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Abstract

This study develops an integrative model and conceptually-based scales for evaluating the extent to which national culture impact the B2B technology adoption in Thailand. It is the first paper that introduces a method to measure the fit between Thai culture and B2B technology adoption[1], which the researcher refers to 'cultural fit'. The discussion on the current research gap in national cultural theories in relation to IT adoption research, theories of fit and current research on Thai's culture were presented. Based on this literature as well as qualitative data collection, pre-test and pilot test surveys, questionnaire items were developed and analyzed. The resulting dimensionality of cultural fit, used for investigating the appropriateness of B2B technology adoption in Thailand, includes personal relationship, long term relationship, interorganisational trust, ability to communicate in English language and materialism.

Keywords: Cultural fit, Appropriateness of technology, Technology transfer, B2B technology adoption, Thailand, Developing countries

1. Introduction

This research was motivated by the gap between the theoretical claims for B2B technology in western countries and the practicality of its adoption in developing countries. Developing countries including Thailand have high hopes of adopting B2B technology to create wealth and to bridge the digital divide between rich and poor countries (UNCTAD 2005). However, evidence shows that developing countries have a low level of B2B technology adoption. There is little evidence to support the assertion that these countries have gained net benefits from implementing this technology (Humphrey et al. 2003; Kraemer et al. 2002; Pare 2002, 2003; Tregurtha and Vink 2002).

Recurring themes from previous research in IT and e-commerce adoption in Thailand (e.g. Ekasdornkorn, Phalavonk and Corbitt 2003; Gray and Sazogni 2004; Jirachiefpattana 1997; Rotchanakitumnaul and Speece 2003; Thannasakit 2002) are reinforced by the author own working experience in Thailand and publications related to this topic (Vatanasakdakul 2006; Vatanasakdakul and D'Ambra 2006, 2007; Vatanasakdakul et al. 2004). It is not clear whether

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[1] Due to the low level of B2B technology adoption in Thailand, the scope of B2B technology adoption refers to the use of internet technology for inter-firm communication including e-marketplace and e-mail. Electronic Data Interchange (EDI) is excluded.

B2B technology is appropriate for the way in which Thai businesses are operated. While culture factor has been mentioned as a potential factor in B2B technology adoption failure in developing countries, relatively little has been done in terms of specification and operationalisation of the measure of cultural fit.

This presented paper seeks to fill some of the above gaps. Its contribution are threefold (1) an exploration of the relationship between culture and B2B technology adoption to investigate the appropriateness of technology transfer; (2) an examination of the possible role of cultural fit in the use of B2B technology in Thailand; and (3) on introduction of a method capable of analyzing and measuring the fit between Thai culture and B2B technology adoption in Thailand.

2.   Literature review

2.1   National Cultural Theories

National culture has been defined in many ways (e.g. Hofstede 1991 and Triandis 2000). There is substantial research (e.g. Chang 2003; Dwyer, Hani 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".

In an attempt to analyse the cultural phenomenon, researchers have proposed cultural frameworks, which can, in some form, operationalise and measure culture (e.g. Hall 1973; Hofstede 1980, 1991, 2001; Hofstede and Bond 1988; Singh 2004; Trompenaars 1993, 1996). Table 1 below presents a sample of widely accepted culture frameworks that have served to identify national cultural differences, and that have been influential in the current IT adoption literature.

Table 1: National culture frameworks

Researchers	National culture dimensions
Hall (1973)	*High context vs. Low context*
Hofstede (1980, 1991, 2001)	*Individualism vs. Collectivism*
	Power distance
	Masculinity vs. Femininity
Hofstede and Bond (1988)	*Uncertainty Avoidance*
	Time orientation
Triandis (2001, 2004)	*Individualism vs. Collectivism*
Triandis and Gelfand, (1998)	
Trompenaars (1993, 1996)	*Universalism vs. Particularism*
	Collectivism vs. Individualism
	Affective vs. Neutral relationship
	Specificity vs. Diffuseness
	Achievement vs. Ascription
	Oriented towards time
	Internal vs. External control
Schwartz (1994, 1997, 1999)	*Conservatism*
	Intellectual autonomy
	Affective autonomy
	Hierarchy
	Egalitarian commitment
	Mastery
	Harmony

