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ABSTRACT

Although Information Technology (IT) transfer from western countries to developing countries in Asia has been studied extensively in IS research, there has been little research investigating the fit between culture and B2B technology adoption. This study began to explore the fit between Thai's culture and B2B technology and its implications on the utilization of the technology. The evidence via survey questionnaire with quantitative analysis on the impact of Thai's culture for companies adopting B2B technology was provided. This study found that Thai culture does shape the appropriateness of B2B technology adoption and it seems to misfit for the way in which Thai businesses are operated. The cultural dimensions identified in this research are personal relationships, long term relationships, interorgnaisaitonal trust, ability to communicate in English language and materialism.

Keywords

Appropriate technology, B2B technology adoption, Cultural fit, Digital Divide, Thai culture

INTRODUCTION

The influence of national culture on a cross-national buyer and seller interaction has received considerable attention in the international business literature (Freeman and Brown 2004). However, little research from this perspective has been done in the B2B technology adoption literature. Hewett et al. (2006) assert that national culture is an important factor in relationships that are forged and relied on to continue interorganisational relationships. Steenkamp (2001) strongly agrees that the failure to take cultural differences between countries into account has been the cause of many business failures. Barratt (2004) strongly agrees that cultural difference is one of the main challenges to connect all trading partners into the electronic supply chain. He suggests four cultural elements which are trust, mutuality, information exchange, and openness and communication to support collaboration among trading partners. However, his model has not yet been tested.

B2B technology is developed to enhance business operations based on western business practices. It is not clear whether B2B technology is appropriate for the way in which Thai businesses are operated. Most of the previous cultural research in IT adoption is often seen to involve a comparison across two or more separate cultures of focal phenomena (e.g. Karahanna, Evaristo, and Srite 2002; Rau and Liang 2003; Scheraga et al. 2000). Much of the research was conducted using pre-defined ranking of cultural dimensions, particularly Hofstede's cultural framework, to indicate cultural differences between nations and their implications on IT adoption. For example, a study by Shane (1992) indicated that individualist societies appear to

be more inventive than collectivist societies. Yet, the understanding between the fit between culture and technology and its implications on the use of B2B technology has not been explored. As Weber, Shenkar and Raveh (1996) suggest that fit can also be reached by achieving complementarities and not necessarily by achieving similarity.

The conceptual and relevant work has progress far enough to suggest that the role of national culture can be crucial. However, given the relevance and complexity of this issue, this body of work is relatively small. The purpose of this study is to provide evidence via a questionnaire on the impact of national culture for companies adopting Internet technology for inter-firm communication, which refers to B2B technology, with particular emphasis on the use of e-mail and e-marketplace. The focus of this study is to determine the extent to which Thai cultural values impacts the use B2B technology and the perceived fit between Thai culture and B2B technology by organizations, which refers to *cultural fit*.

Section 2 provides a defining of national culture and a review of the relevant literature is discussed in Section 3. Section 4 discusses the research question and the methodology adopted is discussed in Section 5. The research findings are presented in Section 6. Section 7 discussed the conclusions drawn from the research and offers implications for future research.

DEFINING NATIONAL CULTURE

National culture has been defined in many ways (e.g. Hofstede 1991 and Triandis 2000). There is substantial research (e.g. Chang 2003; Dwyer, Measak and Hsu 2005; Fan and Zigang 2004; Hewett, Money and Sharma 2006; Hofstede 1991; Komin 1991) suggesting that national culture can be used to discuss differences in behaviour patterns in different countries. To serve the purpose of this research, the definition of national culture by Komin (1991), a prominent researcher in Thai culture, is adopted. Discussing Thai culture, Komin (1991, p.687) notes that "characterising a national culture, of course, does not mean that every person in the culture arranges all the characteristic dimensions in the same order of importance. Therefore, in describing Thai national characteristics, we are only referring to the common characteristic elements within the Thai culture – the national norms, or group norms in the case of describing a particular group".

