

eBusiness Adoption Studies in Thailand

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ABSTRACT

Electronic Business or eBusiness over the Internet enables businesses (whether large or small) to do more than buying or selling their products and services. eBusiness is now including all network based transactions, collaborations, and interactions with customers, suppliers, and business partners. Given the economic dominance of Western economies in fields such as eBusiness, a number of questions arise associated with the suitability of lessons learned in the West to eBusiness developments in Thailand. In particular, the authors have noted that most existing eBusiness adoptions are designed to cater for businesses in Western countries; and this raises the question of whether these adoptions are suited to businesses in Thailand. In this regard, the authors are of the opinion that a study explicitly on eBusiness is required to assist businesses in Thailand to adopt and engage in eBusiness successfully. The research findings provide the foundation for future research aimed at developing a framework to guide businesses in Thailand, to successfully implement the new generation of eBusiness activities, which include sCommerce (Social Commerce) and sBusiness (Social Business).

Keywords: eBusiness, eCommerce, sCommerce, sBusiness, Critical success factor (CSF)

I INTRODUCTION

Electronic Business (eBusiness) is an evolution of traditional business practices. It is designed to take advantages of the new technologies of the Internet age. eBusiness did not suddenly appear. Rather, the first electronic stores (eStores) appeared since 1993 (Philipson, 2002). An early example of such eStores was the “PizzaNet” Homepage in 1994 (Mitchell, 1995).

By 2018, according to eMarketer (2014), the worldwide eBusiness market will be worth \$2.5 trillion compared with \$40 billion in 1999 (Philipson, 2002). Moreover, the world has become a global village in reality (Singh & Waddell, 2004). It will be difficult for businesses to survive without engaged the management and technology complexities in eBusiness to sustain the innovations. In addition, Thailand in 2015 was ranked 5th in terms of time spent on Social Media each day. Thailand is

also ranked 2nd place in the world with most LINE application users after Japan. 50 percent of Thais have an active Social Media account and are actively

on mobile devices. Facebook is the top active social platform for Thais. Social Media in Thailand was dated back to 1995 when the Internet became commercialized. “Talk on Unix”, “Pirch”, “ICQ”, “QQ”, and “MSN Messenger” were once, five of the most popular Social Media applications in Thailand (Jantavongso, 2015).

Notwithstanding, eBusiness can provide businesses with a gateway to participating and contributing to global business. Most significantly from a developing country’s point of view, such as that of Thailand, ‘*the adoption of eBusiness offers the potential of advancing directly to being world competitive without the necessity to follow the traditional Western development path involving considerable time and expense*’ (Jantavongso, 2007). Given the economic dominance of well-developed Western economies in fields such as eBusiness; ‘*the question of whether Thailand can bridge the gap to become an advanced country doing global business*’, is a question of great interest.

While there are a number of studies have been conducted on eCommerce, limited research have been conducted on eBusiness in Thailand (Intrapairot & Srivihok, 2003; Kini & Thanarithiporn, 2004; Laosethakul & Boulton, 2007; Lertwongsatien & Wongpinunwatana, 2003; Limthongchai & Speece, 2003; Pimsawadi & Digman, 2012; Sebor, Lee, & Sukasame, 2009; Suanpang, 2014; Sutanonpaiboon & Pearson, 2006). In this regard, the authors are of the opinion that a study explicitly on eBusiness is required to assist businesses in Thailand to adopt and engage in eBusiness. As such, the authors have been engaged in the study of eBusiness in Thailand since 2003 (Blashki & Jantavongso, 2006; Jantavongso, 2007; Jantavongso, Li, & Tootell, 2003; Jantavongso, Sugianto, & Syau, 2007; Sugianto & Jantavongso, 2006)

For this reason, this paper describes a number of the Critical Success Factors (CSF) for eBusiness from a Thai perspective in the current environment. The paper is an introductory article for those who are interested, but not familiar with the roles of eBusiness in Thailand.

II RESEARCH APPROACH

The research method adopted in this study is based on the information systems research approach proposed by Shanks et al (1993), which employs a

positivist research framework. The research framework proposes a research cycle consisting of three stages, theory building, theory testing, and theory refinement.

This paper reports the results from the first stage of theory building and in this study involved a review of the literature on relevant research domains. A literature survey was conducted first, which focused on the domain of eBusiness and Thailand.

