value of sex is at 0.973, which is higher than 0.05. Then Ho is accepted, there is no relationship between sex and the source of using E-commerce at the significance level 0.05.

From the age variable, the significance value is at 0.001 which is less than 0.05. Then H0 is rejected and accept H1, there is the relationship between age and the source of using E-commerce at the significance level 0.05.

From the education variable, the significance value is at 0.00 which is higher than 0.05. Then H0 is accepted, there is no relationship between education and the source of using E-commerce at the significance level 0.05.

From the marital variable, the significance value is at 0.026 which is less than 0.05. Then H0 is rejected and accept H1, there is the relationship between marital and the reason in using E-commerce at the significance level 0.05.

From the occupation variable, the significance value is at 0.231 which is higher than 0.05. Then H0 is accepted, there is no relationship between occupation and the source of using E-commerce at the significance level 0.05.

From the income variable, the significance value is at 0.003 which is less than 0.05. Then H0 is rejected, there is the relationship between income and the source of using E-commerce at the significance level 0.05.

Hypothesis 3: The relationship between demographic of Internet users and the attitude
            toward E-commerce

The third hypothesis will test about the relationship between the demography of the respondents and their attitude towards E-commerce. The demography data include sex, age, education, marital status, occupation and income. There are all 19 questions about the attitude towards E-commerce. The Hypothesis tests are set as follows.

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Table 4.36.   The Relationship between Sex and Attitude towards E-commerce.

Attitude towards E-commerce	Sex	n	Mean	Std. Deviation	Sig.
Can easily find the details of goods and service	Male	206	4.2039	0.58199	0.583
	Female	194	4.1649	0.82299	
Is an easy way in buying the goods and service	Male	206	3.8981	0.67303	0.010
	Female	194	3.7165	0.73198	
Can save the time in selecting the goods and service	Male	206	3.8252	0.73155	0.385
	Female	194	3.7577	0.81949	
Can find and order the hard to find products	Male	206	3.5485	0.72923	0.328
	Female	194	3.4742	0.78974	
There are varieties of products	Male	206	3.5777	0.74000	0.899
	Female	194	3.5876	0.82390	
Easy to search and find the service providers	Male	206	3.4515	0.72923	0.000
	Female	194	3.7732	0.85782	
Has the products and service according to what you are looking for	Male	206	3.4757	0.71697	0.693
	Female	194	3.5052	0.77022	
The price is cheaper than the market price	Male	206	2.7767	0.69045	0.567
	Female	194	2.8196	0.80377	
The products are the quality products	Male	206	2.9175	0.48185	0.539
	Female	194	2.9485	0.52642	
Can get the goods within short of time	Male	206	2.9029	0.75242	0.002
	Female	194	3.1237	0.63991	
The quality of products are same as in the advertisement	Male	206	3.0680	0.68092	0.128
	Female	194	2.9742	0.53320	
The interested homepage can attract to use the service	Male	206	3.7184	0.77670	0.278
	Female	194	3.6289	0.87356	
The safety of payment method	Male	206	3.0291	0.99223	0.012
	Female	194	2.8093	0.71238	
The safety in keeping the record	Male	206	2.8544	0.98682	0.121
	Female	190	2.7158	0.76516	
Help in getting the image of in trend	Male	206	3.1602	0.91522	0.313
	Female	194	3.2577	1.01571	
Can replace the traditional buying method	Male	206	3.2039	0.90375	0.164
	Female	194	3.0825	0.83536	
Appropriate to modern way of life	Male	206	3.2379	0.84202	0.260
	Female	194	3.1443	0.81425	
The international service providers is more trustfully than the domestic service providers	Male	206	2.9417	1.00560	0.725
	Female	194	2.9072	0.95040	
It is a buying method of up to date people	Male	206	3.1553	0.92401	0.184
	Female	194	3.2732	0.84105	

According to table 4.36, from the 19 questions about the attitude towards the E-commerce, the hypothesis tests are set and analyzed by using the independent T-test according to the questions as follow:

HO: There is no difference between male and female toward the attitude "can easily find the details of goods and service"

H1: There is the difference between male and female toward the attitude "can easily find the details of goods and service"

The significance value is 0.583, which is higher than the level of significance at 0.05, then we accept HO that there is no different attitude in sex toward the point of it can easily find the details of goods and service in E-commerce.

HO: There is no difference between male and female toward the attitude "is an easy way in buying the goods and service"

H1: There is the difference between male and female toward the attitude "is an easy way in buying the goods and service"

The significance value is 0.01, which is less than the level of significance at 0.05, then we reject HO and accept H1 that there is the different attitude in sex toward the point of E-commerce is an easy way in buying the goods and service.

HO: There is no difference between male and female toward the attitude "can save the time in selecting the goods and service"

H1: There is the difference between male and female toward the attitude "can save the time in selecting the goods and service"

The significance value is 0.385, which is higher than the level of significance at 0.05, then we accept HO that there is no different attitude in sex toward the point of E-commerce can save the time in selecting the goods and service can save the time in selecting the goods and service.

H0: There is no difference between male and female toward the attitude "can find and order the hard to find products"

H1: There is the difference between male and female toward the attitude "can find and order the hard to find products"

The significance value is 0.328, which is higher than the level of significance at 0.05, then we accept H0 that there is no different attitude in sex toward the point of E-commerce can find and order the hard to find products.

H0: There is no difference between male and female toward the attitude "there are varieties of products"

H1: There is the difference between male and female toward the "there are varieties of products"

The significance value is 0.899, which is higher than the level of significance at 0.05, then we accept H0 that there is no different attitude in sex toward the point of there are variety products in E-commerce.

H0: There is no difference between male and female toward the attitude "easy to search and find the service providers"

H1: There is the difference between male and female toward the attitude "easy to search and find the service providers"

The significance value is 0.000, which is less than the level of significance at 0.05, then we accept H1, there is the different attitude in sex toward the point that it is easy to search and find the service providers in E-commerce.

H0: There is no difference between male and female toward the attitude "the products and service is according to what you are looking for"

H1: There is the difference between male and female toward the attitude "the products and service is according to what you are looking for"

The significance value is 0.693, which is higher than the level of significance at 0.05, then we accept H0, there is no different in sex towards the attitude that the products and service in E-commerce is according to what they are looking for.

H0: There is no difference between male and female toward the attitude "the price is cheaper than the market price"

H1: There is the difference between male and female toward the attitude "the price is cheaper than the market price"

The significance value is 0.567, which is higher than the level of significance at 0.05, then we accept H0 that there is no different attitude in sex toward the point that the price in E-commerce is cheaper than the market price.

H0: There is no difference between male and female toward the attitude "the products are the quality products"

H1: There is the difference between male and female toward the attitude "the products are the quality products"

The significance value is 0.539, which is higher than the level of significance at 0.05, then we accept H0 that there is no different attitude in sex toward the point that the products are the quality products.

HO: There is no difference between male and female toward the attitude "can get the goods within short of time"

H1: There is the difference between male and female toward the attitude "can get the goods within short of time"

The significance value is 0.002, which is less than the level of significance at 0.05, then we reject HO and accept H1 that there is the different attitude in sex toward the point of getting the goods within short of time

HO: There is no difference between male and female toward the attitude "the quality of products are same as in the advertisement"

H1: There is the difference between male and female toward the attitude "the quality of products are same as in the advertisement"

The significance value is 0.128, which is higher than the level of significance at 0.05, then we accept HO that there is no different attitude in sex toward the point that the quality of products are same as in the advertisement.

HO: There is no difference between male and female toward the attitude "the interested homepage can attract to use the service"

H1: There is the difference between male and female toward the attitude "the interested homepage can attract to use the service"

The significance value is 0.278, which is higher than the level of significance at 0.05, then we accept HO that there is no different attitude in sex toward the point of interested homepage can attract to use the service.

H0: There is no difference between male and female toward the attitude "the safety of payment method"

H1: There is the difference between male and female toward the attitude "the safety of payment method"

The significance value is 0.012, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the different attitude in sex toward the point of the safety of payment method.

H0: There is no difference between male and female toward the attitude "the safety in keeping the record"

H1: There is the difference between male and female toward the attitude "the safety in keeping the record"

The significance value is 0.121, which is higher than the level of significance at 0.05, then we accept H0 that there is no different attitude in sex toward the point of safety in keeping the record.

H0: There is no difference between male and female toward the attitude "help in getting the image of in trend"

H1: There is the difference between male and female toward the attitude "help in getting the image of in trend"

The significance value is 0.313, which is higher than the level of significance at 0.05, then we accept H0 that there is no different attitude in sex toward the point of help to get the image of in trend.

HO: There is no difference between male and female toward the attitude "can replace the traditional buying method"

H1: There is the difference between male and female toward the attitude "can replace the traditional buying method"

The significance value is 0.313, which is higher than the level of significance at 0.05, then we accept HO that there is no different attitude in sex toward the point of can replace the traditional buying method.

HO: There is no difference between male and female toward the attitude "appropriate to modern way of life"

H1: There is the difference between male and female toward the attitude "appropriate to modern way of life"

The significance value is 0.260, which is higher than the level of significance at 0.05, then we accept HO that there is no different attitude in sex toward the point of E-commerce is appropriate to modern way of life

HO: There is no difference between male and female toward the attitude "the international service providers is more trustfully than the domestic's"

H1: There is the difference between male and female toward the attitude "the international service providers is more trustfully than the domestic's"

The significance value is 0.725, which is higher than the level of significance at 0.05, then we accept HO that there is no different attitude in sex toward the international service providers is more trustfully than the domestic's.

HO: There is no difference between male and female toward the attitude "it is the buying method of up to date people"

H1: There is the difference between male and female toward the attitude "it is the buying method of up to date people"

The significance value is 0.184, which is higher than the level of significance at 0.05, then we accept H0 that there is no different attitude in sex toward the point that E-commerce is the buying method of up to date people"

Table 4.37. The Relationship between Age and Attitude towards E-commerce.

Attitude towards E-commerce	Age	Sum of Squares	Mean Square	F	Sig.
Can easily find the details of goods and service	Between Groups	10.533	2.107	4.373	0.001
	Within Groups	189.777	0.482		
Is an easy way in buying the goods and service	Between Groups	6.282	1.256	2.561	0.027
	Within Groups	193.278	0.491		
Can save the time in selecting the goods and service	Between Groups	18.208	3.642	6.476	0.000
	Within Groups	221.569	0.562		
Can find and order the hard to find products	Between Groups	23.186	4.637	8.837	0.000
	Within Groups	206.752	0.525		
There are varieties of products	Between Groups	16.474	3.295	5.724	0.000
	Within Groups	226.804	0.576		
Easy to search and find the service providers	Between Groups	8.760	1.752	2.733	0.019
	Within Groups	252.617	0.641		
The products and service is according to what you are looking for	Between Groups	10.742	2.148	4.046	0.001
	Within Groups	209.218	0.531		
The price is cheaper than the market price	Between Groups	8.147	1.629	2.994	0.012
	Within Groups	214.451	0.544		
The products are the quality products	Between Groups	10.354	2.071	8.984	0.000
	Within Groups	90.823	0.231		
Can get the goods within short of time	Between Groups	9.746	1.949	4.038	0.001
	Within Groups	190.214	0.483		
The quality of products are same as in the advertisement	Between Groups	5.128	1.026	2.774	0.018
	Within Groups	145.669	0.370		
The interested homepage can attract to use the service	Between Groups	1.947	0.389	.569	0.724
	Within Groups	269.803	0.685		
The safety of payment method	Between Groups	6.876	1.375	1.820	0.108
	Within Groups	297.722	0.756		
The safety in keeping the record	Between Groups	6.197	1.239	1.580	0.165
	Within Groups	305.985	0.785		
Help in getting the image of in trend	Between Groups	7.297	1.459	1.578	0.165
	Within Groups	364.481	0.925		
Can replace the traditional buying method	Between Groups	5.751	1.150	1.521	0.182
	Within Groups	297.839	0.756		
Appropriate to modern way of life	Between Groups	5.901	1.180	1.733	0.126
	Within Groups	268.276	0.681		

Table 4.37.   The Relationship between Age and Attitude towards E-commerce.
(Continued)

Attitude towards E-commerce	Age	Sum of Squares	Mean Square	F	Sig.
The international service providers is more trustfully than the domestic service providers	Between Groups	14.400	2.880	3.089	0.010
	Within Groups	367.350	0.932		
It is a buying method of up to date people	Between Groups	3.888	0.778	.991	0.423
	Within Groups	309.050	0.784		

The hypothesis between age and attitude towards E-commerce are analyzed by using one-way Anova or F-Test. The degree of freedom between group is 5 and within group are 394. The hypothesis tests are set according to the questions as follow.