INTERNET AND E-COMMERCE ADOPTION AND THAI'S CULTURE

The adoption of the Internet and e-commerce in Thailand is relatively new compared with other South East Asian countries such as Singapore and Taiwan (Gibson 1997). Nevertheless, a long term implementation and the slow adoption of Internet and e-commerce in Thailand have urged researchers and practitioners to rethink the way that Thais should adopt these technologies. In recent years the investigation of Thai culture on the Internet and e-commerce adoption has become a new research interest. Researchers have begun to question the cultural barriers and actual benefits gained from the technology.

Similar to Asian cultures, businesses in Thailand operate in a personal relationship oriented approach. This factor seems to play an important role in Internet and e-commerce adoption in Thailand. Rotchanakitumnual and Speece (2003) assert that, because the Thai culture is characterized by femininity and high context communication values, the strong orientation towards human relationships becomes a crucial issue. Thai people prefer communication based on informal and personal relationships. Thongjeen and Speece (2002) conducted in-depth interviews with 15 owners, CEOs and managers of SMEs in Thailand to examine the critical factors in e-commerce adoption among SMEs. They found that the personal contact network (PCN) or connections are fundamental in how business operates in Thailand. Larpsiri and Speece (2003) indicate that sales representatives in the insurance industry use Internet and intranet technologies to support the development of interpersonal skills rather than replacing sales representatives with the technologies. Thus, the influence of the personal relationship can make the Internet less attractive in the Thai context.

The issue of English language has been found to be a barrier in the adoption of Internet and e-commerce in Thailand. An interesting piece of research in e-learning adoption in Thailand by Tetiwat and Huff (2003) reveals the misfit of e-learning and Thai cultural values. They conducted in-depth interviews with 22 Thai educators, who had experience in managing online courses in 12 Thai universities. Despite the fact that the English language is taught in schools as the second language, most Thai students and educators perceived English language as an obstacle. English is time consuming for them to read and to understand the content, and it is difficult for them to express their ideas in any language other than Thai (Tetiwat and Huff 2003). This finding also supports Gibson (1997), who conducted a study on the development of IT in Thailand using interviews to survey journalists in Thailand, as well as extensive document analysis. He observed that most of the Thai people only communicated in the Thai language, and they lacked the ability to communicate in the English language. This has a significant impact on the ability to acquire new knowledge and to quicken the development of IT in Thailand. Furthermore, Hongladarom (1999) conducted a study on the use of the Usenet newsgroup, soc.culture.thai, which is an online discussion forum. She found that Thai people feel interior and lacking confidence when communicating with native English speakers because their English is not good enough to enable them to talk as fast or to argue as effectively as the native

speakers; this results in a reluctance to participate. In addition, she observed that Thai people like to mix Thai words in English alphabets, which those in the global community do not understand.

Tetiwat and Huff (2003) assert that the high power distance and the krengjai value in the Thai teaching and learning system seems to be incompatible with the online education system. Unlike western education systems that encourage systematic analytical thinking and questioning, many Thai teachers do not encourage their students to speak out, make comments and propose new ideas. Challenging the ideas of teachers is viewed as disrespectful behaviour. Thus, students do not dare to argue with teachers and everything that teachers say is always right and absolute. Teachers have high control of the environment of the classroom. In addition, with the krengjai value, students always feel reluctant to interrupt or disturb teachers and to avoid asserting their opinions and asking questions when they do not understand. As a result, students feel it inappropriate to email teachers and reluctant to use an online discussion forums.

Researchers have found that the high uncertainty avoidance characteristic in Thai culture has an influence on IT adoption in Thailand. Thannasakit (1999) studied the impact of Thai culture on requirements engineers. The study was conducted using the ethnographic approach which involved interviews with eight software developers in Thailand. He found that Thai culture was high in power distance, group focus, emotion and relationship focus, and was characterised by a dislike of uncertain situations. This is in line with the statement made by Hofstede (2001) that early adoption of the Internet would take place in cultures characterised by weak uncertainty avoidance. In contrast, Jirachiefpattana (1997) believes that because of high uncertainty avoidance value, Thai people accept technology more easily than most other developing countries in order to seek security and to prevent ambiguous environments.