III EBUSINESS

The term 'eBusiness' was first appeared in 1997 by IBM (Jantavongso, 2007). Prior to this era, the term 'eCommerce' was more often used. Recently, Social Commerce (sCommerce) is becoming a common term involving an online business. sCommerce is not a new term. Yahoo! coined the term sCommerce in 2005 (Marsden, 2010). The terms eBusiness and eCommerce can often be used interchangeably. However, they have different meanings. While eCommerce refers to aspects of doing online businesses involving exchanges among customers, business partners and suppliers; eBusiness encompasses these elements as well as activities that are handled within the business itself (Deitel, Deitel, & Nieto, 2003).

eBusiness is more than simply having a website for a business. As such, eBusiness not only encompasses tools such as technology, mobile devices, and the Internet; but eBusiness also covers the application of Social Media to improve the business processes. One of the most widely recognized examples of an eBusiness is Amazon.com. Established in 1994, Amazon.com has now become one of the largest eBusinesses (Deitel et al., 2003).

The last few years have been observed a rapidly growth in a number of Social Media users and an advancement in Social Media technology. Social Media have evolved as a result of Web 2.0 concepts (coined in 1999) and new media technologies (Croteau & Hoynes, 2014). People around the world are at this time interacting with each other through Social Media networking to communicate their shared interests, activities and disseminate information. Moreover, Social Media such as Facebook and Twitter alone have become enormously popular across demographics of race, age and gender and have billions of users (Utz & Muscanell, 2015). According to Patterson (2011), Social Media is underpinned by the ideological and technological of Web 2.0. Web 2.0 is a collection of interactive capacities, suggested a technological change from Web 1.0 (the Internet origin). Web 2.0 enabled the rise of blogs, Social Media networking sites, content platforms, collaborative wikis, virtual game worlds, social bookmarking, and virtual worlds (Croteau,

Hoynes, & Milan, 2012).

This implies that Social Media has now become a significant part of the ways people communicate, and share a wide variety of information. For this reason, it is not unexpected that Social Media truly has provided new methods of conducting business activities and reaching customers for businesses. Applications such as Facebook, Twitter, LINE, LinkedIn, Google Plus, Blogs, WhatsApp, Tango, WeChat, Instagram, YouTube, and Skype provide businesses with significant business building communities based on interests and relationships.

Advancements of Social Media have extended the inclusion of eBusiness to Social Business (sBusiness) and Social Commerce (sCommerce). sCommerce is made possible by Social Media. sCommerce has provided businesses with extra tools of approaching, acquiring, and retaining customers with the use of Social Media technologies (Lee, 2013). sCommerce empowers customers to a better and informed decision by allowing customers to search for other customers' reviews and comments prior purchasing a product or service.

Put simply, sCommerce is conducting business in a collaborative and participative method, by applying Social Media, through a business interactive interface that enables social interactions (Baghdadi, 2013). It is the use of Social Media technology and networks to produce businesses.

On the other hand, sBusiness is more emphasized on business operations and generate value. Social Media are tasks that apply Social Media, applications, networks to allow more efficient, effective and useful connection between people, information, and assets. These connections drive business decisions, actions, and results across the business (Kiron, Palmer, Phillips, & Kruschwitz, 2012).

IV CRITICAL SUCCESS FACTORS

The Critical Success Factor (CSF) is a term for an element that is required for a business to meet its goal. It is a critical factor that must be done exceedingly well for a business to be successful (Gates, 2010). The next section continues the work from the previous studies by the authors (Blashki & Jantavongso, 2006; Jantavongso, 2007, 2013b; Jantavongso & Li, 2003; Jantavongso et al., 2003; Jantavongso et al., 2007; Oh, Jantavongso, & Li, 2004; Sugianto & Jantavongso, 2006).

A. eBusiness Readiness

Countries such as the United States, Australia, England, other European countries, and Singapore have a high level of 'eBusiness Readiness' (Jantavongso, 2013b). In this study, eBusiness Readiness measures the capability of business

environment to seize Internet-based commercial opportunities. Meanwhile, eBusiness may aid businesses in gaining competitive advantages over their rivals, as well as improving the ways in which businesses perform their processes. Unfortunately, it incurs a high level of implementation risk. Businesses need to be able to assess their business whether they are really ready for implementing eBusiness.

B. eBusiness Infrastructure

eBusiness infrastructure covers Internet connectivity, the telecommunications structure, the logistics structure and the web strategies required to support eBusiness activities. Internet connectivity refers to the availability of high speed communications links that enable the transmission of data and information between people. Communication links include fiber optic cables, wireless communication networks and telephone lines which are supported by the telecommunications structure.

The logistics system includes processes necessary to transfer the physical goods to the customers after they have been sold over the Internet. The logistics system for this is no different from the logistics system of traditional businesses and eBusiness requires the logistics infrastructure for material deliveries and transportation, and, material flow control. As such, the logistics system comprises the transportation infrastructure, the postal infrastructure and public infrastructure such as electricity, airports, seaports, railways and highways.