The literature review reveals a similarity in the approach of existing cultural frameworks (Hall 1973; Hofstede 1980, 1991, 2001; Tridians 2000; Trompennaars 1996; Schwartz 1994, 1997, 1999). 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 understandings of the fit between culture and technology and its implications on the use of B2B technology have 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. Consequently, it is suggested that identifying cultural difference does not always imply the fit of technology in different cultural context. In addition, Singh (2004) asserts that one limitation of pervious cultural categorisation studies is that they categorise culture only on the basis of dominant cultural value orientations. In fact, culture cannot only be studied at the level of cultural values, but also at the level of cultural forms, propositions, recipes, routines, customs, and systems of customs. Therefore, this research identifies the need to look beyond comparison of cultural differences in IT adoption research and proposes to take a step in the direction of investigation of the inclusion of the cultural fit issue. This will enable the researchers to have a better understanding of fit between Thai culture and B2B technology. The next section presents the literature review on theories of fit, which is a foundation of the cultural fit concept.

2.2 Theories of Fit

The concept of cultural fit, proposed by this study, is derived from theories of fit, national cultural theories and then applied to IT adoption research. The concept of 'fit' or 'congruence' is at the centre of the strategy literature. Fit is rooted in the concept of 'matching' or 'aligning' organisational resources with environmental opportunities and threats (Bahee 1992; Henderson and Venkatraman 1999; Venkatraman 1989; Venkatraman and Camillus 1984). It seeks to find the best way to form a business strategy by considering the components of an organisation, which must fit well with each other to produce optimal performance (Donaldson 2001; Drazin and Van de Ven, 1985; Ginsberg and Venkatraman 1985; Venkatraman, 1989).

Thus, to achieve the optimal performance on B2B technology adoption in Thailand, it is important for firms to adopt technology that fits well within a cultural context. This research defines 'cultural fit' as a degree to which an individual perceives a match of the use of technology within their culture. Figure 1 provides a graphical illustration of the cultural fit concept. It is to investigate how well the technology that transfers from western countries suits a receiving country, which is, in this case, Thailand.
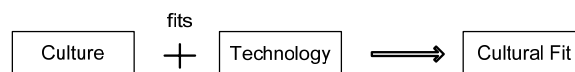
Figure 1: *A graphical illustration of cultural fit*

Hewett et al. (2006) assert that national culture is an important factor in relationships that are forged and relied on to continue B2B relationships. Due to a notion of B2B technology, the cultural fit, in this study, focuses on the influence of Thai national culture on business to business communication and relationships in Thailand. This leads to the research question: ***What constitutes valid and reliable scales for measuring cultural fit in B2B technology adoption in Thailand?***

To have a better understanding of Thai culture that may impact on the adoption of B2B technology, the next section presents the literature on the Thai culture and e-commerce adoption.

2.3 Overview of the Thai Culture and IT Adoption

Thailand's population is relatively homogeneous. More than 85 percent speak a dialect of Thai and share a common culture. Up to 12 percent of Thais are of significant Chinese heritage. Malay-speaking Muslims from the south comprise another significant minority group (2.3 percent). Theravada Buddhism is the official religion of Thailand and is the religion of about 95 percent of the population (Library of Congress 2005). In addition, Thailand is the only country in South East Asia that has never been under a western colonial power.

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. Only in recent years has research on the implications of Thai culture for IT and e-commerce adoption been given attention. However, the relationship between Thai culture and B2B technology adoption has not been extensively discussed.