Two research studies were conducted on the adoption of Internet banking and the results suggested that trust has significant influence on the adoption (Ekasdornkorn et al. 2003; Rotchanakitumnaul and Speece 2003). Rotchanakitumnaul and Speece (2003) conducted a qualitative research project by interviewing seven corporate customers who had adopted Internet banking and eight non-adopters. Interestingly, they found that the adopters did not use the Internet banking extensively, even though they have technology capability. They conclude that trust and lack of legal support are the most critical factors in the adoption decision. Trust includes confidence in computer security to prevent fraud in financial transactions on the web and banks' capability to solve problems if any arise. Corporate customers still prefer face to face contact with the banks. They prefer to deal with banks that have many branches because they feel more confident and it is more convenient for them to go to the branch when a problem occurs. Ekasdornkorn et al. (2003) assert that even Thai credit card holders do not buy online because of the distrust of the system. They feel that online payment is not secure enough to reveal their credit card information over web pages.

Another research study on Internet banking adoption was conducted by Jaruwachirathanakul and Fink (2005). They conducted a quantitative study by sending a survey questionnaire to 600 individuals in 40 large organizations in the Bangkok province. They found that the features of the website and its perceived usefulness are regarded as the most significant encouragement factors in Internet banking adoption in Thailand. The external factor, which is measured by the Internet infrastructure, government support, industry regulator and support from trading partners, is the most significant factor in discouraging Internet banking. This external factor is more important than culture and personal preference, which were measured by the importance of face-to-face communication and services from the banks and influence from friends.

Furthermore, Intrapairot and Srivihok (2003) conducted a research project on e-commerce adoption among SMEs in the Thai tourism industry. They conducted a web site survey on 150 Thai tourism web sites. The result revealed that half of them were incomplete, inactive or contained too little data. The level of e-commerce adoption for business transactions is quite low. They categorised the functions of the website to include four main activities: advertising, ordering, payment and delivery. They concluded that the main barriers are: lack of awareness, unsecured product ordering process, uncertainty about payment systems and the security system, lack of legal support, poor communication infrastructure, no certification authority and the language problem.

In summary, only in recent years has research on the implications of Thai culture for IT and e-commerce adoption been given attention. The results of research address the importance of Thai national culture in Internet and e-commerce adoption in different application contexts. However, the relationship between Thai culture and B2B technology adoption has not been extensively discussed. Thus, this research aims to offer further insights into the impact of Thai culture on business communications and relationships, which may influence the utilisation of B2B technology.

RESEARCH QUESTIONS

The literature review has raised some issues of concern, highlighting those that call for future consideration. Specifically, this study asserts to provide answers to the following questions, gathering evidence from the experiences of companies operating in the Thai Tourism industry:

- What is the impact of Thai culture on business to business communication and relationships, which influence the appropriateness of B2B technology adoption?
- How, and to what extent (if at all), has the Thai culture influenced the appropriateness of B2B technology adoption?

METHODOLOGY

The lacks of theories and the limited empirical evidence on these issues have created the need to conduct preliminary research interviews, which were used to facilitate the research process and the survey design. This study began with a preliminary study by interviewing 13 officials in the Thai government and companies in the tourism industry. The aim was to explore and to identify the cultural dimensions that impact on the adoption of B2B technology in Thailand. In essence, the interview has helped structuring both the research questions and, consequently, the postal questionnaire was used as instrument for data collection. The interviews were conducted using open-ended question conversing issues such as reasons for B2B technology adoption, benefits achieved and drawbacks, current business processes and to what extent those applications replace the traditional way of doing business. Then, the culture-related discussion was pursued based on the issues that the interviewees addressed. Based on results of the interviews and analysis of cultural literature, the cultural fit dimensions have been emerged. The theoretical and conceptual basis for these cultural fit dimensions have been subsequently published at the *European Conference in Information System* (Vatanasakdakul and D'Ambra 2006), *Australasian Conference in Information System* (Vatanasakdakul 2006).