H0:   There is no difference among age group toward the attitude "can easily find the details of goods and service"

H1:   There is the difference among age group toward the attitude "can easily find the details of goods and service"

The significance value is 0.001, which is less than the level of significance at 0.05, then we accept H1, there is the different attitude among age group toward it can easily find the details of goods and service in E-commerce.

H0:   There is no difference among age group toward the attitude "is an easy way in buying the goods and service"

H1:   There is the difference among age group toward the attitude "is an easy way in buying the goods and service".

The significance value is 0.027, which is less than the level of significance at 0.05, then we accept H1 that there is the different among age group toward the attitude of E-commerce is an easy way in buying the goods and service.

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H0: There is no difference among age group toward the attitude "can save the time in selecting the goods and service"

H1: There is the difference among age group toward the attitude "can save the time in selecting the goods and service"

The significance value is 0.000, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the different among age group toward the attitude can save the time in selecting the goods and service.

H0: There is no difference among age group toward the attitude "can find and order the hard to find products"

H1: There is the difference among age group toward the attitude "can find and order the hard to find products"

The significance value is 0.000, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the different among age group toward the attitude E-commerce can find and order the hard to find products.

H0: There is no difference among age group toward the attitude "there are varieties of products"

H1: There is the difference among age group toward the attitude "there are varieties of products"

The significance value is 0.000, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the different among age group toward the attitude there are varieties of products in E-commerce.

H0: There is no difference among age group toward the attitude "easy to search and find the service providers"

H1: There is the difference among age group toward the attitude "easy to search and find the service providers"

The significance value is 0.019, which is less than the level of significance at 0.05, then we accept H1 that there is the different among age group toward the attitude E-commerce is an easy to search and find the service providers.

H0: There is no difference among age group toward the attitude "the products and service is according to what you are looking for"

H1: There is the difference among age group toward the attitude "the products and service is according to what you are looking for"

The significance value is 0.001, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the different attitude among age group toward the products and service in E-commerce is according to what they are looking for.

H0: There is no difference among age group toward the attitude "the price is cheaper than the market price"

H1: There is the difference among age group toward the attitude "the price is cheaper than the market price"

The significance value is 0.012, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the different among age group toward attitude that the price in E-commerce is cheaper than the market price.

H0: There is no difference among age group toward the attitude "the products are the quality products"

H1: There is the difference among age group toward the attitude "the products are the quality products"

The significance value is 0.000, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the different attitude among age group toward that the products are the quality products.

H0: There is no difference among age group toward the attitude "can get the goods within short of time"

H1: There is the difference among age group toward the attitude "can get the goods within short of time"

The significance value is 0.001, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the different attitude among age group toward the point of getting the goods within short of time.

H0: There is no difference among age group toward the attitude "the quality of products are same as in the advertisement"

H1: There is the difference among age group toward the attitude "the quality of products are same as in the advertisement"

The significance value is 0.018, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the different attitude among age group toward the quality of products are same as in the advertisement.

H0: There is no difference among age group toward the attitude "the interested homepage can attract to use the service"

H1: There is the difference among age group toward the attitude "the interested homepage can attract to use the service"

The significance value is 0.724, which is higher than the level of significance at 0.05, then we accept H0 that there is no different attitude among age group toward the point of interested homepage can attract to use the service.

H0: There is no difference among age group toward the attitude "the safety of payment method"

H1: There is the difference among age group toward the attitude "the safety of payment method"

The significance value is 0.108, which is higher than the level of significance at 0.05, then we accept H0 that there is no different attitude among age group toward the point of the safety of payment method.

H0: There is no difference among age group toward the attitude "the safety in keeping the record"

H1: There is the difference among age group toward the attitude "the safety in keeping the record"

The significance value is 0.165, which is higher than the level of significance at 0.05, then we accept H0 that there is no different attitude among age group toward the point of safety in keeping the record.

HO: There is no difference among age group toward the attitude "help in getting the image of in trend"

H1: There is the difference among age group toward the attitude "help in getting the image of in trend"

The significance value is 0.165, which is higher than the level of significance at 0.05, then we accept HO that there is no different attitude among age group toward the point of help to get the image of in trend.

HO: There is no difference among age group toward the attitude "can replace the traditional buying method"

H1: There is the difference among age group toward the attitude "can replace the traditional buying method"

The significance value is 0.182, which is higher than the level of significance at 0.05, then we accept HO that there is no different attitude among age group toward the point of can replace the traditional buying method.

HO: There is no difference among age group toward the attitude "appropriate to modern way of life"

H1: There is the difference among age group toward the attitude "appropriate to modern way of life"

The significance value is 0.126, which is higher than the level of significance at 0.05, then we accept HO that there is no different attitude among age group toward the point of E-commerce is appropriate to modern way of life

H0: There is no difference among age group toward the attitude "the international service providers are more worthy than the domestic providers"

H1: There is the difference among age group toward the attitude "the international service providers are more worthy than the domestic providers"

The significance value is 0.010, which is less than the level of significance at 0.05, then we reject H0 and accept H1, that there is the different attitude among age group toward the international service providers is more trustfully than the domestic's.

H0: There is no difference among age group toward the attitude "it is the buying method of up to date people"

H1: There is the difference among age group toward the attitude "it is the buying method of up to date people"

The significance value is 0.423, which is higher than the level of significance at 0.05, then we accept H0 that there is no difference attitude among age group toward the point that "E-commerce is the buying method of up to date people"

Table 4.38.   The Relationship between Education and Attitude towards E-commerce.

Attitude towards E-commerce	Education	Sum of Squares	Mean Square	F	Sig.
Can easily find the details of goods and service	Between Groups	12.307	3.077	6.464	0.000
	Within Groups	188.003	0.476		
Is an easy way in buying the goods and service	Between Groups	14.393	3.598	7.676	0.000
	Within Groups	185.167	0.469		
Can save the time in selecting the goods and service	Between Groups	17.686	4.422	7.864	0.000
	Within Groups	222.091	0.562		
Can find and order the hard to find products	Between Groups	19.366	4.841	9.082	0.000
	Within Groups	210.572	0.533		
There are varieties of products	Between Groups	18.931	4.733	8.333	0.000
	Within Groups	224.346	0.568		
Easy to search and find the service providers	Between Groups	22.789	5.697	9.432	0.000
	Within Groups	238.588	0.604		

Table 4.38. The Relationship between Education and Attitude towards E-commerce. (Continued)

Attitude towards E-commerce	Education	Sum of Squares	Mean Square	F	Sig.
The products and service is according to what you are looking for	Between Groups	10.775	2.694	5.087	0.001
	Within Groups	209.185	0.530		
The price is cheaper than the market price	Between Groups	23.445	5.861	11.625	0.000
	Within Groups	199.153	0.504		
The products are the quality products	Between Groups	18.077	4.519	21.482	0.000
	Within Groups	83.100	0.210		
Can get the goods within short of time	Between Groups	21.425	5.356	11.851	0.000
	Within Groups	178.535	0.452		
The quality of products are same as in the advertisement	Between Groups	16.118	4.030	11.818	0.000
	Within Groups	134.679	0.341		
The interested homepage can attract to use the service	Between Groups	23.546	5.886	9.368	0.000
	Within Groups	248.204	0.628		
The safety of payment method	Between Groups	24.034	6.008	8.459	0.000
	Within Groups	280.564	0.710		
The safety in keeping the record	Between Groups	8.143	2.714	3.500	0.016
	Within Groups	304.039	0.776		
Help in getting the image of in trend	Between Groups	15.229	3.807	4.218	0.002
	Within Groups	356.549	0.903		
Can replace the traditional buying method	Between Groups	15.675	3.919	5.376	0.000
	Within Groups	287.915	0.729		
Appropriate to modern way of life	Between Groups	16.780	4.195	6.438	0.000
	Within Groups	257.398	0.652		
The international service providers is more trustfully than the domestic service providers	Between Groups	27.529	6.882	7.674	0.000
	Within Groups	354.221	0.897		
It is a buying method of up to date people	Between Groups	17.150	4.287	5.726	0.000
	Within Groups	295.788	0.749		

The hypothesis among education level and attitude towards E-commerce are analyzed by using one-way Anova or F-Test. The degree of freedom between group is 4 and within group are 395. The hypothesis tests are set according to the questions as follow.

H0: There is no difference among education level toward the attitude "can easily find the details of goods and service"

H1: There is the difference among education level toward the attitude "can easily find the details of goods and service"

The significance value is 0.000, which is less than the level of significance at 0.05, then we accept H1, that there is the difference attitude among education level toward it can easily find the details of goods and service in E-commerce.

H0: There is no difference among education level toward the attitude "is an easy way in buying the goods and service"

H1: There is the difference among education level toward the attitude "is an easy way in buying the goods and service"

The significance value is 0.000, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the difference among education level toward the attitude of "E-commerce is an easy way in buying the goods and service".

H0: There is no difference among education level toward the attitude "can save the time in selecting the goods and service"

H1: There is the difference among education level toward the attitude "can save the time in selecting the goods and service"

The significance value is 0.000, which is less than the level of significance at 0.05, then we accept H1 that there is the difference among education level toward the attitude can save the time in selecting the goods and service.

H0: There is no difference among education level toward the attitude "can find and order the hard to find products"

H1: There is the difference among education level toward the attitude "can find and order the hard to find products"

The significance value is 0.000, which is less than the level of significance at 0.05, then we accept H1 that there is the difference among education level toward the attitude E-commerce can find and order the hard to find products.

H0: There is no difference among education level toward the attitude "there are varieties of products"

H1: There is the difference among education level toward the "there are varieties of products"

The significance value is 0.000, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the difference among education level toward the attitude there are varieties of products in E-commerce.

H0: There is no difference among education level toward the attitude "easy to search and find the service providers"

H1: There is the difference among education level toward the attitude "easy to search and find the service providers"

The significance value is 0.000, which is less than the level of significance at 0.05, then we accept H1 that there is the different among education level toward the attitude E-commerce is an easy to search and find the service providers.

H0: There is no difference among education level toward the attitude "the products and service is according to what you are looking for"

H1: There is the difference among education level toward the attitude "the products and service is according to what you are looking for"

The significance value is 0.001, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the different attitude among education level toward the products and service in E-commerce is according to what they are looking for.