Drawing from the qualitative interviews study (as outlined in the methodology section and presented at the European Conference of Information System (ECIS) 2006), and literature review on Thai cultural values and IT adoption research in Thailand (Gibson 1997; Hofstede 2001; Hongladarom 1999; Komin 1991; Larpsiri and Speece 2003; Rotchanakitumnaul and Speece 2003; Thongjeen and Speece 2002; Tetiwat and Huff 2003), this research posits five Thai cultural values that may impact on the adoption of B2B technology. This includes personal relationships, long-term relationships, interorganisational trust, ability to communicate in the English language, and materialism. These cultural values are selected based on the effect of Thai national culture on business communications and relationships. Table 2 presents a summary of cultural fit dimensions.

Table 2: *Cultural fit dimensions presented by this research.*

Dimensions	Description
Personal relationships	It refers to personal relationship in the Thai business context or the so call 'Guanxi' in Chinese.
Long-term relationships	It refers to the long term orientation of the Thai society.
Interorganisational trust	It refers to the face-to-face communication of the Thai trust building process.
Ability to communicate in the English language	It refers to the English language capability of the Thai people.
Materialism	It deals with the degree of materialism and the appreciation of western cultural values.

Below each of these constructs is elaborated in the context of using the B2B communication and relationships.

Personal relationships: Personal relationships or connections are very important in doing business in Thailand (Champathes Rodsutti and Makayathorn 2005; Niffenegger et al. 2006; Thongjeen and Speece 2002). As Komin (1991) states, Thailand is a society of relationship not a society of law. It is similar to the concept of "Guanxi" in Chinese business, which represents the formal and informal relationships that are built and maintained for business connections (Chen, Chen and Xin 2004). In the Thai collectivist society, members are concerned with group interest rather than individual interest (Hofstede 1991, 2001). In addition, Komin (1991) asserts that the interdependency orientation of Thai society results in a strong distinction between in-group and out-group. The concept of *Bhunkhun* (indebted goodness) and the return of BhunKhun (*Saang BhunKhun*) constitute the root of meaningful relationships as well as the root of social connection in Thai culture, in which in-groups are successfully built and reinforced.

Long term relationships: The connection between long-term relationships and B2B technology adoption has been under researched. Hofstede (1991) indicates that Thailand is a long-term orientation culture. Some researchers, for example Hofstede and Bond (1998) and Robertson (2000), believe that this cultural dimension seems to be significant in the Asian business context. Niffenegger et al. (2006) assert that Thai businesses rely more on a long-term orientation. This may be opposite to the characteristics of non-EDI e-commerce technologies, including e-marketplaces, which are often associated with a community of potential short-term partnerships (Kaefer and Bendoly 2004).

Interorganisational trust: This factor focuses on how interorganisational trust develops and the way national culture impacts on a trust building process. Face-to-face communication is very important in trust building in Thailand (Rotchanakitumnaul and Speece 2003; Niffenegger et al. 2006; Vatanasakdakul et al. 2004). Hofstede (1991) asserts Thailand is a high uncertainty avoidance culture, in which members feel uncomfortable with uncertainty and ambiguity. The literature review reveals that the degree of uncertainty avoidance in IT adoption relates to face-to-face communication. The characteristics of the web environment as opposed to face-to-face communication can lead to the reduction of confidence both in reliability of web transactions and trading partners (Pavlou 2002; Ratanasignam and Phan 2003).

Ability to communicate in English Language: The Internet and e-commerce accelerate the need for global communication and English is the predominant language for the development of IT and e-commerce (Chieochan et al. 2003). Previous research has revealed the implications of a lack of English language competence for IT adoption in Thailand (e.g. Gibson 1997; Hongladarom 1999; Tetiwat and Huff 2003). Gibson (1997) asserts that Thailand is the only South East Asian country where most of the people speak and read only their national language. Thai people study English in middle school, but most can only read simple English words.