Because little empirical literature was available to guide the cultural measurement for the Thai business context, extensive tests were conducted prior the data collection via survey questionnaire. Since the actual study was conducted in the Thai context, all the data collected were in the Thai language by the author. Pre-test was conducted by three bilingual experts to ensure that the translation of the survey questionnaire from the English to the Thai version was accurate and free from bias. Then, the back translation process was carried out, from Thai back to English version, to ensure the accuracy and reliability of the survey instrument (Brislin 1970). Then, the pilot test was conducted to fully test the measures. After consulting with the Tourism Authority of Thailand, a list of company that participated in www.thaitravelmart.com, which is the first and only B2B e-marketplace in Thailand, was obtained. The pilot surveys were sent to 60 tourism firms.

The main survey was a confirmatory to ensure the reliability and validity of the survey instrument by using the Structural Equation Modelling (SEM) with the Partial Least Square (PLS) technique. The validity and reliability of all the items were satisfied. In this research, the PLS approach is preferable because of the suitability of the technique to the nature of this study. PLS provides better prediction capability and it can be used for analysis of a high complexity model with small sample sizes compared to the large number of independent variables. In addition, it has no requirement of a normal distribution assumption which suits the nature of the data collected. The PLS software used in the research is PLS-Graph (Version 3.00) developed by Wynne Chin, which is widely used in IS research.

The data collection was conducted between October 2005 and February 2006. 993 postal survey questionnaires were sent to 331 companies across Thailand inviting them to participate in this study, which accompanied by a letter of support of the Tourism Authority of Thailand. The 331 companies represented the total population of the companies registered with the Thaitravelmart.com at the time of the study. Each company received three surveys to distribute to those employees who were responsible for using e-mail and e-marketplace to communicate with the company's trading partners. Overall, 107 valid and unique responses were collected. The respondents were asked to indicate their positions and business titles. As expected, the majority of the respondents described themselves as sales/marketing executives and general managers/owners with 38 percent and 36 percent respectively. Only a few described themselves as accounting, computer and human resources staff. Average tenure was 4.75 years. The sample included 43.9 percent males (n=47) and 30.8 percent females (n=33), with 25.3 percent (n=27) missing values.

Even though there was no restriction on the location of the companies for participation in the e-marketplace, only companies located in Thailand were selected for the survey. The majority (91.6 percent) of the respondent companies are Thai locally owned. The rest are joint ventures (7.5 percent) and foreign owned (0.9 percent). In addition, the level of IT adoption of the companies was also investigated. The majority of the companies (97.2 percent) had between 1-50 computers. Only 2.8 percent of the companies had more than 50 computers. Furthermore, almost all the companies (99.1 percent) had Internet access. About half (49.5 percent) of the Internet access type was broadband and 44.9 percent was dialup. 74.3 percent of the

companies had a LAN connection. Moreover, 93.5 percent of the companies indicated that they did not have Electronic Data Interchange (EDI).