H0: There is no difference among education level toward the attitude "the price is cheaper than the market price"

H1: There is the difference among education level toward the attitude "the price is cheaper than the market price"

The significance value is 0.000, which is less than the level of significance at 0.05, then we accept H1 that there is the difference among education level toward attitude that the price in E-commerce is cheaper than the market price.

H0: There is no difference among education level toward the attitude "the products are the quality products"

H1: There is the difference among education level toward the attitude "the products are the quality products"

The significance value is 0.000, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the different attitude among education level toward that the products are the quality products.

H0: There is no difference among education level toward the attitude "can get the goods within short of time"

H1: There is the difference among education level toward the attitude "can get the goods within short of time"

The significance value is 0.000, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the different attitude among education level toward the point of getting the goods within short of time.

H0: There is no difference among education level toward the attitude "the quality of products are same as in the advertisement"

H1: There is the difference among education level toward the attitude "the quality of products are same as in the advertisement"

The significance value is 0.000, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the different attitude among education level toward the quality of products are same as in the advertisement.

H0: There is no difference among education level toward the attitude "the interested homepage can attract to use the service"

H1: There is the difference among education level toward the attitude "the interested homepage can attract to use the service"

The significance value is 0.000, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the different attitude among education level toward the interested homepage can attract to use the service.

H0: There is no difference among education level toward the attitude "the safety of payment method"

H1: There is the difference among education level toward the attitude "the safety of payment method"

The significance value is 0.000, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the different attitude among education level toward the safety of payment method.

H0: There is no difference among education level toward the attitude "the safety in keeping the record"

H1: There is the difference among education level toward the attitude "the safety in keeping the record"

The significance value is 0.016, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the different attitude among education level toward the safety in keeping the record.

H0: There is no difference among education level toward the attitude "help in getting the image of in trend"

H1: There is the difference among education level toward the attitude "help in getting the image of in trend"

The significance value is 0.002, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the different attitude among education level toward E-commerce help to get the image of in trend.

H0: There is no difference among education level toward the attitude "can replace the traditional buying method"

H1: There is the difference among education level toward the attitude "can replace the traditional buying method"

The significance value is 0.000, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the different attitude among education level toward the point of can replace the traditional buying method.

H0: There is no difference among education level toward the attitude "appropriate to modern way of life"

H1: There is the difference among education level toward the attitude "appropriate to modern way of life"

The significance value is 0.000, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the different attitude among education level toward E-commerce is appropriate to modern way of life

H0: There is no difference among education level toward the attitude "the international service providers is more trustfully than the domestic's"

H1: There is the difference among education level toward the attitude "the international service providers is more trustfully than the domestic's"

The significance value is 0.000, which is less than the level of significance at 0.05, then we reject H0 and accept H1, that there is the different attitude among education level toward the international service providers is worthier than the domestic service providers.

H0: There is no difference among education level toward the attitude "it is the buying method of up to date people"

H1: There is the difference among education level toward the attitude "it is the buying method of up to date people"

The significance value is 0.000, which is less than the level of significance at 0.05, then we accept H1, that there is the different attitude among education level toward the point that E-commerce is the buying method of up to date people.

Table 4.39. The Relationship between Marital Status and Attitude toward E-commerce.

Attitude towards E-commerce	Marital Status	Sum of Squares	Mean Square	F	Sig.
Can easily find the details of goods and service	Between Groups	4.829	2.414	4.903	.008
	Within Groups	195.481	0.492		
Is an easy way in buying the goods and service	Between Groups	11.393	5.697	12.019	.000
	Within Groups	188.167	0.474		
Can save the time in selecting the goods and service	Between Groups	16.129	8.065	14.316	.000
	Within Groups	223.648	0.563		
Can find and order the hard to find products	Between Groups	8.647	4.324	7.757	.000
	Within Groups	221.290	0.557		
There are varieties of products	Between Groups	14.844	7.422	12.899	.000
	Within Groups	228.433	0.575		
Easy to search and find the service providers	Between Groups	8.829	4.414	6.939	.001
	Within Groups	252.549	0.636		
The products and service is accord ing to what you are looking for	Between Groups	8.436	4.218	7.917	.000
	Within Groups	211.524	0.533		
The price is cheaper than the market price	Between Groups	12.897	6.448	12.208	.000
	Within Groups	209.701	0.528		
The products are the quality products	Between Groups	10.440	5.220	22.840	.000
	Within Groups	90.737	0.229		
Can get the goods within short of time	Between Groups	12.661	6.331	13.418	.000
	Within Groups	187.299	0.472		
The quality of products are same as in the advertisement	Between Groups	9.446	4.723	13.265	.000
	Within Groups	141.351	0.356		
The interested homepage can attract to use the service	Between Groups	11.502	5.751	8.773	.000
	Within Groups	260.248	0.656		
The safety of payment method	Between Groups	13.930	6.965	9.513	.000
	Within Groups	290.667	0.732		
The safety in keeping the record	Between Groups	4.657	2.329	2.976	.052
	Within Groups	307.524	0.783		
Help in getting the image of in trend	Between Groups	13.260	6.630	7.341	.001
	Within Groups	358.518	0.903		
Can replace the traditional buying method	Between Groups	15.061	7.531	10.362	.000
	Within Groups	288.529	0.727		
Appropriate to modern way of life	Between Groups	9.851	4.926	7.398	.001
	Within Groups	264.326	0.666		
The international service providers is more trustfully than the domestic service providers	Between Groups	1.249	0.625	.652	0.522
	Within Groups	380.501	0.958		
It is a buying method of up to date people	Between Groups	6.928	3.464	4.494	.012
	Within Groups	306.010	0.771		

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The hypothesis among marital status and attitude towards E-commerce are analyzed by using one-way Anova or F-Test. The degree of freedom between group is 2 and within group are 397. The hypothesis tests are set as follows:

H0: There is no difference among marital status toward the attitude "can easily find the details of goods and service"

H1: There is the difference among marital status toward the attitude "can easily find the details of goods and service"

The significance value is 0.008, which is less than the level of significance at 0.05, then we accept H1, that there is the difference attitude among marital status toward it can easily find the details of goods and service in E-commerce.

H0: There is no difference among marital status toward the attitude "is an easy way in buying the goods and service"

H1: There is the difference among marital status toward the attitude "is an easy way in buying the goods and service"

The significance value is 0.000, which is less than the level of significance at 0.05, then we accept H1 that there is the difference among marital status toward the attitude of E-commerce is an easy way in buying the goods and service.

H0: There is no difference among marital status toward the attitude "can save the time in selecting the goods and service"

H1: There is the difference among marital status toward the attitude "can save the time in selecting the goods and service"

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The significance value is 0.000, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the difference among marital status toward the attitude can save the time in selecting the goods and service.

H0: There is no difference among marital status toward the attitude "can find and order the hard to find products"

H1: There is the difference among marital status toward the attitude "can find and order the hard to find products"

The significance value is 0.000, which is less than the level of significance at 0.05, then we accept H1 that there is the difference among marital status toward the attitude E-commerce can find and order the hard to find products.

H0: There is no difference among marital status toward the attitude "there are varieties of products"

H1: There is the difference among marital status toward the "there are varieties of products"

The significance value is 0.000, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the difference among marital status toward the attitude there are varieties of products in E-commerce.

H0: There is no difference among marital status toward the attitude "easy to search and find the service providers"

H1: There is the difference among marital status toward the attitude "easy to search and find the service providers"

The significance value is 0.001, which is less than the level of significance at 0.05, then we accept H1 that there is the difference among marital status toward the attitude E-commerce is an easy to search and find the service providers.

H0: There is no difference among marital status toward the attitude "the products and service is according to what you are looking for"

H1: There is the difference among marital status toward the attitude "the products and service is according to what you are looking for"

The significance value is 0.000, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the different attitude among marital status toward the products and service in E-commerce is according to what they are looking for.

H0: There is no difference among marital status toward the attitude "the price is cheaper than the market price"

H1: There is the difference among marital status toward the attitude "the price is cheaper than the market price"

The significance value is 0.000, which is less than the level of significance at 0.05, then we accept H1 that there is the difference among marital status toward attitude that the price in E-commerce is cheaper than the market price.

H0: There is no difference among marital status toward the attitude "the products are the quality products"

H1: There is the difference among marital status toward the attitude "the products are the quality products"

The significance value is 0.000, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the different attitude among marital status toward that the products are the quality products.

H0:   There is no difference among marital status toward the attitude "can get the goods within short of time"

H1:   There is the difference among marital status toward the attitude "can get the goods within short of time"

The significance value is 0.000, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the different attitude among marital status toward the point of getting the goods within short of time.

H0:   There is no difference among marital status toward the attitude "the quality of products are same as in the advertisement"

H1:   There is the difference among marital status toward the attitude "the quality of products are same as in the advertisement"

The significance value is 0.000, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the different attitude among marital status toward the quality of products are same as in the advertisement.

H0:   There is no difference among marital status toward the attitude "the interested homepage can attract to use the service"

H1:   There is the difference among marital status toward the attitude "the interested homepage can attract to use the service"

The significance value is 0.000, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the different attitude among marital status toward the interested homepage can attract to use the service.

H0: There is no difference among marital status toward the attitude "the safety of payment method"

H1: There is the difference among marital status toward the attitude "the safety of payment method"

The significance value is 0.000, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the different attitude among marital status toward the safety of payment method.

H0: There is no difference among marital status toward the attitude "the safety in keeping the record"

H1: There is the difference among marital status toward the attitude "the safety in keeping the record"

The significance value is 0.052, which is higher than the level of significance at 0.05, then we accept H0 that there is no the different attitude among marital status toward the safety in keeping the record.

H0: There is no difference among marital status toward the attitude "help in getting the image of in trend"

H1: There is the difference among marital status toward the attitude "help in getting the image of in trend"

The significance value is 0.001, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the different attitude among marital status toward E-commerce help to get the image of in trend.

H0: There is no difference among marital status toward the attitude "can replace the traditional buying method"

H1: There is the difference among marital status toward the attitude "can replace the traditional buying method"

The significance value is 0.000, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the different attitude among marital status toward the point of can replace the traditional buying method.

H0: There is no difference among marital status toward the attitude "appropriate to modern way of life"

H1: There is the difference among marital status toward the attitude "appropriate to modern way of life"

The significance value is 0.001, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the different attitude among marital status toward E-commerce is appropriate to modern way of life

H0: There is no difference among marital status toward the attitude "the international service providers is more trustfully than the domestic's"

H1: There is the difference among marital status toward the attitude "the international service providers is more trustfully than the domestic's"

The significance value is 0.522, which is higher than the level of significance at 0.05, then we accept H0, that there is no different attitude among marital status toward the international service providers is more trustfully than the domestic's.

H0: There is no difference among marital status toward the attitude "it is the buying method of up to date people"

H1: There is the difference among marital status toward the attitude "it is the buying method of up to date people"

The significance value is 0.012, which is less than the level of significance at 0.05, then we accept H1, that there is the different attitude among marital status toward the point that E-commerce is the buying method of up to date people.

Table 4.40. The Relationship between Occupation and Attitude towards E-commerce.