According to the Board of Investment of Thailand: BOI (2015), Thailand has the necessary infrastructure to support eBusiness activities. These infrastructure includes modernized transportation facilities, as well as upgraded communications and IT networks.

Thailand's telecommunications services are at an international standard, particularly in city areas such as Bangkok. There is an abundance of fixed lines for businesses and residences. Local telephone calls are not timed and carry a fixed charge of THB 3 (\$0.10) per call. The fixed telephone line network has a total capacity of over 8 million lines, of which about 7 million are in use. 94 million are mobile phone subscribers (Board of Investment of Thailand, 2015). Of these, 1.8 million are 4G LTE mobile subscribers.

Mobile broadband connectivity is another important enabler for the digital economy and for eBusiness inclusion in Thailand. These trends are expected to continue over the next few years, as operators continue to enhance both 3G and 4G networks after the completion of the first Thailand's 4G spectrum auction in November 2015. The introduction of 4G services will minimize the barrier between the online and offline world. Users will benefit from faster and more reliable mobile data services, as well as

improved efficiency and productivity. 4G deployment would help transform Thailand into a true digital economy, driving the adoption and growth of new and innovative services such as online businesses (Pornwasin, 2015b).

In relation to the Internet connectivity infrastructure, according to National Electronics and Computer Technology Center (NECTEC) (National Electronics and Computer Technology Center, 2015), there were 39 commercial Internet Service Providers (ISPs) operating in Thailand. Moreover, as noted by the Board of Investment of Thailand (Board of Investment of Thailand, 2015), the Thai government committed itself to making broadband Internet available and affordable to the general public. Internet international bandwidth is at 1,340 Gbps. The total domestic bandwidth is at 2,169 Gbps. Accordingly, eCommerce usage is at 67 percent. In 2015, 28 million are Internet users compared with only 30 users in 1991 (Charmonman, 2007). Of these numbers the broadband Internet users is at 6 million. eCommerce market by the end of 2016 is expected to reach THB 1 trillion (Board of Investment of Thailand, 2015) compared with THB 400,000 in 2006 (Charmonman, 2007). The Thai government committed \$2.6 billion in 2012 to extend the national fiber optic broadband network. The goal is to make high speed Internet available to 95 percent of the population by 2020 (Singapore Post Limited, 2015).

Thailand has a good transportation infrastructure when compared to other ASEAN countries (Sullivan, 2015). Thailand's logistics cost is on a declining trend. Logistics cost per Gross Domestic Product (GDP) from a range of 16 to 18 percent during 2001 to 2008 to a range of 14 to 15 percent during 2009 to 2012 (Board of Investment of Thailand, 2014). While there are a number of logistics service providers to facilitate eBusinesses in Thailand, one is of noted as follows.

Thailand Post is providing integrated logistics services such as pick-and-pack services to warehouse management, distribution and transport management, and money collection. Thailand Post has countrywide logistics facilities can assist businesses to reduce the logistics costs. It is able to provide efficient transport and logistics structures due to 5,000 post offices and major distribution centers in regional provinces across Thailand. According to Leesa-nguansuk (2015), it offers 10 to 20 percent lower costs than other private logistics service providers

C. Thai Business Culture

Thailand has a strong business environment with a good mix of foreign and local investors. It has a high demand for imports as well as being strong in exports. Thailand has its own social and business culture, and

is a unique society. A business culture is one of the factors that influence the successful implementation of eBusiness.

Chongruksut (2002) examines Thai business culture from an internal prospective defining Thai business culture as a system of patronage. The patronage system is a significant characteristic of Thai business culture and involves adherence to personal relationships rather than to regulation of an institution. The relationships are based on cultural values and a set of norms, for example, that the younger must respect the older. This norm permeates most Thai businesses.

The U.S. Department of Commerce (2009) advises that the business relationships in Thailand are not as formal as those found in China, Japan, Korea, or the Middle East, but neither are they as relaxed and impersonal as is commonly found in the West. Many business relationships have their foundations in personal ties developed within the social circles of family, friends, classmates, and office colleagues. Although Thailand is a relatively open and friendly society, it is not advisable to approach potential business contacts without a prior introduction or personal reference. In general, Thai people will be more receptive if an introduction or letter from a known government official or mutual business associate is presented.

D. Law Related to eBusiness

The legal and regulatory environments required to support growth in the digital economy are significantly different from those needed to support traditional businesses. This presents challenges to the government as a new, or extended, legal framework is now required to support and regulate the unique aspects of eBusiness (Jantavongso, 2007).

