

CHAPTER TWO

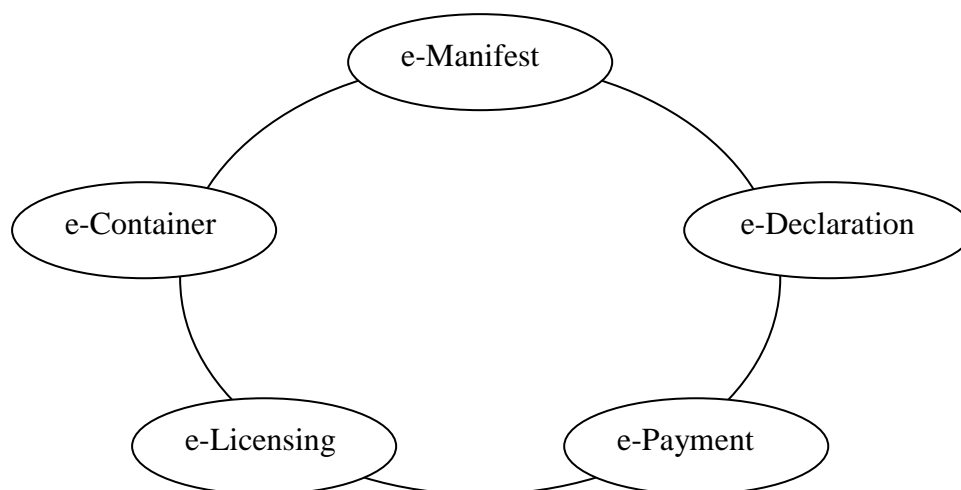
REVIEW OF LITERATURE

2.1 DEFINITION OF E-CUSTOMS

The Thai Customs Department was established in the reign of King Rama IV. It is accountable for the collection of all kinds of duties and taxes as national income. The main role of Thai Customs focuses on export promotion and providing the best service to the public. Nowadays, the modern Thai Customs Department plays a role in improving the information management technology system both highly support customer satisfaction and internal management in this organization (Customs Dept, 2007). Moreover, the Thai Customs Department is also considered the leading government organization involved in creating and supporting fair business by reducing the intrusion of illegally copied products to the market. It serves as a safeguard to protect communities from illegal consignments and enhances social safety.

At the present, one of the major visions of Thai Customs is to be world-class customs for national competitiveness and social protection. Furthermore, the Thai Customs Department improves and develops new implements which will improve the efficiency of cross-border trade management in order to reduce time and cost of transaction in handling both domestic and international business. This system will also help relevant government agencies to reduce administrative costs and provide better service to the public. Electronic Customs Processing or e-Customs is the alternative solution to support and help both the Thai Customs Department and relevant parties to achieve the Thai Customs' vision. Moreover, "E-Customs is the web-based version of its customs automation system which will allow customs administrators and traders to handle most of their transactions -from customs declarations to cargo manifests and transit documentation- via the Internet (UNCTAD, 26 Mar 2002)." There are five functions involved transaction parties and related together in e-Customs system as follow: e-Declaration, e-Payment, e-Manifest, e-Container, and e-Licensing.

Figure 2. E-Customs forms.



From. E-Customs วิธีการศุลกากรนำเข้า-ส่งออกระบบอิเล็กทรอนิกส์ (น.13), โดย วิชัย มากวัฒนสุข, 2548, กรุงเทพฯ: สำนักพิมพ์ธรรมนิติ.

1. e-Declaration

The e-Declaration requires importers and exporters to file a goods declaration form to submit identification to Customs during the shipping arrival or departure via the clearance procedures. It will reduce the cost of production in order to enhance the competitive advantage of Thai exporters. It also helps the importers decrease many processes to release the cargoes.

2. e-Payment

The e-Payment is the technologies and processes associated with accepting the payments and refunding requests via internet accounts. It can help importers and exporters to reduce the costs required to process all forms of payment and enhance Thai Customs to make efficiencies to serve the citizens and boost the commerce business.

3. e-Manifest

The e-Manifest is an electronic field version of the paper manifest that carriers are required to submit before crossing the border via Customs-approved Electronic Data Interchange, EDI. It can provide a more streamlined border clearance process. Moreover, this system can help carriers to enter manifests through the internet portal including vessel schedules, the master manifests, house manifest, and container lists.