Attitude towards E-commerce	Occupation	Sum of Squares	Mean Square	F	Sig.
Can easily find the details of goods and service	Between Groups	4.275	1.069	2.153	0.074
	Within Groups	196.035	0.496		
Is an easy way in buying the goods and service	Between Groups	8.003	2.001	4.125	0.003
	Within Groups	191.557	0.485		
Can save the time in selecting the goods and service	Between Groups	20.195	5.049	9.082	0.000
	Within Groups	219.583	0.556		
Can find and order the hard to find products	Between Groups	8.163	2.041	3.635	0.006
	Within Groups	221.774	0.561		
There are varieties of products	Between Groups	4.925	1.231	2.041	0.088
	Within Groups	238.352	0.603		
Easy to search and find the service providers	Between Groups	2.521	0.630	0.962	0.428
	Within Groups	258.856	0.655		
The products and service is according to what you are looking for	Between Groups	.185	0.046	0.083	0.988
	Within Groups	219.775	0.556		
The price is cheaper than the market price	Between Groups	6.613	1.653	3.023	0.018
	Within Groups	215.985	0.547		
The products are the quality products	Between Groups	4.691	1.173	4.801	0.001
	Within Groups	96.487	0.244		
Can get the goods within short of time	Between Groups	6.973	1.743	3.568	0.007
	Within Groups	192.987	0.489		
The quality of products are same as in the advertisement	Between Groups	6.211	1.553	4.242	0.002
	Within Groups	144.587	0.366		
The interested homepage can attract to use the service	Between Groups	1.343	0.336	0.491	0.743
	Within Groups	270.407	0.685		

Table 4.40. The Relationship between Occupation and Attitude towards E-commerce. (Continued)

Attitude towards E-commerce	Occupation	Sum of Squares	Mean Square	F	Sig.
The safety of payment method	Between Groups	4.029	1.007	1.324	0.260
	Within Groups	300.569	0.761		
The safety in keeping the record	Between Groups	13.170	3.292	4.305	0.002
	Within Groups	299.012	0.765		
Help in getting the image of in trend	Between Groups	34.155	8.539	9.990	0.000
	Within Groups	337.623	0.855		
Can replace the traditional buying method	Between Groups	19.431	4.858	6.752	.000
	Within Groups	284.159	0.719		
Appropriate to modern way of life	Between Groups	20.203	5.051	7.855	.000
	Within Groups	253.974	0.643		
The international service providers is more trustfully than the domestic service providers	Between Groups	19.634	4.908	5.354	.000
	Within Groups	362.116	0.917		
It is a buying method of up to date people	Between Groups	25.650	6.412	8.817	.000
	Within Groups	287.288	0.727		

The hypothesis among occupation and attitude towards E-commerce are analyzed by using one-way Anova or F-Test. The degree of freedom between group is 4 and the degree of freedom within group is 395. The hypothesis tests are set as the questions asked as follows:

H0: There is no difference among occupation toward the attitude "can easily find the details of goods and service"

H1: There is the difference among occupation toward the attitude "can easily find the details of goods and service"

The significance value is 0.074, which is higher than the level of significance at 0.05, then we accept H0, that there is no different attitude among occupation toward it can easily find the details of goods and service in E-commerce.

H0: There is no difference among occupation toward the attitude "is an easy way in buying the goods and service"

H1: There is the difference among occupation toward the attitude "is an easy way in buying the goods and service"

The significance value is 0.003, which is less than the level of significance at 0.05, then we accept H1 that there is the difference among occupation toward the attitude of E-commerce is an easy way in buying the goods and service.

H0: There is no difference among occupation toward the attitude "can save the time in selecting the goods and service"

H1: There is the difference among occupation toward the attitude "can save the time in selecting the goods and service"

The significance value is 0.000, which is less than the level of significance at 0.05, then we accept H1 that there is the difference among occupation toward the attitude can save the time in selecting the goods and service.

H0: There is no difference among occupation toward the attitude "can find and order the hard to find products"

H1: There is the difference among occupation toward the attitude "can find and order the hard to find products"

The significance value is 0.006, which is less than the level of significance at 0.05, then we accept H1 that there is the difference among occupation toward the attitude E-commerce can find and order the hard to find products.

H0:	There is no difference among occupation toward the attitude "there are varieties of products"

H1:	There is the difference among occupation toward the "there are varieties of products"

The significance value is 0.088, which is higher than the level of significance at 0.05, then we accept H0 that there is no difference among occupation toward the attitude there are varieties of products in E-commerce.

H0:	There is no difference among occupation toward the attitude "easy to search and find the service providers"

H1:	There is the difference among occupation toward the attitude "easy to search and find the service providers"

The significance value is 0.428, which is higher than the level of significance at 0.05, then we accept H0 that there is no difference among occupation toward the attitude E-commerce is an easy to search and find the service providers.

H0:	There is no difference among occupation toward the attitude "the products and service is according to what you are looking for"

H1:	There is the difference among occupation toward the attitude "the products and service is according to what you are looking for"

The significance value is 0.988, which is higher than the level of significance at 0.05. H0 is accepted, there is no different attitude among occupation toward "the products and service in E-commerce is according to what they are looking for".

H0: There is no difference among occupation toward the attitude "the price is cheaper than the market price"

H1: There is the difference among occupation toward the attitude "the price is cheaper than the market price"

The significance value is 0.018, which is less than the level of significance at 0.05, then we accept H1 that there is the difference among occupation toward attitude that the price in E-commerce is cheaper than the market price.

H0: There is no difference among occupation toward the attitude "the products are the quality products"

H1: There is the difference among occupation toward the attitude "the products are the quality products"

The significance value is 0.001, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the different attitude among occupation toward that the products are the quality products.

H0: There is no difference among occupation toward the attitude "can get the goods within short of time"

H1: There is the difference among occupation toward the attitude "can get the goods within short of time"

The significance value is 0.007, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the different attitude among occupation toward the point of getting the goods within short of time.

H0: There is no difference among occupation toward the attitude "the quality of products are same as in the advertisement"

H1: There is the difference among occupation toward the attitude "the quality of products are same as in the advertisement"

The significance value is 0.002, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the different attitude among occupation toward the quality of products are same as in the advertisement.

H0: There is no difference among occupation toward the attitude "the interested homepage can attract to use the service"

H1: There is the difference among occupation toward the attitude "the interested homepage can attract to use the service"

The significance value is 0.743, which is higher than the level of significance at 0.05, then we accept H0 that there is no different attitude among occupation toward the interested homepage can attract to use the service.

H0: There is no difference among occupation toward the attitude "the safety of payment method"

H1: There is the difference among occupation toward the attitude "the safety of payment method"

The significance value is 0.260, which is higher than the level of significance at 0.05, then we accept H0 that there is no different attitude among occupation toward the safety of payment method.

H0: There is no difference among occupation toward the attitude "the safety in keeping the record"

H1: There is the difference among occupation toward the attitude "the safety in keeping the record"

The significance value is 0.002, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the different attitude among occupation toward the safety in keeping the record.

H0: There is no difference among occupation toward the attitude "help in getting the image of in trend"

H1: There is the difference among occupation toward the attitude "help in getting the image of in trend"

The significance value is 0.000, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the different attitude among occupation toward E-commerce help to get the image of in trend.

H0: There is no difference among occupation toward the attitude "can replace the traditional buying method"

H1: There is the difference among occupation toward the attitude "can replace the traditional buying method"

The significance value is 0.000, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the different attitude among occupation toward the point of can replace the traditional buying method.

H0: There is no difference among occupation toward the attitude "appropriate to modern way of life"

H1: There is the difference among occupation toward the attitude "appropriate to modern way of life"

The significance value is 0.000, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the different attitude among occupation toward E-commerce is appropriate to modern way of life

H0: There is no difference among occupation toward the attitude "the international service providers is more trustfully than the domestic's"

H1: There is the difference among occupation toward the attitude "the international service providers is more trustfully than the domestic's"

The significance value is 0.000, which is less than the level of significance at 0.05, then we accept H1, that there is the different attitude among occupation toward the international service providers is more trustfully than the domestic's.

H0: There is no difference among occupation toward the attitude "it is the buying method of up to date people"

H1: There is the difference among occupation toward the attitude "it is the buying method of up to date people"

The significance value is 0.000, which is less than the level of significance at 0.05, then we accept H1, that there is the different attitude among occupation toward the point that E-commerce is the buying method of up to date people.

Table 4.41. The Relationship between Income and Attitude towards E-commerce.

Attitude towards E-commerce	Income	Sum of Squares	Mean Square	F	Sig.
Can easily find the details of goods and service	Between Groups	5.664	1.416	2.874	0.023
	Within Groups	194.646	0.493		
Is an easy way in buying the goods and service	Between Groups	5.924	1.481	3.021	0.018
	Within Groups	193.636	0.490		
Can save the time in selecting the goods and service	Between Groups	6.679	1.670	2.830	.025
	Within Groups	233.098	0.590		
Can find and order the hard to find products	Between Groups	5.802	1.451	2.556	.038
	Within Groups	224.135	0.567		
There are varieties of products	Between Groups	2.723	0.681	1.118	.348
	Within Groups	240.555	0.609		
Easy to search and find the service providers	Between Groups	1.160	0.290	.440	.779
	Within Groups	260.217	0.659		
The products and service is according to what you are looking for	Between Groups	7.038	1.759	3.264	.012
	Within Groups	212.922	0.539		
The price is cheaper than the market price	Between Groups	22.131	5.533	10.902	.000
	Within Groups	200.467	0.508		
The products are the quality products	Between Groups	7.902	1.976	8.366	.000
	Within Groups	93.275	0.236		
Can get the goods within short of time	Between Groups	9.728	2.432	5.050	.001
	Within Groups	190.232	0.482		
The quality of products are same as in the advertisement	Between Groups	9.230	2.308	6.438	.000
	Within Groups	141.567	0.358		
The interested homepage can attract to use the service	Between Groups	1.650	0.412	.603	.661
	Within Groups	270.100	0.684		
The safety of payment method	Between Groups	4.892	1.223	1.612	.170
	Within Groups	299.706	0.759		
The safety in keeping the record	Between Groups	1.286	0.321	.404	.806
	Within Groups	310.896	0.795		
Help in getting the image of in trend	Between Groups	13.427	3.357	3.700	.006
	Within Groups	358.350	0.907		
Can replace the traditional buying method	Between Groups	19.856	4.964	6.911	.000
	Within Groups	283.734	0.718		
Appropriate to modern way of life	Between Groups	8.284	2.071	3.076	.016
	Within Groups	265.894	0.673		
The international service providers is more trustfully than the domestic service providers	Between Groups	2.780	0.695	.724	.576
	Within Groups	378.970	0.959		
It is a buying method of up to date people	Between Groups	3.265	0.816	1.041	.386
	Within Groups	309.672	0.784		

The hypothesis among income level and attitude towards E-commerce are analyzed by using one-way Anova or F-Test. The degree of freedom between group is 4 and within group are 395. The hypothesis tests are set as follows:

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H0: There is no difference among income level toward the attitude "can easily find the details of goods and service"

H1: There is the difference among income level toward the attitude "can easily find the details of goods and service"

The significance value is 0.023, which is less than the level of significance at 0.05, then we accept H1, that there is the different attitude among income level toward it can easily find the details of goods and service in E-commerce.

H0: There is no difference among income level toward the attitude "is an easy way in buying the goods and service"

H1: There is the difference among income level toward the attitude "is an easy way in buying the goods and service"

The significance value is 0.018, which is less than the level of significance at 0.05, then we accept H1 that there is the difference among income level toward the attitude of E-commerce is an easy way in buying the goods and service.