In particular, the legal framework should include support for the use of digital signatures, digital certificates in virtual transactions and the regulations governing online transactions. The government must provide transparent, market-favorable regulation and legislation at both national and international levels to address the issues brought by the new digital economy. Suitable environments must be set in place to support security, secrecy and non-repudiation of digital transactions. Furthermore, the government needs to ensure that existing regulations do not hinder the growth of new or existing markets over the Internet. At the same time, the new regulations should be flexible enough to cater for global policy shifts and further changes in technology (Jantavongso, 2007).

While there is no specific laws relating to eBusiness in Thailand, there are Acts which relate to eCommerce as follows. According to Panusapthna (2013), Thailand has adequate legal provisions to

support electronic transactions. Panusapthna (2013) also believed that Thailand are suitable to support the rapid growth and development of eCommerce. The details of these laws are as follows.

The Electronic Transactions Act of B.E.2544 (2001) is to provide legal recognition of electronic transactions by enabling them to have the same legal effect as that given to transactions made by traditional paper means. The Act ensures a regulatory environment in order to promote the reliability of eCommerce (Panusapthna, 2013).

The Computer Crime Act of B.E.2550 (2007) or CCA supports the ICT infrastructure by ensuring the security and building confidence of interested parties in performing electronic transactions. The CCA aimed at preventing and suppressing the commission of a computer related offences. The CCA stipulates offences related to: (i) computer system, (ii) computer data, and (iii) providing of tools used in committing a computer crime (Panusapthna, 2013).

Consumer Protection Act of B.E.2522 (1979) provides consumers a protection against false, misleading and unfair advertising of goods and services. Consumer Protection Act ensures that consumers shall have the same rights irrespective of whether the transaction is carried out electronically or by traditional means (Panusapthna, 2013).

Direct Selling and Direct Marketing Act of B.E.2545 (2002) refers to electronic transaction. This is because of electronic transaction is under the term “direct marketing” of the Act. Sellers who provide their goods or services to customers through electronic means must be comply with the provisions of the Act (Panusapthna, 2013).

Credit Information Business Act B.E.2545 (2002) is associated with measurements to protect credit information.

Offence Relating to the Electronic Card Section 269/1-269/7 of the Criminal Code B.E.2499 (1956) Amended B.E.2547 (A.D.2004) deal with the offenses relating to fraud credit card making, unauthorized use of another person’s electronic card (Singsangob, 2005).

Personal Data Protection Bill is under drafting process. It covers legal protection of personal data on both consumer and business information. With valuable data is now easily transferable, the Thai government has been obliged to move to protect individuals from the misuse or abuse of their personal information, especially from commercial exploitation (ZICOLaw, 2015).

Finally, *Copyright Act (No. 2) B.E.2558 (2015)* includes responsibility of intermediaries, or Internet Service Providers (ISPs), for infringement of

copyright work on the Internet. Copyright Act will provide stronger protection to owners of intellectual property rights, especially movies and other digital content. This Act will promote the growth of original-content creators to support online businesses (Pornwasin, 2015a; Tunsarawuth, 2015).

E. Taxation in Thailand

Closely associated with legal issues are those associated with taxation. In fact the two are inseparably related and most international tax authorities believe that current tax systems and structures, founded on basic principles of neutrality, fairness, certainty and simplicity, will continue to be appropriate to cater for the changes brought by electronic transactions (Jantavongso et al., 2003).

The global nature of eBusiness raises issues of international taxation legislation and regulation that need the simultaneous cooperation of both national governments and international bodies. Taxation in particular has proved to be a very difficult area to handle within the eBusiness environment. It is difficult to apply customs duties on goods and services delivery across national boundaries. For this reason, members of the World Trade Organization (WTO) agreed since 1998 to refrain from applying customs duties on products and services delivered electronically (Chandra, 2003). However, such action by members of the WTO in refraining from applying taxation regimes to electronically delivered products and services may violate fundamental tax principles of neutrality, given that they are levied on conventional products and services. Here the point is that issues of transnational taxation are complex and must be addressed.

There are no special restrictions or regulations on eBusiness products trading over the Internet. A business that supplies goods or provides services in Thailand and has an annual turnover exceeding THB 1.2 million is subject to VAT in Thailand. Thus producers, providers of services, wholesalers, retailers, exporters and importers need to pay Value Added Tax (VAT) on goods and services. The current tariff system in Thailand is the VAT. VAT is levied at the rate of seven percent on the value of goods sold and services rendered at every level. The same rate also applies to importation. Goods imported for re-export are generally exempted from import duty and VAT. Software (freeware) such as web browsers, server software, and anti-virus software can be freely downloaded. For electronically transmitted licensed software, the Thai Revenue Department charges five percent withholding tax for software royalty payments (International Business Publications, 2013).