RESULTS AND DISCUSSION

Drawing from the interviews, pre-test, pilot test and the main data analysis, five Thai cultural factors, which influence the adoption of B2B technology were identified and validated to measure the fit between Thai culture and B2B technology. These were: personal relationships, long-term relationships, interorganisational trust, the ability to communicate in the English language and materialism. Figure 1 presents the results generated by PLS. The results indicated that personal relationships, trust, ability to communicate in the English language and materialism had influenced cultural fit at the 99 percent of confidence level, while the construct of long-term relationships was not found to be significant. This implies that all of these factors, with the exception of long-term relationships, can be used to measure the perception of cultural fit and B2B technology adoption in Thailand. Among these factors, personal relationships contributed most to the cultural fit construct (0.460 of path coefficient), followed by ability to communicate in the English language (0.374), trust (0.349) and materialism (0.208).
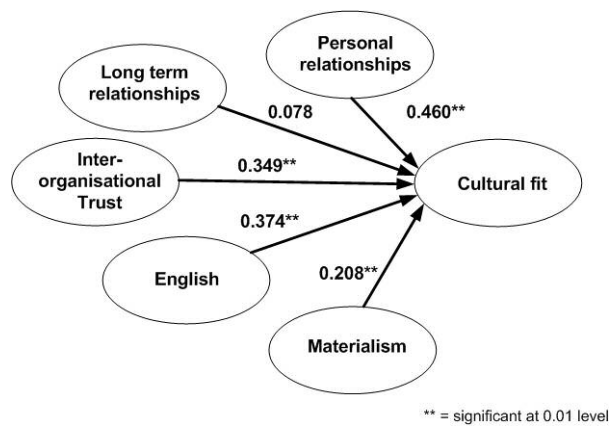

** = significant at 0.01 level

Figure 1 Results generated by PLS

Table 1 outlines the descriptive statistics by each cultural factor showing sufficient range and variance. Frequency statistics for measure revealed scores that span across the entire seven-point Likert scales. The following presents a detailed discussion about each cultural dimension and its implications for the appropriateness of B2B technology adoption in Thailand.

Measures	N	Mean	Std. Deviation
Personal Relationships			
My business opportunities are from my personal relationships such as friends, people whom I know, family rather than using e-marketplace.	107	5.30	1.23
My business opportunities are based on recommendations from friends and customers rather than using e-marketplace.	107	5.05	1.27
My business opportunities are from my personal relationship such as friends, family than using e-mail.	107	4.93	1.39
My business opportunities are based on my business network rather than marketing using e-mail.	107	5.28	1.24
My business opportunities are based on recommendations from friends and customers rather than marketing using e-mail.	107	4.97	1.45
Long-term relationships			
E-marketplace helps me to facilitate a long-term relationship with my suppliers.	107	5.32	1.16
E-marketplace helps me to facilitate a long-term relationship with my customers.	107	5.26	1.17

Measures	N	Mean	Std. Deviation
Inter organizational trust			
I would trust information from speaking face-to-face with suppliers rather than from the e-marketplace.	107	5.14	1.07
I would trust information from speaking face-to-face with customers rather than from the e-marketplace.	107	5.13	1.10
I would trust information from speaking face-to-face with suppliers rather than from e-mail.	107	5.04	1.16
I would trust information from speaking face-to-face with customers rather than from e-mail.	107	5.09	1.15
An ability to communicate in the English language			
It is difficult for me to communicate in the e-marketplace effectively using English language.	107	4.74	1.58
It is difficult for me to explain detailed information to my trading partners in the e-marketplace using English language.	107	4.55	1.58
It is difficult for me to communicate by e-mail in the English language.	107	4.59	1.71
It is difficult for me to explain detailed information to my trading partners in the e-marketplace using English language.	107	4.63	1.58
Materialism			
I admire Western countries that use Internet technology for their businesses.	107	5.38	1.30
Adopting e-marketplace is important because it is necessary to follow the Western practice.	107	4.42	1.69
Adopting e-mail is important because it is necessary to follow the Western practice.	107	4.42	1.66

Table 1 Cultural ítems and descriptive statistics

Personal relationships

Personal relationships were found to be the most influential factor in measuring the fit between B2B technology and Thai culture. The respondents somewhat agreed that their business opportunities were mostly gained from personal relationships such as friends, family, business network and people whom I know rather than using e-marketplace and e-mail. Additionally, the preliminary interviews with Thai firms in the tourism industry found that conducting 'sale-call' activities, which referred to sending the sale representatives to promote products and services at the customers companies' location, were a more important way to gain new business opportunities than the promoting of their business online. Similar to previous research (Niffenegger et al. 2006; Thongjeen and Speece 2002), personal relationships are found to be a very significant factor in doing business in Thailand. For example, Thongjeen and Speece (2002) indicate that it is common for Thai SMEs to rely on personal relationships in gaining new business opportunities. Additionally, Larpsiri and Speece (2003) also support the proposition that developing good personal relationships between sales representatives and customers is crucial to success in Thai business rather than using the online medium.