Materialism: In the twentieth century, the influence of materialism of western values on modern Thai society has not been much discussed in relation to the new shift in Thai cultural value. While materialism defines success by the number and quality of possessions accumulated (Richins and Dawson 1992), Buddhism emphasises the non-materialistic way of life. With the pressures from globalisation, a desire by Thai businesses to possess western products as a symbol of success has increased (Niffenegger et al. 2006; Suparb 2002). Thailand has placed importance on acceptance of western values, culture and thought in many ways. As Wong and Ahuvia (1998) asserts that even though Asian society consumes the same products as western society; this does not mean that consumers buy them for the same reasons. This research supports the argument put forward by Wong and Ahuvia (1998) and adapted to the technology adoption context that realization of benefits gained from technology may vary in different cultures. Therefore, it is important to investigate the implication of materialism on the perception of cultural fit on B2B technology adoption in Thailand.

3. Method

Responding to the research question, the derivation of scale measuring cultural fit on B2B technology adoption in Thailand must be ecologically valid, incorporate diverse concepts and identify underlying dimensions. These dimensionalities of cultural fit were tested by quantitative method. To that end, the author developed the final survey items based on

- Qualitative interviews
- Pre-test study
- Pilot survey
- Main survey

The results from the main survey were reported.

3.1 Qualitative Interviews

To fill the initial gap in the current literature on Thai culture that may impact on the B2B communication and relationship setting, a preliminary study was conducted to identify the dimensionality of Thai business culture and to gain further understanding of B2B technology adoption. The results were used to form the measurements in the survey questionnaire. The detail of qualitative study was presented at the European Conference of Information Systems (Vatanasakdakul and D'Ambra. 2006).

3.2 Pre-test Study

Because little empirical literature was available to guide the cultural measurement for the Thai business context, extensive tests were conducted prior the main data collection. Since the actual study was conducted in the Thai context, all the data collected were in the Thai language by the author. According to Temple and Young (2004), this enabled the author to obtain more insightful information by using the native language in the data collection process. Once the first version of the survey questionnaire was developed in English, the 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).

3.3 Pilot Test Survey

A pilot study is essential to fully test the measures. The survey questionnaire for the pilot study was administered in Thailand by the author during June and July 2005. The pilot surveys were sent to 60 tourism firms that participated in www.thaitravelmart.com. To increase the response rate, the researcher made telephone calls to all the contact persons in each company, the contact list was provided by the Tourism Authority of Thailand. The number of responses totalled 21 companies, which was a response rate of 35 percent.

The pilot data were then analysed for reliability and validity. SPSS version 13.0 was used as the statistical analysis tool. Factor analysis was employed to test the validity in the pilot study. Principal Component Analysis (PCA) was used to investigate the presence of components with eigenvalues exceeding 1. In addition, a screeplot was created to indicate the number of factors appearing to represent underlying conceptual constructs in the data. Furthermore, this study utilised PCA for factor extraction and rotation by using the Kaiser Varimax rotation method. In terms of the reliability, the internal consistency reliability, which refers to "the degree to which items in a test measure the attribute in a consistent manner" (Tashakkori and Teddlie 1998, p.85), were assessed using Cronbach's coefficient alphas based on Nunnally's Criteria with a cut off point of 0.7.

The implications from the pilot study were that the original 28 items of cultural fit were reduced to 18 items. Furthermore, based on the results from the pilot study, some questions in the survey questionnaire were re-worded for clarity. All the revised items in the survey were verified and back translated by the experts to ensure the accuracy before conducting the main data collection.

3.4 Main Survey

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. 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 main survey 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.

4.   Results

4.1   Descriptive Statistics

Table 3 and 4 provide the descriptive statistics for the main survey sample. The respondents somewhat agree with the following statements:

My business opportunities are from my personal relationships such as friends, people whom I know, family rather than using e-marketplace; My business opportunities are based on recommendations from friends and customers rather than using e-marketplace; My business opportunities are based on my business network rather than marketing using e-mail; E-marketplace helps me to facilitate a long-term relationship with my suppliers/customers; I would trust information from speaking face-to-face with suppliers/customers rather than from the e-marketplace/email; I admire Western countries that use Internet technology for their businesses.