H0: There is no difference among income level toward the attitude "can save the time in selecting the goods and service"

H1: There is the difference among income level toward the attitude "can save the time in selecting the goods and service"

The significance value is 0.025, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the difference among income level toward the attitude can save the time in selecting the goods and service.

H0: There is no difference among income level toward the attitude "can find and order the hard to find products"

H1: There is the difference among income level toward the attitude "can find and order the hard to find products"

The significance value is 0.038, which is less than the level of significance at 0.05, then we accept H1 that there is the difference among income level toward the attitude E-commerce can find and order the hard to find products.

H0: There is no difference among income level toward the attitude "there are varieties of products"

H1: There is the difference among income level toward the "there are varieties of products"

The significance value is 0.348, which is higher than the level of significance at 0.05, then we accept H0 that there is no difference among income level toward the attitude there are varieties of products in E-commerce.

H0: There is no difference among income level toward the attitude "easy to search and find the service providers"

H1: There is the difference among income level toward the attitude "easy to search and find the service providers"

The significance value is 0.779, which is higher than the level of significance at 0.05, then we accept H0 that there is no difference among income level toward the attitude E-commerce is an easy to search and find the service providers.

H0: There is no difference among income level toward the attitude "the products and service is according to what you are looking for"

H1: There is the difference among income level toward the attitude "the products and service is according to what you are looking for"

The significance value is 0.012, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the different attitude among income level toward the products and service in E-commerce is according to what they are looking for.

H0: There is no difference among income level toward the attitude "the price is cheaper than the market price"

H1: There is the difference among income level toward the attitude "the price is cheaper than the market price"

The significance value is 0.000, which is less than the level of significance at 0.05, then we accept H1 that there is the difference among income level toward attitude that the price in E-commerce is cheaper than the market price.

H0: There is no difference among income level toward the attitude "the products are the quality products"

H1: There is the difference among income level toward the attitude "the products are the quality products"

The significance value is 0.000, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the different attitude among income level toward that the products are the quality products.

H0: There is no difference among income level toward the attitude "can get the goods within short of time"

H1: There is the difference among income level toward the attitude "can get the goods within short of time"

The significance value is 0.001, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the different attitude among income level toward the point of getting the goods within short of time

H0: There is no difference among income level toward the attitude "the quality of products are same as in the advertisement"

H1: There is the difference among income level toward the attitude "the quality of products are same as in the advertisement"

The significance value is 0.000, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the different attitude among income level toward the quality of products are same as in the advertisement.

H0: There is no difference among income level toward the attitude "the interested homepage can attract to use the service"

H1: There is the difference among income level toward the attitude "the interested homepage can attract to use the service"

The significance value is 0.661, which is higher than the level of significance at 0.05, then we accept H0 that there is no different attitude among income level toward the interested homepage can attract to use the service.

H0: There is no difference among income level toward the attitude "the safety of payment method"

H1: There is the difference among income level toward the attitude "the safety of payment method"

The significance value is 0.170, which is higher than the level of significance at 0.05, then we accept H0 that there is no different attitude among income level toward the safety of payment method.

H0: There is no difference among income level toward the attitude "the safety in keeping the record"

H1: There is the difference among income level toward the attitude "the safety in keeping the record"

The significance value is 0.806, which is higher than the level of significance at 0.05, then we accept H0 that there is no different attitude among income level toward the safety in keeping the record.

H0: There is no difference among income level toward the attitude "help in getting the image of in trend"

H1: There is the difference among income level toward the attitude "help in getting the image of in trend"

The significance value is 0.006, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the different attitude among income level toward E-commerce help to get the image of in trend.

H0: There is no difference among income level toward the attitude "can replace the traditional buying method"

H1: There is the difference among income level toward the attitude "can replace the traditional buying method"

The significance value is 0.000, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the different attitude among income level toward the point of can replace the traditional buying method.

H0: There is no difference among income level toward the attitude "appropriate to modern way of life"

H1: There is the difference among income level toward the attitude "appropriate to modern way of life"

The significance value is 0.016, which is less than the level of significance at 0.05, then we reject H0 and accept H1 that there is the different attitude among income level toward E-commerce is appropriate to modern way of life

H0: There is no difference among income level toward the attitude "the international service providers is more trustfully than the domestic's"

H1: There is the difference among income level toward the attitude "the international service providers is more trustfully than the domestic's"

The significance value is 0.576, which is higher than the level of significance at 0.05, then we accept H0, that there is no difference in attitude among income level toward the international service providers are more worthy than the domestic service providers.

H0: There is no difference among income level toward the attitude "it is the buying method of up to date people"

H1: There is the difference among income level toward the attitude "it is the buying method of up to date people"

The significance value is 0.386, which is higher than the level of significance at 0.05, then we accept H0, that there is no different attitude among income level toward the point that E-commerce is the buying method of up to date people.

Hypothesis 4: The relationship between demographic of Internet users and trend in using E-commerce.

The forth hypothesis tests the relationship between the demography and the trend in using E-commerce. The demography data include sex, age, education, marital status, occupation and income. The Hypothesis tests are set as follows

H0: there is no relationship between sex and trend in using E-commerce

H1: there is the relationship between sex and trend in using E-commerce

H0: there is no relationship between age and trend in using E-commerce

H1: there is the relationship between age and trend in using E-commerce

H0: there is no relationship between education and trend in using E-commerce

H1: there is the relationship between education and trend in using E-commerce

H0: there is no relationship between marital status and trend in using E-commerce

H1: there is the relationship between marital status and trend in using E-commerce

H0: there is no relationship between occupation and trend in using E-commerce

H1: there is the relationship between occupation and trend in using E-commerce

H0: there is no relationship between income and trend in using E-commerce

H1: there is the relationship between income and trend in using E-commerce

Table 4.42. The Relationship between Demography and Trend in Using E-commerce.

		Trend in using E-commerce			$X2$	P-Value (Sig.)
		Yes	Do not sure	No		
Sex					25.651	0.000
Male	Count	98	92	16		
	Percent	47.60	44.70	7.80		
Female	Count	46	119	29		
	Percent	23.70	61.30	14.90		
Age					71.264	0.000
Less than 20 years	Count	3	18	4		
	Percent	12.00	72.00	16.00		
21 - 25 years	Count	36	26	-		
	Percent	58.10	41.90	-		
26 - 30 years	Count	74	126	16		
	Percent	34.30	58.30	7.40		
31 - 35 years	Count	12	30	19		
	Percent	19.70	49.20	31.10		
36 - 40 years	Count	11	11	6		
	Percent	39.30	39.30	21.40		
Over 41 years	Count	8	-	-		
	Percent	100.00	-	-		
Education					31.907	0.000
Do not get education	Count	-	4	-		
	Percent	-	100.00	-		
High School or equivalent	Count	3	7	4		
	Percent	21.40	50.00	28.60		
Bachelor Degree or equivalent	Count	90	113	10		
	Percent	42.30	53.10	4.70		
Master Degree or equivalent	Count	51	83	31		
	Percent	30.90	50.30	18.80		
Higher than Master Degree	Count	-	4	-		
	Percent	-	100.00	-		

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Table 4.42.   The Relationship between Demography and Trend in Using E-commerce.
(Continued)

		Trend in using E-commerce			X2	P-Value (Sig.)
		Yes	Do not sure	No		
Marital Status					25.142	0.001
Single	Count	97	194	39		
	Percent	29.40	58.80	11.80		
Married	Count	47	13	3		
	Percent	74.60	20.60	4.80		
Divorce	Count	-	4	3		
	Percent	-	57.10	42.90		
Occupation					25.142	0.001
Student	Count	11	26	-		
	Percent	29.70	70.30	-		
Employee	Count	74	131	35		
	Percent	30.80	54.60	14.60		
Government officer	Count	23	22	6		
	Percent	45.10	43.10	11.80		
Personal Business	Count	22	24	-		
	Percent	47.80	52.20	-		
Freelance	Count	14	8	4		
	Percent	53.80	30.80	15.40		
Income					42.282	0.000
Less than 10,000 baht	Count	13	29	8		
	Percent	26.00	58.00	16.00		
10,001 - 20,000 baht	Count	52	46	10		
	Percent	48.10	42.60	9.30		
20,001 - 30,000 baht	Count	33	77	3		
	Percent	29.20	68.10	2.70		
30,001 - 40,000 baht	Count	11	34	11		
	Percent	19.60	60.70	19.60		
More than 40,001 baht	Count	35	25	13		
	Percent	47.90	34.20	17.80		

The trend in using E-commerce can be analyzed as follows. The significance value of sex is at 0.000, which is less than 0.05 Then H0 is rejected and accepted H1, there is the relationship between sex and the trend in using E-commerce at the significance level 0.05.

From the age variable, the significance value is at 0.000 which is less than 0.05. Then H0 is rejected and accept H1, there is the relationship between age and the trend in using E-commerce at the significance level 0.05.

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From the education variable, the significance value is at 0.000 which is less than 0.05. Then H0 is rejected and accept H1, there is the relationship between education and the trend in using E-commerce at the significance level 0.05.

From the marital variable, the significance value is at 0.000 which is less than 0.05. Then H0 is rejected and accept H1, there is the relationship between marital and the trend in using E-commerce at the significance level 0.05.

From the occupation variable, the significance value is at 0.001 which is less than 0.05. Then H0 is rejected and accept H1, there is the relationship between occupation and trend in using E-commerce at the significance level 0.05.

From the income variable, the significance value is at 0.000 which is less than 0.05. Then H0 is rejected, there is the relationship between income and the trend in using E-commerce at the significance level 0.05.

4.6 Questionnaire Conclusion

4.6.1 Demography of the Sample

From the sample group of 400 respondents who use the Internet in the Bangkok area, there are 206 male and 194 female or 51.50 percent and 48.50 percent respectively. Most of them are in the age group of 26 – 30 years, 216 respondents at 54.00 percent follow by the group of 21 – 25 years and 31 – 35 years or at 15.50 and 15.30 respectively. The highest education level of most respondents is the bachelor degree or equivalent with 213 respondents or at 53.30 percent follow by the master degree or equivalent with 165 respondents or at 41.30 percent. Most respondents are single. From 400 respondents, 330 of them or 82.50 percent are single. There are 63 respondents who married or at 15.80 percent.

Most respondents are the employees with the highest frequency at 240 respondents or 60.00 percent, follow by being the government officer at 51 respondents

or 12.80 percent. There are only 46 respondents who do their own business or at the third range at 11.50 percent. The income of first second range is not much different. The first range is at 20,001 – 30,000 baht with 113 respondents or 28.30 percent. The second range is at 10,001 – 20,000 baht with 108 respondents or 27.00 percent. However the third range who has income more than 40,001 baht has 73 respondents or at 18.30 percent.

4.6.2 Behavior of Using Internet

From the questionnaire survey, we found that the first-two places where respondents use the Internet are from the office and home, which can count from 289 respondents and 279 respondents or 44.70 percent and 43.10 percent respectively. It is 49.50 percent of respondent that use the Internet for more than 4 years. In the other hand 198 respondents have more than 4 years experience with the Internet. There are 111 respondents or 27.80 percent that use the Internet about 3 – 4 years.

There are 131 respondents who use the Internet more than 10 times per week , or at 32.80 percent which is the highest frequency and follow by 92 respondents who use the Internet 1 – 3 times per week or at 23.00 percent. The average time in using the Internet of the respondents is about 1 – 2 hours per time with 198 respondents or at 49.50 percent. Most of them do not have the expense in using the Internet, 285 respondents or at 71.30 percent. However the average expense of those who pay for using the Internet is the range at 251 – 500 baht per month.