By demonstrating cultural misfit in the use of B2B technology in Thailand, the researcher strongly believes that for developing countries, it may be too optimistic to assume the benefits of B2B technology claimed by western countries. Furthermore, by relating the importance of personal relationships to the perception of appropriateness of B2B technology, this research may extend the knowledge from previous findings, particularly, the prohibiting factors of B2B e-marketplaces adoption among firms in developing countries (e.g. Humphrey et al. 2003; Moodley and Morris 2004).

Long-term relationships

The results of this study did not find statistical significance on the effect of the long-term relationships in relation to the perception of appropriateness of B2B technology adoption. However, this finding could contribute to the existing knowledge of B2B technology adoption research. To best of the researcher's knowledge, there is no empirical study addressing the relationship between long-term relationships and its implications on the adoption of B2B technology in Thailand. There were only a few studies speculating on such a relationship, however, these studies were conducted mainly in western contexts (e.g. Grey et al. 2005; Pires and Aisbett 2003). For instance, Pires and Aisbett (2003) indicate that Internet facilitates development of long-term relationships between suppliers and customers. The results of this study make the speculation more likely not to be the case in the Thai business context. Interestingly, the results of this research may explain the findings by Kaefer and

Bendoly (2004). Unlike Pires and Asibett (2003)'s findings, Kaefer and Bendoly (2004) indicate that non-EDI e-commerce technologies, including e-marketplaces, are often associated with a community of potential short-term partnerships. This may indicate a misfit of Thai long-term relationships and the nature of short term partnerships required in the B2B e-marketplace. In the researcher's opinion, further research should be conducted to explore this issue.

Interorganisational trust

An analysis of the structural model shows that trust is an important factor contributing to the perception of appropriateness of B2B technology adoption. The essential nature of face-to-face communication in a trust building process of the Thai business culture seems not to fit with the Web environment, which encourages non face-to-face communication. The respondents somewhat agreed that they would trust information from speaking face-to-face with suppliers/customers rather than from e-marketplace/e-mail. The importance of face-to-face communication can be explained by the high level of uncertainty avoidance in Thai culture, although this research recognises that the issue of trust is not peculiar to Thai culture, but also exists in western culture. However, it argues that in some cultures, members of a society may prefer communication media that enable social presence more than others (Guo 2002). Ratnasingam and Phan (2003) assert that a high degree of social presence can reduce levels of uncertainty, which can then lead to an increase in trust.

Furthermore, the findings of this study confirm with the study from Rotchanakitumnaul and Speece (2003) on e-banking adoption in Thailand. They assert that corporate customers still prefer face-to-face contact with bank personnel and prefer to do business with banks that have many physical branches. On the other hand, the results of this study do not agree with Jirachiefpattana's study (1997). Jirachiefpattana takes the view that due to high uncertainty avoidance level, Thai managers tend to become early technology adopters in order to secure their company's status. Moreover, a study conducted by Pavlou (2002) asserts that to succeed in online businesses, companies will have to adjust and change their mindsets to a new way of building trust online. However, in this case, findings from the preliminary interviews revealed that Thai firms did not seem to easily accept this change.

Ability to communicate in the English language

The Thai people's relative lack of ability to communicate in the English language has been documented by other researchers in the field. For instance, Gibson (1997) asserts that Thai people only communicate in their own language, which is the Thai language, and do not have sufficient skills to communicate in other languages. He points out that this has significant impact on the development of IT in Thailand. In addition, Tetiwat and Huff (2003) also find that the lack of English language capability has tremendously affected the adoption of e-learning in Thailand and slowed it down. Thai students and educators complain that it is a time consuming and a difficult process to express their ideas in the English language on the Web.