Table 3: *Descriptive information about respondent*

		n	Frequency (%)	Mean
Size of companies	Small (1-50 employees)	55	51.4	
	Medium (51-200)	41	38.3	
	Large (>200)	11	10.3	
Annual revenue (Baht)	Small			12,235,433
	Medium			59,300,024
	Large			34,949,210
	Total			**106,484,668**
Investment in IT (Baht)	Small			179,076
	Medium			666,492
	Large			862,629
	Total			**1,708,198**
Number of Computers	1-50 computers	104	97.2	
	More than 50 computers	3	2.8	
Type of Internet access	Dialup	48	44.9	
	Broadband	53	49.5	
	Satellite	4	3.7	
	Others	2	1.9	
Website	Companies with website	13	12.1	
	Companies without website	93	86.9	
	No response	1	0.9	
Role of the respondents	Sales and Marketing	41	38.8	
	Human resource	4	3.7	
	IT	4	3.7	
	Accounting	6	5.6	
	General manager/Owner	39	36.4	
	Others	13	12.1	
Gender	Males	47	43.9	
	Females	33	30.8	
	No response	27	25.3	
Level of education	High school	6	5.6	
	College	19	17.7	
	Undergraduate	66	61.7	
	Postgraduate	16	15	
Mean years of experience with companies				4.75 (years)

(n=107)

Table 4: *Item and scale descriptive statistics*

Measures	Mean	Std. Deviation
My business opportunities are from my personal relationships such as friends, people whom I know, family rather than using e-marketplace. (PER3)	5.30	1.23
My business opportunities are based on recommendations from friends and customers rather than using e-marketplace. (PER5)	5.05	1.27
My business opportunities are from my personal relationship such as friends, family than using e-mail. (PER7)	4.93	1.39
My business opportunities are based on my business network rather than marketing using e-mail. (PER 2)	5.28	1.24
My business opportunities are based on recommendations from friends and customers rather than marketing using e-mail. (PER 6)	4.97	1.45
E-marketplace helps me to facilitate a long-term relationship with my suppliers. (LONG2)	5.32	1.16
E-marketplace helps me to facilitate a long-term relationship with my customers. (LONG3)	5.26	1.17
I would trust information from speaking face-to-face with suppliers rather than from the e-marketplace. (TRUST1)	5.14	1.07
I would trust information from speaking face-to-face with customers rather than from the e-marketplace. (TRUST2)	5.13	1.10
I would trust information from speaking face-to-face with suppliers rather than from e-mail. (TRUST3)	5.04	1.16
I would trust information from speaking face-to-face with customers rather than from e-mail. (TRUST4)	5.09	1.15
It is difficult for me to communicate in the e-marketplace effectively using English language. (ENG2)	4.74	1.58
It is difficult for me to explain detailed information to my trading partners in the e-marketplace using English language. (ENG3)	4.55	1.58
It is difficult for me to communicate by e-mail in the English language. (ENG5)	4.59	1.71
It is difficult for me to explain detailed information to my trading partners in the e-marketplace using English language. (ENG6)	4.63	1.58
I admire Western countries that use Internet technology for their businesses. (WEST1)	5.38	1.30
Adopting e-marketplace is important because it is necessary to follow the Western practice. (WEST2)	4.42	1.69
Adopting e-mail is important because it is necessary to follow the Western practice. (WEST4)	4.42	1.66

Note: This research adopts a seven point Likert scale (1=strongly disagree to 7=strongly agree).

4.2 Validity

The bootstrapping procedure was generated to obtain the PLS loading, weight and T-statistics. Chin (1988) suggests that the loading should be greater than 0.707. According to the statistical results in Table 5, overall the condition of the loading scores was met in this study and the T-statistics revealed that all the items were at a significant level of 99 percent.