In ranking the first-three purposes in using the Internet of the respondents, we found that most of them use the Internet for checking the mails, searching the information and recreation or entertainment.

4.6.3 Behavior in Using E-commerce

Most respondents do not have the experience with the E-commerce, only 102 respondents or at 25.50 percent who have the experience with the E-commerce. However, 141 respondents would like to try in the future or at 35.30 percent prefer to try. The first reason that respondents who use the service of E-commerce is because of its convenience in find the information and doing the transaction, with 65 respondents or 63.70 percent.

Most of them have more than 5 times experience in using the service of E-commerce or at 45 respondent or 44.10 percent. The other 33 respondents have about 2 – 3 times experience with E-commerce or at 32.40 percent. The average order value is about 1,501 – 3,000 baht with the 38 respondents or at 37.30 percent follow by the range at 501 – 1,500 baht with 29 respondents or 28.40 percent. The payment method of most users is done by using the credit card, 64 respondents or 62.70 percent.

Credit card is the most popular payment method for those who use and will try to use the service of E-commerce with 125 respondents or 51.40 percent. Most respondents, 102 respondents or 42.00 percent, prefer to use both sources from domestic web site and international web site in doing the transaction. However, 99 respondents prefer to use only domestic web site in doing the transaction or at 40.70 percent.

Books and hotel reservations are the most popular products and service that most respondents interested to buy from E-commerce. There are 143 respondents and 135 respondents or at 11.90 percent and 11.20 percent respectively.

Payment method is the major problem that causes most Internet users, 117 respondents or 19.00 percent do not want to use the service of E-commerce. The trustfulness of the seller is another cause, that respondents do not want to use the service of E-commerce, 98 respondents or at 15.90 percent.

Most respondents have the positive attitude toward the E-commerce in the point that it is easy to find the details of goods and service and doing the transaction. However some of them do not believe in the safety of keeping the record and do not sure that the price is cheaper than the market price.

The tendency that they will use the service of E-commerce is at 36 percent or with 144 respondents. The 211 respondents or 52.80 percent are not sure whether they will use the service or not.

4.6.4 Comment from the Respondents

The respondents have the comment in the payment, product, confidential buyers' data and the legal about the E-commerce as follow.

Payment - The security payment method can convince the respondents to use the service of E-commerce. Some of them prefer the payment to be effective when they receive the goods or service.

Product – The guarantee service from the seller should guarantee is essential. The quality of the products should be the same as what the sellers advertise. The guarantee should cover to the delivery service guarantee that the sellers will response if the goods are damaged during the delivery.

The security of the buyer's data – Some respondents do not want to do the E-commerce transaction because they do not confident that the seller will keep confidentially about their filled data.

The legal aspects – Some respondents still do not believe that the E-commerce law can protect them from the fraud, which may occur during doing E-commerce transaction.

4.7 Hypothesis Conclusion

4.7.1 Hypothesis 1. The Relationship between Demography of Internet Users and Behavior in Using Internet.

The behavior in using the Internet includes the experience, the time, the average hour, the expense and the purpose in using the Internet

The hypothesis test of the relationship between demography and the behavior in using the Internet found that the significance value of age, education, marital status, occupation and income is less than the level of significance at 0.05, then H0 is rejected. There is the relationship between the age, education, marital status, occupation and income and the experience in using the Internet.

The significance value of sex is higher than level of significance of 0.05. It means that H0 is accepted. There is no relationship between sex and the behavior in using the Internet. Except the purpose of using the Internet, the significance value of sex in the purpose of using the Internet is less than 0.05 then Ho is rejected. There is the relationship between sex and purpose in using the Internet.

From the consumer behavior theory, which stated that the different demography such as sex, age, education level, etc will have the difference in behavior. The different age will have different behavior in using the Internet. The different education level will have different behavior of using the Internet. However in the present globalization, the sex does not have much difference in the behavior of using the Internet except the purpose of using it.

4.7.2 Hypothesis 2. The Relationship between Demography of Internet Users and Behavior in Using E-commerce

The hypothesis test the relationship between demography and behavior in using E-commerce found that the significance value of age, marital status and income is less

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than the level of significance at 0.05, then H0 is rejected. There is the relationship between the age, marital status income and the experience in using E-commerce.

The significance value of sex is higher than the level of significance at 0.05 in the experience, frequency and the payment method. It is the reason of using E-commerce and average order value that the significance values is less then 0.05. Then we accept H0 that there is no different in sex and in the experience, frequency and payment method in using E-commerce. However at the different sex, there is the different reason and average order value in using E-commerce.

The significance values of education are higher than the level of significance at 0.05 in the frequency of using E-commerce and lower than 0.05 in experience, reason, average order value and payment method. Then we accept H0 that there is no different between education and the frequency in using E-commerce. However, at the different education level there is the different experience, reason, average order value and payment method.

The significance values of occupation are higher than the level of significance at 0.05 in the experience and reason of using E-commerce and lower than 0.05 in frequency, average order value and payment method. Then we accept H0 that there is no different between occupation and the experience and reason in using E-commerce. However, at the different occupation there is the different in frequency, average order value and payment method.

The hypothesis tests the relationship between demography and behavior of those who have the experience in using E-commerce and those who interested to use the service of E-commerce found that there is the difference in preferred payment method and the sex, age, education, marital status, occupation and income.

There is the difference in source of using the Internet at the different age, education, occupation and income. However at the different sex and marital status there is no different in source of using Internet.

4.7.3 Hypothesis 3. The Relationship among Demography of Internet Users and Attitude toward E-commerce.

The hypothesis test about the difference among the demography and the attitude towards E-commerce found that mostly there is no different between male and female toward the attitude of E-commerce. The difference attitude will be at the point of E-commerce is an easy way in buying the goods and service, it is easy to search and find the service providers, can get the goods within short of time, the safety of payment method and the safety in keeping the record.

The difference among age group has the different attitude E-commerce. However, there are some points that the different age has the same attitude such as the interested homepage can attract to use the service, the safety of payment method, the safety in keeping the record, E-commerce help to get the image of in trend, it can replace the traditional buying method, it s appropriate to modern way of life and it is a buying method of up to date people.

The test from education level we found that difference of education level get the different attitude toward the E-commerce. The significance value of the education level is less than the level of significance at 0.05

The difference of marital status has the different attitude toward E-commerce. There are only 2 points that the different marital status have the same attitude that are the safety in keeping the record and the international service providers are more trustfully than the domestic service providers. The mean of these 2 points is not sure.

The attitude of the respondents towards E-commerce is quite difference according to their occupation. There are some points that they have the same attitude such as it is easily find the details of goods and service, there are varieties of products, it is easy to search and find the service providers, the products and service is according to what they are looking for, the interest homepage can attract to use the service and the safety of payment method.

The different income level has the influence to the different attitude towards E-commerce. However, the respondents have the same attitude at the point of there are varieties of products, it is easy to search and find the service providers, the interested homepage can attract to use the service, the safety of payment method, the safety in keeping the record, the international service providers is worthier than the domestic service providers and it is a buying method of up to date people.

4.7.4 Hypothesis 4. The Relationship between Demography of Internet Users and the Trend in Using E-commerce.

The hypothesis test of the relationship between demography and the trend in using E-commerce found that the significance value of sex, age, education, marital status, occupation and income is less than the level of significance at 0.05, then H0 is rejected. There is the relationship between the sex, age, education, marital status, occupation and income and the trend in using the Internet.

V. CONCLUSIONS AND RECOMMENDATIONS

5.1 Research Conclusions

Even though the Electronics commerce (E-commerce) has emerged for decades, the growth rate of users and the perception in Thailand is very slow. It is the main objectives of the research "Behavior and Attitude of Internet Users toward E-commerce in Bangkok" to study the behavior in using Internet of the users in Bangkok area, the attitude and the trend of using the E-commerce as well as the factor that motivate the Internet users to use the service of E-commerce.

The questionnaire is the tool of this research which ask about personal data, the behavior in using the Internet and the behavior and the attitude toward E-commerce. The 400 questionnaires are distributed to the Internet users in 10 representative districts in Bangkok area by using the multi-stage sampling method.

From the sample group of 400 respondents, the percentage between male and female is not much difference at 51.50 percent and 48.50 percent respectively. Most respondents are single with the age around 26 – 30 years who have the highest education at bachelor degree. Most of them are employees who have the average income range at 20,001 – 30,000 baht.

Most respondents use the Internet from their home about more than 10 times per week and about 1 – 2 hours per time. The purpose of using the Internet is for checking the mails and searching the information.

It is only 25 percent or 102 respondents who have the experience in using the E-commerce. The reason in using because of the convenience in finding the information and do the transaction. The average orders value is about 1,501 – 3,000 baht with the payment method by credit card. Book and hotel reservation is the most interested products and service of the respondents in using E-commerce.

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The main reason of the respondents in not using the E-commerce comes from the payment system as well as the trustfulness of the sellers.

Most respondents have the positive attitude toward E-commerce in the point that it is easy to find the details of goods and service include of doing the transaction.

5.2 Recommendations

E-commerce is not the new business channel in Thailand. However, the growth rate is very low. Most respondents do not believe in doing the transaction in this channel because of the payment method, the worthiness of the seller, the quality of the products which may not be the same as advertised or may get damaged during delivery, etc. The sellers should convince the buyers in those points such as developing the new technology of payment method include to convince the buyers about trustfulness of their web site.

The order value of each transaction is not much high, since the buyers are quite carefully in using this channel. The average order value is about 1,501 - 3,000 baht. Then there is the high chance that the products at that price range will gain the attention from the buyers. The buyers will try to use the service at the low price products.

Most respondents are not sure that the international service providers are worthier than the domestic service providers and 40 percent of respondents prefer to use only domestic web site. Then it is a good opportunity for the domestic service providers to concentrate in this channel and take the geography advantage to convince the buyers. They may add the value of after sell service to motivate the buyers to use the service of E-commerce as well.

5.3 Recommendation for Further Research

(1) This research is focused only on the Internet users in Bangkok area, it is recommended that there should be further research which will cover all over

Thailand to get the whole picture about behavior and attitude towards E-commerce of Internet users in Thailand. Then we can take the advantages of knowing the positive and negative attitude of the users to improve the weak point.

(2)   This research has studied only the behavior and the attitude of the Internet users towards the E-commerce. In the next research we should extend to focus on the satisfaction and the expectation of the users as well. Then we can use the information to improve the quality of the service and the web site.