Results of PLS analysis indicated that the ability to communicate in the English language has a significant effect on the perception of appropriateness of B2B technology adoption. The preliminary interviews clearly suggested that the Thai's weakness in the ability to communicate in the English language makes it more difficult for Thai companies to understand and utilize e-marketplace and e-mail technologies. On the other hand, rather unexpectedly, the results from the survey questionnaire indicated that the respondents felt neutral that it was difficult to explain detailed information when communicating online with their trading partners using the English language.

Materialism

This study, to the researcher's knowledge, is the first to address the importance of materialism in relation to the perception of appropriateness of B2B technology adoption. This study highlights the influence of western values of materialism on modern Thai society and its implications for the appropriateness of B2B technology adoption in Thailand. The results of this study indicate that materialism is of statistical significance in the appropriateness of B2B technology adoption. The respondents indicated that they admired western countries that they adopted Internet technology for their businesses. In addition, it was important to follow this western practice by adopting e-marketplace and e-mail in order to be seen as modernized.

Richins and Dawson's (1992) theories of materialism assert that one's success can be measured by the number and quality of possessions accumulated, seems to apply well to explain the appropriateness of B2B technology adoption in Thailand. Although much previous cultural research has emphasized the importance of the non-materialistic Buddhist influence on Thai society and Thai economic development (Embree 1950), the findings of this research support the arguments made by Komin (1991) in relation to changes in Thai society in the 21st century. She takes the view that western influence on Thai culture has increased the emphasis on material values as a symbol of success. The results of this research support the argument put forwarded by Komin (1991) that Thai culture is characterized as an ego-oriented society, which emphasizes the importance

of face-saving as a value. This value has accelerated the degree of material acquisition. In addition, Komin (1991) asserts that the flexibility and adjustment orientation value of Thai culture makes the influence of western culture easier to be picked up and transferred in Thailand.

CONCLUSION AND RECOMMENDATION

This research has yielded some interesting findings with respect to the effect of Thai culture on business communications and relationships, which may influence the utilisation of B2B technology. To the researcher's knowledge, it is the first research that measures the fit between Thai culture and B2B technology adoption in Thailand. Responding to the research questions, a critical discussion was presented of what and how, and the extent to which culture influence the appropriateness of B2B technology adoption in Thailand. In brief, this research found evidence to suggest that Thai culture does shape the appropriateness of B2B technology adoption in the Thai tourism industry and it seems to misfit for the way in which Thai businesses are operated. The cultural dimensions identified in this research are personal relationships, long term relationships, interorgnaisaitonal trust, ability to communicate in English language and materialism.

The results of this study contribute to the realization of the importance of appropriateness in the success of B2B technology adoption in Thailand. It provides more understanding of the complex relationships between Thai cultural factors and the effectiveness of B2B technology usage. This study has shown that the adoption of B2B technology in Thailand is not simply a process of mimicking technology based on the western model. Rather, local cultural aspects shape adoption of the technology. This research suggests that to achieve high utilization of B2B technology, it is important for the Thai government and firms to adopt effective e-strategies that align with the local environment.

One of the limitations of this study is the scope of the unit of analysis. This study is limited by concentrating only on the adoption of B2B technology in the tourism industry. In doing so, this study may restrict its findings to an industry context. Even though the findings of this thesis are quite in line with previous studies (e.g. Hongladarom 1999; Larpsiri and Speece 2003; Rotchanakitumnaul and Speece 2003; Tetiwat and Huff 2003; Thannasakit 1999; Thongjeen and Speece 2002), they are able to provide more in-depth understanding of why the uptake of e-commerce in Thailand has been slow. Caution should, however, be taken when generalizing the conclusions. Thus, future research may extend duplication of this study by using a larger sample size, a variety of industrial contexts and a variety of Asian countries. This will help to strengthen the validity of this research. Furthermore, to fully understand the implications of Thai culture on the appropriateness of B2B technology transfer to Thailand, the result of the extended Task-technology fit (TTF) model (Goodhue and Thompson 1995) with cultural fit will be future researched.

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