F. People and Education

The final critical factor in examining successful

Western eBusinesses is the level of education. In the West, the standard of education is not an issue and, as mentioned, it is an inherent feature of the West which is easily overlooked.

However, sufficient levels of education and literacy are necessary pre-conditions for an eBusiness uptake in a country. eBusinesses require their customers to have the ability to navigate the Internet. The level of education and literacy in a country determine the number of people having the necessary skills to use computers and navigate the Internet, and consequently, utilize eBusiness. Education and training are also important factors in ensuring that entrepreneurs, managers and employees, both present and future, have the necessary skills to perform successfully within an eBusiness environment. Of importance here is that the level of education and training within a country is a prime determinant of any eBusiness capability. Moreover, from an Asian and in particular a Thai standpoint, such issues must be explicitly acknowledged and addressed and cannot be taken as a given, as they might be in Western countries.

The population of Thailand is estimated at 67 million in 2015 and of these, approximately 28 million are Internet users (Charmonman, 2007). The Internet penetration rate is at 26 percent and is expected to rise (Singapore Post Limited, 2015). sCommerce is a trend for eBusiness users in Thailand, with 1.7 million, 4.5 million and 28 million users on Instagram, Twitter and Facebook respectively. Social messaging applications are a key sCommerce platform. 'Tarad.com' is a major electronic retailer in Thailand. The popular online business categories are traveling, hotels, resorts, fashion accessories, computers, and electronic appliances respectively. Thai consumers want variety when it comes to online business. Thais have access to both international and local online stores. Amazon, eBay and Agoda are popular among Thais. Thai online consumers prefer bank transfers as online payment method. Other methods are 'cash on delivery' (COD) and 'over the counter' payment. Added to this, there are approximately 8 million credit card holders in Thailand (Singapore Post Limited, 2015).

Furthermore, Thai is the national language and English is the next most commonly spoken language. The Thai population has six major ethnic groups, namely, Chinese, Malays, Cambodians, Vietnamese, Indians, and others. Of these, the Thai-Chinese ethnic group (in their second or third generation) plays a dominant role in the economic life of the country. Finally, Thailand has a very high level of literacy, the rate in 2015 of which was estimated by the UNESCO Institute for Statistics (UIS) (Huebler & Lu, 2013) as 95.2 percent (15 years and older) and 98.7 percent (15

to 24 years).

Accordingly, ICT skills courses have been offered as part of university curriculums in Thailand since 1999 (North-Chiang Mai University, 2015). To date, there are a number of undergraduate and postgraduate programs in eBusiness offered by Thai universities. For example, Master of Science Program in Electronic Business, Master of Business Administration Program in Technology and Electronic Management, Master of Information Science in Internet and Electronic Commerce Technology, Bachelor of Business Administration Program in Electronic Business, and Bachelor of Business Administration in Electronic Commerce Management.

G. Trust and eBusiness

To further understand nature of eBusinesses in Thailand, the notion of 'Trust' need to be reviewed. Whereas, there are a number of possible descriptions of trust in a normal business setting (Hawthorn, 1998; Jantavongso, 2007, 2013a; Jantavongso et al., 2003; Jantavongso et al., 2007; Sugianto & Jantavongso, 2006); there are not as many in a Thai and eBusiness context. The fundamental axiom of trust is associated with cultural affinities and inter-dependencies (Clarke, 2013). Akhter (2004) extended the definition of trust into (i) social, (ii) personal and (iii) technical perspectives. Trust can be considered as an expectation and a willingness to engage in interactions premised on a community member's recommendations or word of mouth. The personal perspective views trust as a belief or expectation that is deeply rooted in one's personality. In turn, trust from a technical perspective is related to the choice of hardware, software, authentication process and interface design that are required to build a trusted website (Akhter, 2004).

While trust is 'a confident reliance by one party on the behavior of one or more other parties' (Clarke, 2013); the trust concept has been applied outside its original social setting, including in economic context. Of relevance to this paper, it is used in the context of eBusiness. eBusiness in Thailand goes beyond commercial aspects; other clusters of trust factors include the user's circumstances, needs, and privacy.

V CONCLUSION

eBusiness provides opportunities for businesses around the world including Thailand to achieve rapid capital growth and a fast approach to build a business from scratch. However, this poses something of a dilemma in that eBusiness allows the rapid launch of new businesses at an online level whether ready or not. Fundamentally, to be successful, eBusiness must be fully prepared before launching its business on the Internet and entering a global market.

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