Table 6 shows the results from the cross-loadings procedure by PLS. The cross-loadings procedure was calculated to confirm whether the indicators were to be dropped or kept. The results show a good loading among the items in each construct. Each indicator loaded higher with its corresponding latent variable. This implied that the latent component scores indeed predict each indicator in its block better than indicators in other blocks (Chin 1988). The loading clearly separated each latent variable as theorized in the conceptual level. Thus, it is confirmed that the validity criteria in this research have been met.

Table 5 *PLS loadings, T-statistics, Significance level, Composite Reliability & AVE*

Construct and Items	PLS loadings	T-statistics	Significance level	Composite Reliability	AVE
Personal relationships				0.921	0.701
PER3	0.8446	23.3452	0.01		
PER5	0.8812	30.1924	0.01		
PER7	0.8617	23.9416	0.01		
PER2	0.7347	11.3888	0.01		
PER6	0.8575	21.606	0.01		
Long-term relationships				0.960	0.923
LONG2	0.9651	13.9624	0.01		
LONG3	0.9566	14.1233	0.01		
Trust				0.919	0.740
TURST1	0.8144	19.05	0.01		
TURST2	0.8933	35.5178	0.01		
TRUST3	0.8795	26.1431	0.01		
TRUST4	0.8523	13.8249	0.01		
English language				0.955	0.841
ENG2	0.8891	35.4548	0.01		
ENG3	0.8891	22.3601	0.01		
ENG5	0.9459	2.6497	0.01		
ENG6	0.942	67.1989	0.01		
Materialistic				0.882	0.715
WEST1	0.7161	8.3879	0.01		
WEST2	0.8955	36.474	0.01		
WEST4	0.9119	51.48	0.01		

Table 6: *the results from the cross-loadings procedure by PLS*

Items	Factors				
	Personal Relationship	Long term relationship	Trust	English Language	Materialism
PER3	0.845	-0.112	0.417	0.196	0.213
PER5	0.881	0.115	0.444	0.173	0.266
PER7	0.862	0.055	0.471	0.217	0.213
PER2	0.735	-0.068	0.424	0.145	0.187
PER6	0.857	0.132	0.332	0.236	0.249
LONG2	0.062	0.965	0.123	0.139	0.461
LONG3	0	0.957	0.155	0.123	0.437
TURST1	0.372	0.06	0.814	0.253	0.035
TURST2	0.425	0.175	0.893	0.216	0.233
TRUST3	0.491	0.106	0.88	0.275	0.26
TRUST4	0.418	0.15	0.852	0.153	0.324
ENG2	0.228	0.19	0.188	0.889	0.339
ENG3	0.227	0.035	0.19	0.889	0.192
ENG5	0.197	0.164	0.282	0.946	0.278
ENG6	0.203	0.104	0.291	0.942	0.281
WEST1	0.208	0.492	0.262	0.102	0.716
WEST2	0.204	0.316	0.18	0.325	0.896
WEST4	0.271	0.401	0.213	0.305	0.912

Table 7: *Correlation of latent constructs*

Measures	Personal Relationship	Long term Relationship	Interorganis- ational Trust	English language	Materialism
Personal Relationship	**0.838**				
Long term Relationship	0.034	**0.961**			
Interorganisational Trust	0.499	0.144	**0.86**		
English language	0.232	0.136	0.261	**0.917**	
Materialism	0.27	0.468	0.254	0.299	**0.846**

* Diagonal elements are square root of average variance extracted

Furthermore, Fornell and Larcker (1981) suggested that the discriminant validity can be evaluated by comparing the AVEs of the latent variables and the correlations among the latent variables (LVs). They recommend that the AVE of the latent variables should be greater than the square of the correlations among the LVs. This indicated more variance was shared between the LV component and its block of indicators than with another component representing a different block of indicators. The correlation matrixes in Table 7 show that the square roots of AVE are greater than the corresponding off diagonal elements. This indicates that each measure was not tapping into different concepts. Thus, the discriminant validity is confirmed.