The e-Manifest also allows the principal shipping agents, shipping agents, and freight forwarders to submit messages for customs conveyance reports and customs cargo reports to the respective authorities utilizing the internet as the primary data carrier source.

Using the e-Manifest can help customers to access forms on any computer, that is connected to the Internet and improve operational efficiency in cargo data transfer between relevant parties in the shipping business and government agencies.

4. e-Container

The e-Container can support the carriers input tracking their containers into the Customs Department's computer system. The details of containers will be automatically reviewed and rechecked. It will reduce the processing time and save costs to complete the process.

5. e-Licensing

The e-Licensing is a system to facilitate the Customs license procedures. It can interface exchanging data with other government agencies and improve verification for importers and exporters in order to connect all data in a single application.

2.2 CONCEPT OF SERVICE

According to the study of "Factors Affecting on Iranian Customers' Acceptance Towards E-Ticketing Provided by Airlines", Dehbashi (2007), service is any act or manner of performing of persons that is necessarily intangible and does not lead to the ownership of anything. For most cases, service plays a role of growth in business and organization. Moreover, services can be divided in terms of their main characteristics as follows:

1. Intangibility

Services are intangible. Unlike physical products, they cannot be seen, tasted, handled, smelled, felt, and heard. In the customers' opinion, these qualifications make it difficult to analyze or compare previous experience of the service.

2. Inseparability

Services are normally produced and consumed at the same time. Unlike physical goods, they are manufactured, distributed through seller, and consumed later.

3. Variability

Services depend on when and where they are provided and who provides them.

4. Perishability

Services cannot be stored and regained. It brings about an economic opportunity cost. For example, an airplane takes off or a movie starts, any unsold seat cannot be held for future sale (Kolter, 2003).

Up to the present, the revolution of general service has been developed to reform the aspect of service in concept of information service (Dehbashi, 2007). Therefore, the interchange of information that is commercial utilization of the special attributes of this environment is interactive service. This interactive service is the critical basic of the new e-Economy and it is crucial to realize the new role of e-Service in this current era.

2.3 CONCEPT OF E-SERVICE

Steninhagen and Kerrebroeck (2006) mentioned that the conception of e-Commerce has been linked with providing information and communicating brand awareness in the marketplace. Moreover, the important factor of e-Commerce leads to sales transactions, the distributions of products and response to customers' needs. However, this electronic system should add some information and sale functions of e-Commerce where electronic customer services are essential to supplement and fulfill customer satisfaction.

According to De Ruyter, Wetzels, & Kleijnen, (2001), e-Service is interactive, content-centered and integrated with related organizational customer support processes and technologies with the goal of strengthening the customer service provider relationship. Therefore, e-Service is efforts and performances whose delivery is interceded by information technology (Rowley & Roberts, 2005). Furthermore, the nature of e-Service can provide clients with satisfaction level which will focus on customers' willingness to use the Internet instead of traditional channels in order to purchase products, search information, and use services (Dehabashi, 2007).

2.4 THE INNOVATION DECISION PROCESS THEORY

With the explosion of the internet, many companies and government agencies are changing their ways of running business and increasingly pressuring to change the traditional bureaucracies. The impact has encouraged large corporations to adopt advanced technologies so as to achieve the potential savings and times. However, the result of changing cannot be realized unless users accept and intend to use the new technologies, such as telephone banking and automated teller machines for the first time (Meuter et.al, 2005). The main reason why customers are undecided and dissatisfied to try new technologies is consumer readiness. Therefore, instruction and construction should be actively managed before new technology is introduced, as well as after it is fully operational.

Another important reason is to understand certain characteristics of the innovation itself and realize the diffusion of innovation process that it will lead to accept the new things more easily. It can be elaborated by the theory of Rogers's diffusion model.

The Innovation Decision Process Theory (Rogers, 1995) states that diffusion is a process that occurs overtime and spreads as the new idea from the source of invention or creation to the ultimate users or adopters. Moreover, the overview of Rogers's diffusion of innovation theory explains the organizational perspective and addresses diffusion of innovations in corporations (Jennifer, 2003). Roger stated the four main elements that come together to form the theory of diffusion of innovation.