APPENDIX   A

QUESTIONNAIRE (ENGLISH VERSION)

Part 1 : Personal Data

1. Sex   (___) 1. Male   (___) 2. Female

2. Age   (___) 1. Less than 20 years   (___) 2. 21 – 25 years

                             (___) 3. 26 – 30 years   (___) 4. 31 – 35 years

                             (___) 5. 36 – 40 years   (___) 6. Over 41 years

3. Highest Education (___) 1. Do not get education

                             (___) 2. High School or equivalent

                             (___) 3. Bachelor Degree or equivalent

                             (___) 4. Master Degree or equivalent

                             (___) 5. Higher than Master Degree

4. Marital Status   (___) 1. Single   (___) 2. Married

                             (___) 3. Divorce   (___) 4. Widow

5. Occupation   (___) 1. Student   (___) 2. Employee

                             (___) 3. Government Officer (___) 4. Personal Business

                             (___) 5. Freelance   (___) 6. Unoccupation

6. Income   (___) 1. Less than 10,000 baht

                             (___) 2. 10,001 – 20,000 baht

                             (___) 3. 20,001 – 30,000 baht

                             (___) 4. 30,001 – 40,000 baht

                             (___) 5. More than 40,001 baht

Part 2. : Behavior of Internet User

1.   Where do you use the Internet from?

   (___) 1. Home   (___) 2. Internet Café

   (___) 3. Office   (___) 4. School / University

   (___) 5. Others_____

2.   Experience in using the Internet

   (___) 1. Less than 1 year   (___) 2. 1 – 3 years

   (___) 3. 3 – 4 years   (___) 4. more than 4 years

3.   Time in using the Internet per week

   (___) 1. 1 – 3 times per week   (___) 2. 4 – 6 times per week

   (___) 3. 7 – 10 times per week   (___) 4. More than 10 times per week

4.   The average hour in using the Internet per time

   (___) 1. Less than 1 hour   (___) 2. 1 – 2 hours per time

   (___) 3. 2 – 3 hours per time   (___) 4. More than 3 hours per time

5.   What is your expense of using the Internet?

   (___) 1. Free of charge

   (___) 2. About_____per month

6.   What is the purpose for using the Internet?

   (___) 1. Check mails

   (___) 2. Chats

   (___) 3. Search Information

   (___) 4. For recreation/ entertainment

   (___) 5. Read or express opinion in the Web board

   (___) 6. Collect the information about goods or services

   (___) 7. Download program

(___) 8. For dealing business

(___) 9. Search and apply job

(___) 10. Use e-commerce service

(___) 11. Play games

(___) 12. Others_____(please specific)

Part III   Attitude and Behavior toward e-commerce

1.   Have your ever ordered the goods or service through Internet?

(___) 1. Yes   (___) 2. No, but will try (please go to No. 6)

(___) 3. No and do not want to try (please go to No. 9)

2.   What is the reason of using the E-commerce?

(___) 1. Convenience in find the information and doing the transaction

(___) 2. Time saving in buying the goods or services

(___) 3. Cheaper price

(___) 4. Save the travel time

(___) 5. Others(please specific)_____

3.   How many times that you use the service of E-commerce?

(___) 1. 1 time   (___) 2. 2 – 3 times

(___) 3.   4 - 5 times   (___) 4. More than 5 times

4.   What is the average value per order?

(___) 1. Less than 500 baht   (___) 2. 501 – 1,500 baht

(___) 3. 1,501 – 3000 baht   (___) 4. 3,001 – 4,500 baht

(___) 5. Over 4,501 baht

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5. What is your payment method?

    (___) 1. Via credit card   (___) 2. Via E-cash

    (___) 3. Via Bank account   (___) 4. Paid at the destination

    (___) 5. Others

6. What is your preferred payment method?

    (___) 1. Via credit card   (___) 2. Via E-cash

    (___) 3. Via Bank account   (___) 4. Paid at the destination

    (___) 5. Others

7. Where is the source of using or expecting to use the E-commerce?

    (___) 1. Domestic web site   (___) 2. International Web site

    (___) 3. Both sources

8. Goods or services that you interested to buy or have bought via the Internet

    (can choose more than 1 answer)

    (___) 1. Computer or accessories   (___) 15. Books

    (___) 2. Electronics goods   (___) 16. Cosmetic

    (___) 3. Medical   (___) 17. Flowers

    (___) 4. Gift or souvenir   (___) 18. Office supply

    (___) 5. Furniture or house decoration   (___) 19. Musical instruments

    (___) 6. CD, VCD, DVD, VDO   (___) 20. Handicraft

    (___) 7. Jewelry   (___) 21. Games / toys

    (___) 8. Software   (___) 22. Information / news

    (___) 9. Research   (___) 23. Music

    (___) 10. Education / E-learning   (___) 24. Service payments

    (___) 11. Air ticket reservation   (___) 25. Booking/hotel reservation

    (___) 12. Food ordering   (___) 26. Auction

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(___) 13. International call via Internet   (___) 27. E-Banking

(___) 14. Costume   (___) 28. Others_____

9.   What is the reason that you do not use the service of e-commerce

(___) 1. Do not interested

(___) 2. Do not know about the E-commerce web site

(___) 3. Can not see or touch the goods

(___) 4. Do not trust the sellers

(___) 5. Most goods are from the international web site

(___) 6. The goods are not interested

(___) 7. The complicate in order transaction

(___) 8. Do not believe in payment method

(___) 9. Do not want to provide the credit card information

(___) 10. Do not have credit card

(___) 11. Do not want to wait for the delivery

(___) 12. The damage which may occur during the delivery

(___) 13. Others_____

10. Attitude towards E-commerce

	Strongly agree	Agree	Not sure	Dis agree	Strongly disagree
. can easily find the details of goods and service					
. is an easy way in buying the goods and service					
. can save the time in selecting the goods and service					
. can find and order the hard to find products					
. there are varieties of products					
. easy to search and find the service providers					
. the products and service is according to what you are looking for					
. the price is cheaper than the market price					
. the products are the quality products					
0.can get the goods within short of time					
1.the quality of products are same as in the advertisement					
2.the interested homepage can attract to use the service					
3.the safety of payment method					
4.the safety in keeping the record					
5.help in getting the image of in trend					
6.can replace the traditional buying method					
7.appropriate to modern way of life					
8.the international service providers is more trustfully than the domestic service providers					
9.it is a buying method of up to date people					

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11.   Will you using the E-commerce service?

(___) 1. Yes

(___) 2. Do not sure

(___) 3. No

12.   Additional comment about E-commerce

_____

_____

_____

APPENDIX   B

QUESTIONNAIRE (THAI VERSION)
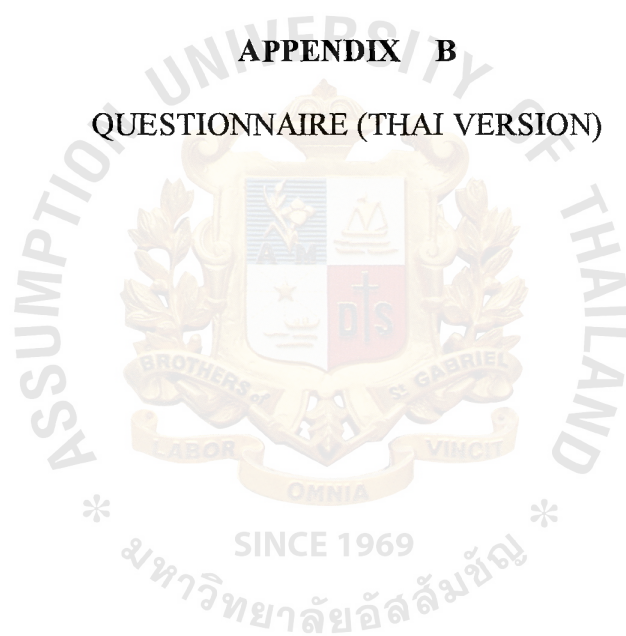
เรื่อง : พฤติกรรมและทัศนคติของผู้ใช้อินเทอร์เน็ตในกรุงเทพมหานครต่อธุรกิจพาณิชย์
อิเล็กทรอนิคส์

คำชี้แจง: แบบสอบถามนี้เป็นส่วนหนึ่งของการศึกษาระดับปริญญาโท คณะ Computer and
Engineering Management มหาวิทยาลัยอัสสัมชัญ ผู้วิจัยต้องการทราบข้อมูลเพื่อ
ประโยชน์ในการศึกษาเท่านั้น

ดังนั้นคำตอบของท่านจะไม่มีผลเสียหายต่อท่านแต่ประการใด

ดังนั้นจึงขอความกรุณาในการตอบแบบสอบถาม

ตามความคิดเห็นและสิ่งที่ท่านกระทำตามสภาพความเป็นจริงมากที่สุด

หมายเหตุ : ผู้ตอบแบบสอบถามต้องเป็นผู้ใช้อินเทอร์เน็ตที่อาศัยอยู่ในเขตกรุงเทพมหานครเท่านั้น

ส่วนที่ 1 ข้อมูลด้านประชากรศาสตร์

1. เพศ   (___) 1. ชาย   (___) 2. หญิง

2. อายุ   (___) 1. ต่ำกว่า 20 ปี   (___) 2. 21 – 25 ปี

               (___) 3. 26 – 30 ปี   (___) 4. 31 – 35 ปี

               (___) 5. 36 – 40 ปี   (___) 6. มากกว่า 41 ปี

3. การศึกษา   (___) 1. มัธยมปลายหรือเทียบเท่า

               (___) 2. ปริญญาตรี หรือ เทียบเท่า

               (___) 3. ปริญญาโท หรือ เทียบเท่า

               (___) 4. สูงกว่าปริญญาโท

4. สถานภาพสมรส   (___) 1. โสด   (___) 2. แต่งงาน

                   (___) 3. ม่าย   (___) 4. หย่า

5. อาชีพ   (___) 1. นักเรียน / นักศึกษา   (___) 2. พนักงานบริษัท

         (___) 3. ข้าราชการ/รัฐวิสาหกิจ   (___) 4. ธุรกิจส่วนตัว

         (___) 5. อาชีพอิสระ   (___) 6. ไม่ได้ประกอบอาชีพ

6. รายได้   (___) 1. ต่ำกว่า 10,000 บาท   (___) 2. 10,001 – 20,000 บาท

         (___) 3. 20,001 – 30,000 บาท   (___) 4. 30,001 – 40,000 บาท

         (___) 5. มากกว่า 40,001 บาท

ส่วนที่ 2 พฤติกรรมผู้ใช้อินเทอร์เน็ต

1. ท่านใช้อินเทอร์เน็ตจากสถานที่ใด (ตอบได้มากกว่า 1 ข้อ)

( ) 1. บ้าน   ( ) 2. ร้านให้บริการอินเตอร์เน็ต

( ) 3. ที่ทำงาน   ( ) 4. สถานที่ศึกษา

( ) 5. อื่น ๆ_____

2. ประสบการณ์ในการใช้อินเทอร์เน็ต

( ) 1. น้อยกว่า 1 ปี   ( ) 2. 1- 2 ปี

( ) 3. 3 –4 ปี   ( ) 4. มากกว่า 4 ปี

3. ความถี่ในการใช้อินเทอร์เน็ตต่อครั้งในสัปดาห์

( ) 1. 1 – 3 ครั้งต่อสัปดาห์   ( ) 2. 4 – 6 ครั้งต่อสัปดาห์

( ) 3. 7 – 10 ครั้งต่อสัปดาห์   ( ) 4. มากกว่า 10 ครั้งต่อสัปดาห์

4. ระยะเวลาเฉลี่ยที่ท่านใช้อินเทอร์เน็ตในแต่ละครั้งประมาณ

( ) 1. น้อยกว่า 1 ชั่วโมงต่อครั้ง   ( ) 2. 1 – 2 ชั่วโมงต่อครั้ง

( ) 3. 3 – 4 ชั่วโมงต่อครั้ง   ( ) 4. มากกว่า 4 ชั่วโมงต่อครั้ง

5. ค่าใช้จ่ายในการใช้อินเทอร์เน็ตของท่าน

( ) 1. ไม่เสียค่าบริการ   ( ) 2. ประมาณ_____บาทต่อเดือน

6. ท่านใช้อินเทอร์เน็ตเพื่อวัตถุประสงค์ใดบ้าง (กรุณาเลือกเพียง 3 ลำดับแรกที่ท่านใช้ โดยใส่หมายเลข 1 , 2 , 3 ในช่อง ( ))

