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# **CROSS-CULTURAL DISCONTINUITIES WITHIN INTERNATIONAL KNOWLEDGE WORK: FIRM-LEVEL EVIDENCE FROM A GERMAN SOFTWARE DEVELOPER IN THAILAND**

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## **ABSTRACT**

*Offshoring knowledge and innovation activities enables many small and medium enterprises (SMEs) to successfully compete in a global economy. This offshoring is largely driven by skills shortages and rising costs at home. However, while economic, political, and regulatory environments have traditionally been the main considerations when offshoring, understanding culture and the cross-cultural discontinuities associated with offshoring have received less attention. This paper uses a case study approach to assess the impact of culture on a German software developer offshoring its operations to Thailand. It begins with literature related to the growth of SMEs who offshore their knowledge-based activities. The methodology then uses interviews and focus groups to identify cross-cultural discontinuities at a case firm and links them to Hofstede's cultural dimensions. Results show five key cross-cultural discontinuities affecting work performance and discusses the implications for small businesses that offshore their knowledge related activities.*

## **INTRODUCTION**

Increasing competitiveness in the global economy has compelled a substantial number of multinational companies to outsource and offshore their business activities to foreign countries, particularly within Asia (Ernst, 2006). This has frequently resulted in both challenges and opportunities, but the current shift in the types of activity offshored embodies new critical challenges. This is especially so for SMEs (small and medium enterprises) who may be lured by the business prospects that offshoring presents, but may lack the experience and resources to overcome these challenges, in particular, the day-to-day management of employees in a cross-cultural work environment. This paper adopts a case study approach to explore the cultural challenges SMEs face when offshoring and employing knowledge workers abroad.

According to Balasubramanian and Ashutosh (2005), a new, second wave of offshoring is underway, which is characterised by firms who are offshoring more than simple manufacturing, and are now relocating knowledge and innovation activities (Lewin, Massini & Peeters, 2009). The offshoring of knowledge activities and innovation requires a critical understanding of how to manage locally recruited knowledge workers who are performing these knowledge-based activities in the context of an international management environment. This paper argues via a German-Thai case study that cross-cultural discontinuities between expatriate management and their locally recruited staff represent a significant barrier to effective knowledge work. Such cross-cultural discontinuities can negate the potential benefits that attract SMEs to offshore their activities in the first place. The paper

has two key aims, firstly to identify the cultural discontinuities which exist within the German-Thai workplace, and secondly, to assess the potential impacts these cultural discontinuities have on work performance and quality.

## **LITERATURE REVIEW AND CONTEXT**

### **Offshoring Business Activities**

Offshoring has frequently been termed the most visible consequence of globalisation (e.g. Auer, Besse & Meda, 2006). A key driver of this offshoring process has often been access to comparatively low cost labour; firms seek to relocate their business activities to countries where labour is cheaper. While this global division of labour is often suggested as the primary reason for offshoring (Farrell, 2005), other aspects also play a significant role in business decisions to locate internationally. These include the need to secure raw materials located overseas (e.g. Fikarek, Veloso & Davison, 2008), the desire to diversify and overcome the risks related to currency fluctuations (e.g. Vestring, Rouse & Reinert, 2005), and the requirements to access free trade areas and be closer to key markets (Kelly, 2001).

While the cost savings of operating abroad are generally well understood, there are a variety of invisible costs and challenges associated with offshoring, which are generally less acknowledged (Stringfellow, Teagarden & Nie, 2008). For example, cultural differences have been noted as one of the most significant barriers when operating overseas, particularly in terms of managing staff. These cultural issues are frequently nuanced towards particular cross-cultural interactions, and often require specific understanding or practical experience. Developing an awareness and understanding of these cultural issues and interactions is fundamentally important to firms operating in the domain of the creative knowledge industries. It is particularly important for SMEs that are unlikely to possess the experience or financial resources necessary to address the cultural issues affecting their work quality and performance.

Deciding whether to offshore and operate internationally can become a business dilemma. On the one hand it provides significant benefits, including considerable scope and flexibility to cut costs, address local issues, and differentiate from competitors who remain focused at home (Miroshnik, 2002). In contrast, international operations can also represent critical business challenges. For example, while offshoring might be economically feasible, the employment of relatively cheap labour, and the potential loss of jobs in the firm's home country often represent a moral quandary (Bardhan, 2006). There are also wide ranging issues such as the difficulty in protecting intellectual property (Bidanda, Arisoy, & Larry, 2006), the choice in offshore location, and the services a firm can provide by offshoring to a particular location (Pyndt & Pederson, 2006).