1. Innovation

Innovation is an idea, a practice, or an object that is known by an individual or other unit of adoption. There are five factors that have been shown in innovation research to be linked to diffusion (Rogers, 1995).

- **Relative advantage**

It is the degree to which an innovation is perceived as better than the idea it supersedes (Fisher, 2004).

- **Compatibility**

It is a measure of the degree to which and innovation is perceived as being compatible with existing values, past experiences, and the needs of potential adopters.

- **Complexity**

It is a measure of the degree to which an innovation is perceived as hard to understand and apply.

- **Trialability**

It is the degree to which the innovation may be trialed and modified.

- **Observability**

It is the degree to which the end of the innovation is visible to others.

2. **Communication**

Rogers (1995) states that communication is the process by which people develop and share information with each other to achieve understanding. There is an important relationship between the source of communication and the innovation and the rate of adoption.

3. **Time**

There are three components of the time element as follow:

- **Innovation-decision process**

This process includes the timeframe when the potential adopter first becomes aware of the innovation through to the point at which the potential adopter either accepts or rejects the innovation. There are five steps in this process: knowledge, persuasion, decision, implementation, and confirmation.

- **Adopter categories**

Adopter categories are a measure of how inclined an individual is to adopt new ideas as compared to other members of the social system. It can be defined by five stages: innovators, early adopters, early majority, late majority, and laggards.

- **Innovation's rate of adoption**

Innovation's rate of adoption is the speed that an innovation is adopted within a social system (Rogers, 1995), beginning with some individuals adopting the innovation, but as time moves on and more individuals adopt, the rate of adopting increases. Eventually, the adoption rate levels off and begins to decline. For example, the research conducted by Raus, Flugge, and Boutellier (2007), mentions that the details related by the European Union adoption of innovation development and execution in the e-Customs are how to manage, implement, and individually conceptualize by each of the member states. This missing link from innovation

development to innovation adoption is one of the most critical points stated by the involved participants after regulations were changed. Moreover, the importers and exporters in the shipping business were struggling with missing procedural details referring to decision making processes and voting structures of the European Customs Authorities.

However, the European Union (EU) has already begun the implementation of standardized the customs systems for the facilitation of the European states with full implementation being in 2010. To accept the new adoption requires the timeframe and to understand the new process in order to avoid the barriers and implement the system correctly (Wagenaar, 2006).

4. Social System

All diffusion occurs within a social system in which members may be individuals, groups, organizations, and subsystems that share the same goals or objectives which link them together.

2.5 THE CONCEPT OF ATTITUDE

The definition of attitude was introduced in the early 19th century. The term of attitude has a number of meanings which always concern a mental feeling, a way of thinking, and a degree of favor. Attitude in the definition of Allport's study (as cited in Fishbein & Ajzen, 1975) is as a state of readiness, gathered from background experience and judging the value of something which can be positive, negative, and neutral. Insko (1959) defined attitude as a proclivity to judge an object or the symbol of that object in a certain way.

To conclude, attitude refers to a mental state involving feeling towards all objects and situations which can be positive or negative direction.

2.6 RELATED RESEARCHES

According to the study of "Effects of Interaction Richness on Consumer Attitudes and Behavioral intentions in E-Commerce", Jahng, Jain, and Ramamruthy (2007), users' attitude towards electronic commerce systems is an important thing that

can influence users' intention to apply and actually use electric commerce systems as a transaction appliance and medium.

However, the nature of electric commerce has some barriers to implementing the process. For example, the lack of two way communication for product and service consultation affects users' attitude and behavior. It can lead to one of the major barriers to the formation of positive attitude towards electric commerce systems.

Furthermore, referring to the research conducted by Rotchanakitumnu and Speece (2004), it mentions that web technology can provide the ability to automate corporate transactions that may allow providing the best service to customers, such as cost reduction in business transactions and improving the customer service. However, the uncertainty of adoption of web-based systems that leads to the distrust of web-based communication and lack of privacy systems is a main barrier to the successful implementation of electronic services.

Therefore, e-customs is quite a new implementation in Thailand. This study will focus on attitudes towards e-customs in order to understand customers' viewpoints and the constraints in the growth of this system so as to improve services.