4.3 Reliability

Table 5 presented the results of the reliability of constructs and indicators. According to the statistical results in Table 5, all the items were above the requirement. Firstly, the individual item reliability on the reflective measure by PLS is also determined by examining the loadings of each of the construct's indicators. Secondly, according to Chin (1998), composite reliability calculated by PLS is suitable for assessing internal consistency. All the reflective scales demonstrated acceptable performance above the minimum value of composite reliability, which is greater than 0.7. Thirdly, AVE scales should exceed 0.5, indicating that "50 percent or more variance of the indicators should be accounted for" (Chin 1998, p.321). It can be seen that all the scales performed acceptably on this standard. Thus, the reliability of all reflective constructs was verified and satisfied.

5. Conclusion and Future Research

This study has presented some perspective and research issues about evaluation and impact of cultural fit on the adoption of B2B technology in Thailand. This exploratory demonstrates that it is possible to develop preliminary scales for measuring the fit between culture and technology. The cultural fit factors, which were emerged from the qualitative interviews, were tested by quantitative analysis using structural equation modeling with partial least square method as well as SPSS. The cultural fit dimensionalities were personal relationship, long term relationship, interorganisational trust, ability to communicate in English language and materialism. The validity and reliability of the scales were validated and satisfied. It is also noted that the items related to long term relationship constructed were dropped to two items, which is less than items of other constructs.

To fully understand the implications of Thai culture on the appropriateness of B2B technology transfer to Thailand, this research plans to further develop and test the cultural fit scales. A research model will be developed for investigating this issue via a strategic fit lens. Further analysis needs to be undertaken to extend and refine the relationships and the tentative model suggested in Figure 2.
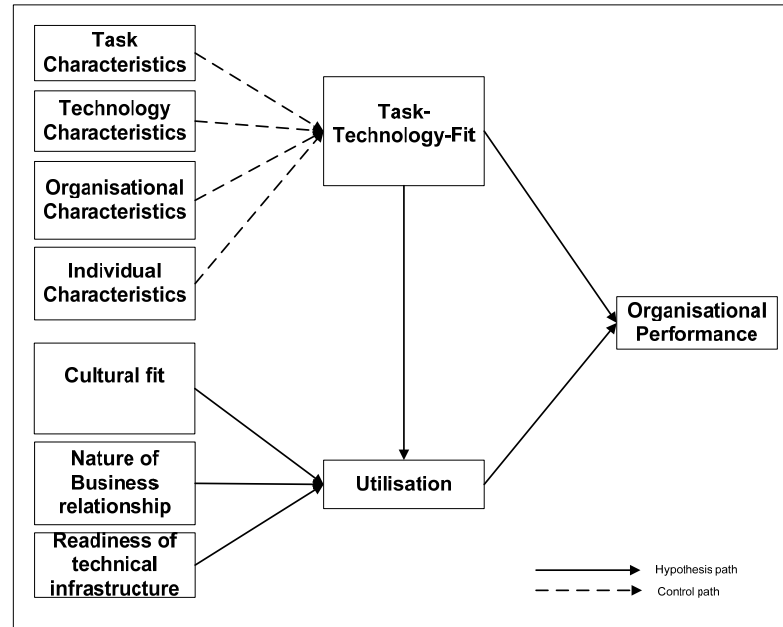
Figure 2: *The proposed research model for future research*

The proposed model will extend the Task-technology fit (TTF) model by Goodhue and Thompson (1995). It is one of the first studies that attempt to ingrate and measure cultural fit factors to TTF model. The original TTF model by Goodhue and Thompson (1995) suggests that for IT to have a positive impact on individual performance, the technology must be utilised, and must be a good fit with the tasks it supports. The researcher supports the argument put forward by Henderson and Venkatraman (1999) that the inability to generate value from IT adoption is in part, due to a lack of alignment between IT and firms' internal and external business environments. Hence, this research takes the view that, to achieve a high utilisation of B2B technology adoption, Thai firms need to adopt effective IT strategies that align with their local environment. In addition to the fit between task and technology, cultural fit is posited to be a major influential factor on a success of B2B technology adoption in Thailand.

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