( ) 1. เพื่อรับส่งไปรษณีย์อิเล็คทรอนิคส์ (e-mail)

( ) 2. เพื่อสนทนาทางอินเตอร์เน็ต (Chat, ICQ)

( ) 3. เพื่อค้นหาข้อมูลข่าวสาร หรือการค้นคว้า

( ) 4. เพื่อความบันเทิง (ดูภาพยนตร์ / ฟังเพลง)

( ) 5. เพื่ออ่านหรือแสดงความเห็นบนเว็บบอร์ด

( ) 6. เพื่อชมสินค้าโดยอาจจะซื้อหรือไม่ก็ได้

( ) 7. เพื่อดาว์นโหลดโปรแกรม

( ) 8. เพื่อติดต่อธุรกิจ / การงาน

(___) 9. เพื่อใช้หางาน / สมัครงาน

(___) 10. เพื่อสั่งซื้อสินค้า / บริการ

(___) 11. เพื่อเล่นเกมส์

(___) 12. อื่น ๆ (โปรดระบุ)_____

ส่วนที่ 3 พฤติกรรมและทัศนคติต่อพาณิชย์อิเล็คทรอนิคส์

1. ท่านเคยซื้อสินค้าหรือบริการผ่านระบบอินเทอร์เน็ตหรือไม่ (หมายถึงการสั่งในทางส่วนตัว
   ไม่ใช่การติดต่อทางการค้าในนามขององค์กร)

   (___) 1. เคย

   (___) 2. ไม่เคยแต่อยากลอง (กรุณาข้ามไปทำข้อ 6)

   (___) 3. ไม่เคยและไม่คิดจะลอง (กรุณาข้ามไปทำข้อ 9)

2. เหตุผลในการเลือกซื้อสินค้าหรือบริการผ่านระบบอินเทอร์เน็ต

   (___) 1. ความสะดวกในการค้นหาข้อมูลและการซื้อ-ขาย

   (___) 2. ความรวดเร็วในการซื้อสินค้าหรือบริการ

   (___) 3. ราคาถูก

   (___) 4. ไม่ต้องเสียเวลาเดินทาง

   (___) 5. อื่น ๆ(โปรดระบุ)_____

3. ท่านได้เคยซื้อสินค้าหรือบริการผ่านทางระบบอินเทอร์เน็ตกี่ครั้ง

   (___) 1. 1 ครั้ง   (___) 2. 2 – 3 ครั้ง

   (___) 3. 4 – 5 ครั้ง   (___) 4. มากกว่า 6 ครั้ง

4. มูลค่าเฉลี่ยในการซื้อสินค้าหรือบริการผ่านระบบอินเทอร์เน็ตในแต่ละครั้ง

   (___) 1. ต่ำกว่า 500 บาท   (___) 2. 501 – 1,500 บาท

   (___) 3. 1,501 – 3,000 บาท   (___) 4. 3,001 – 4,500 บาท

   (___) 5. มากกว่า 4,501 บาท

5. วิธีการชำระเงินที่ท่านใช้ในการซื้อสินค้าหรือบริการผ่านระบบอินเทอร์เน็ตบ่อยที่สุด

    (__) 1. ชำระผ่านทางบัตรเครดิต   (__) 2. ชำระผ่านบัตร e-cash

    (__) 3. ชำระผ่านบัญชีธนาคาร   (__) 4. ชำระเงินปลายทาง

    (__) 5. อื่น ๆ

6. วิธีการชำระเงินที่ท่านชอบในการซื้อสินค้าและบริการผ่านทางอินเทอร์เน็ต

    (__) 1. ชำระผ่านทางบัตรเครดิต   (__) 2. ชำระผ่านบัตร e-cash

    (__) 3. ชำระผ่านบัญชีธนาคาร   (__) 4. ชำระเงินปลายทาง

    (__) 5. อื่น ๆ

7. แหล่งของสินค้าหรือบริการที่ท่านซื้อ หรือคาดว่าจะซื้อ

    (__) 1. จากเวบไซต์ หรือผู้ขายภายในประเทศ

    (__) 2. จากเวบไซต์ หรือผู้ขายต่างประเทศ

    (__) 3. ทั้งสองแหล่ง

8. สินค้าหรือบริการที่ท่านซื้อหรือ สนใจจะซื้อ ผ่านระบบอินเทอร์เน็ต (ตอบได้มากกว่า 1 ข้อ)

(__) 1. คอมพิวเตอร์และอุปกรณ์ต่อพ่วง	(__) 15. หนังสือ
(__) 2. เครื่องใช้ไฟฟ้า / อิเล็คทรอนิคส์	(__) 16. เครื่องสำอาง
(__) 3. ยาและเวชภัณฑ์	(__) 17. ดอกไม้
(__) 4. ของขวัญ	(__) 18. เครื่องใช้สำนักงาน
(__) 5. เฟอร์นิเจอร์และอุปกรณ์ตกแต่งบ้าน	(__) 19. เครื่องดนตรี
(__) 6. CD, VCD, DVD, วีดีโอ	(__) 20. สินค้าหัตถกรรม
(__) 7. อัญมณีและเครื่องประดับ	(__) 21. เกมส์ / ของเล่น
(__) 8. ซอฟท์แวร์	(__) 22. ข้อมูล / ข่าวสาร
(__) 9. รายงานการวิจัย	(__) 23. เพลง
(__) 10. การเรียน / อบรมทางไกล	(__) 24. การชำระค่าบริการต่าง ๆ
(__) 11. การจองตั๋วเครื่องบิน	(__) 25. การจองห้องพัก / โรงแรม
(__) 12. การสั่งอาหาร	(__) 26. การประมูลสินค้า
(__) 13. โทรศัพท์ทางไกลผ่านอินเตอร์เน็ต	(__) 27. การธนาคารผ่านอินเตอร์เน็ต
(__) 14. เสื้อผ้า/เครื่องแต่งกาย	(__) 28. อื่น ๆ_____

กรุณาข้ามไปทำข้อ 10.

9. เหตุผลที่ท่านไม่ต้องการซื้อสินค้าหรือบริการผ่านทางระบบอินเทอร์เน็ต (ตอบได้มากกว่า 1 ข้อ)

    (____) 1. ไม่สนใจที่จะซื้อสินค้าผ่านทางอินเทอร์เน็ต

    (____) 2. ไม่ค่อยรู้จักเว็ปไซต์ที่มีการขายสินค้า

    (____) 3. ไม่สามารถเห็นหรือจับต้องสินค้าได้

    (____) 4. ไม่ไว้ใจผู้ขายว่าจะมีสินค้านั้นจริง หรือส่งสินค้าให้จริง

    (____) 5. ส่วนใหญ่เป็นสินค้าต่างประเทศ ทำให้ไม่ต้องการซื้อ

    (____) 6. ไม่มีสินค้าที่น่าสนใจ

    (____) 7. ความยุ่งยากของขั้นตอนการสั่งซื้อ

    (____) 8. ไม่มั่นใจในระบบการชำระเงิน

    (____) 9. ไม่อยากส่งข้อมูลเครดิตการ์ดผ่านทางอินเทอร์เน็ต

    (____) 10. ไม่มีบัตรเครดิต

    (____) 11. ไม่ต้องการคอยเวลาในการรับสินค้า

    (____) 12. ความเสียหายของสินค้าซึ่งอาจจะเกิดขึ้นในการขนส่ง

    (____) 13. อื่นๆ_____

10. ท่านมีความคิดเห็นอย่างไรเกี่ยวกับธุรกิจพาณิชย์อิเล็คทรอนิคส์

	เห็นด้วยอย่างยิ่ง	เห็นด้วย	ไม่แน่ใจ	ไม่เห็นด้วย	ไม่เห็นด้วยอย่างยิ่ง
1. ช่วยให้หาข้อมูลรายละเอียดเกี่ยวกับสินค้าและบริการได้สะดวกขึ้น					
2. เป็นวิธีการเลือกซื้อสินค้าและบริการที่สะดวก					
3. ช่วยให้ท่านประหยัดเวลาในการเลือกซื้อสินค้า					
4. สามารถสั่งซื้อสินค้าที่หาได้ยากในตลาดทั่วไป					
5. สินค้าและบริการมีความหลากหลาย					
6. สามารถค้นหาผู้ให้บริการที่ตรงกับความต้องการได้ง่าย					
7. มีสินค้าและบริการที่ท่านต้องการ					
8. สินค้าราคาถูกกว่าที่ขายในตลาดโดยทั่วไป					
9. สินค้ามีคุณภาพดี					
10. สามารถได้รับสินค้าในเวลาอันรวดเร็ว					
11. สินค้าที่ได้รับมีคุณภาพเหมือนที่โฆษณา					
12. homepage ที่น่าสนใจดึงดูดให้ซื้อได้					
13. มีความปลอดภัยในการชำระเงิน					
14. มีความปลอดภัยในการเก็บข้อมูลของลูกค้า					
15. ช่วยส่งเสริมภาพลักษณ์ให้เป็นคนทันสมัย					
17. สามารถทดแทนการซื้อสินค้าแบบเดิมได้					
18. เหมาะกับการดำรงชีวิตของท่านในปัจจุบัน					
19. ผู้ให้บริการจากต่างประเทศน่าเชื่อถือมากกว่าผู้ให้บริการภายในประเทศ					
20. เป็นวิธีการซื้อสินค้าและบริการของคนทันสมัย					

11. ในอนาคตท่านจะซื้อสินค้าผ่านทางอินเทอร์เน็ตหรือไม่

( ) 1. ซื้อแน่นอน

( ) 2. ไม่แน่ใจ

( ) 3. ไม่ซื้อแน่นอน

12. ข้อเสนอแนะเพิ่มเติมเกี่ยวกับพาณิชย์อิเล็คทรอนิคส์

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BIBLIOGRAPHY

English References

1. Allport, Gordon. "Attitude" in C. A. Murchinson, ed. A Handbook of Social Psychology. Worcester, Mass.: Clark Univeristy Press, 1935: 798-844.

2. David, Krech, Richard S. Crutchfield, and Egeron L. Ballachey. Individual in Society. New York: McGraw-Hill, 1962.

3. Esprit, Erik. ESPRIT and Acts Projects Related to Electronic Commerce, 1997.

4. Hawkins, Del I. Consumer Behavior: Building Marketing Strategy. Seven Edition. New York: Mc Graw Hill, 1998.

5. Kotler, Philips. Marketing Management, Eighth Edition. New Jersey: Prentice Hall, 1992.

6. Nabil, R. Adam, Oktay Dogramaci, Aryya Gangopadhyay, and Yelena Yesha. Electronic Commerce, Technical, Business, and Legal Issues, 1999.

7. Wigand, R. T. "Electronic Commerce: Definition, Theory and Context," the Information Society, Vol. 13, No.1 (1997): 1-16.

Thai References

1. สุปราณี จริยภรณ์, {สถานภาพของการพาณิชย์อิเล็กทรอนิคส์ในประเทศไทย} 2542.

2. ศรีศักดิ์ จามรมาน, อินเทอร์เน็ตในประเทศไทย, กุมภาพันธ์ 2544.

3. ศูนย์เทคโนโลยีอิเล็กทรอนิกส์และคอมพิวเตอร์แห่งชาติ, รายงานผลการสำรวจกลุ่มผู้ใช้อินเทอร์เน็ตในประเทศไทย ปี 2544, พฤษภาคม 2545.