This paper argues that one of the most significant issues affecting SMEs who choose to offshore their activities is understanding and responding to the cultural differences between locally recruited knowledge workers and the firm's expatriate management. Through a case study of a German software developer operating in Northern Thailand, this paper identifies key cultural discontinuities that exist, and explores their impact on work performance and quality. The focus is on knowledge work, which is expanding relative to the growth of the knowledge economy and the offshoring of knowledge activities. Knowledge work is also more susceptible to differences in culture due to its heavy reliance on communication (Smith & Rupp, 2002), which in turn represents significant potential for conflict (Scarborough, 1999).

## **Growth of the Knowledge Economy and Offshoring Knowledge Activities**

Over the last two decades, knowledge has emerged to become a distinguishing feature of the world's economy (Barrera, 2007). The fundamental importance of knowledge to economic success has led to creation of the term 'knowledge economy'. It was Drucker (1966) who, heavily influenced by Machlup (1962), introduced the concept of the knowledge economy. Since the 1960s, there has been growing debate over the definition, but continuing agreement that the leading edge of the economy is primarily influenced by innovation, technology, knowledge production and knowledge dissemination (Powell & Snellman, 2004). The knowledge economy is generally defined as the effective utilisation of intangible assets such as knowledge, skills, and innovation as key resources for competitive advantage and economic success (ESRC, 2005). Knowledge has become the primary driver of growth in many countries, with economic trends signifying that traditional agrarian and manufacturing activities have been in steady decline and are less resilient to financial crises (Carlaw, Oxley, Walker, Thorns & Nuth, 2006). The emergence of the knowledge economy and increasing internationalisation of knowledge activities means that employee remuneration and skill are becoming overshadowed by creativity and the ability to innovate. This requires new ways of thinking about managing knowledge workers (employees), and the natural result is a global race for talent, where knowledge workers, and the way these knowledge workers are managed have become critical to the success of firms operating within knowledge-based industries. The increasing growth of knowledge economies and subsequent offshoring of knowledge-based activities has created a need to understand culture and perhaps most importantly, the subsequent impact that different cultures have on management, organizational performance and quality.

The relationship between culture and work performance is well known, inextricably linked, and complex (Hartog & Verburg, 2006) and expatriate managers play a critical role in managing locally recruited human resources. Managers must understand how to effectively lead local employees to perform, but these local employees frequently possess different expectations of management as well as differences in their task readiness related to cultural disparities (Peterson & Johri, 2008). Similarly, Rodsutthi and Swierczek (2002) found that the characteristics of leaders and their cultural background had a powerful effect on staff. One of the most internationally and culturally diverse knowledge industries is software development, which is built on a foundation of knowledge (Schware, 1992). The software development industry has gradually expanded from the sole domain of developed countries to become a global endeavour, where internationalisation and offshoring have played a significant role in building the software industry in countries such as India, Brazil and China (Cochran, 2001).

### **Offshoring Software Related Knowledge Work**

The software development industry contributes to the global knowledge economy via its intrinsic features and fits the key definitions and strands of the knowledge economy literature in multiple ways. For example, the software development industry can be described as knowledge intensive, producing both new technology and intellectual property. Software is also consistent with two common perspectives of the knowledge industries, one where knowledge is considered a product, and one where knowledge is used as a tool. Software organisations that thrive in the knowledge economy are deeply involved in producing knowledge and organizing themselves around continuous learning and innovation. Software development has therefore become a multisite, multicultural and globally distributed industry (Herbsleb, Zubrow, Goldenson, Hayes & Paulk, 2001). Despite some sizeable contenders, the global software industry is fragmented, consisting mainly of small and niche firms (Nowak

&Grantham, 2000). In more developed economies, there are skills shortages in the software industry, which have resulted in steadily rising wage costs (Trendle, 2008). To offset these skills shortages and rising wage costs, international offshoring occurs, but these primarily small firms face significant issues in managing international knowledge workers. While the most well known offshoring locations for software are the BRIC countries (Brazil, Russia, India, China), non-BRIC countries are also inheritors of a globalised economy (Willcocks, Griffiths & Kotlarsky, 2009), with significant outsourcing and offshoring of software and IT activities. Thailand is focused on developing its knowledge economy, and is continuing to attract foreign direct investment (FDI) related to software.

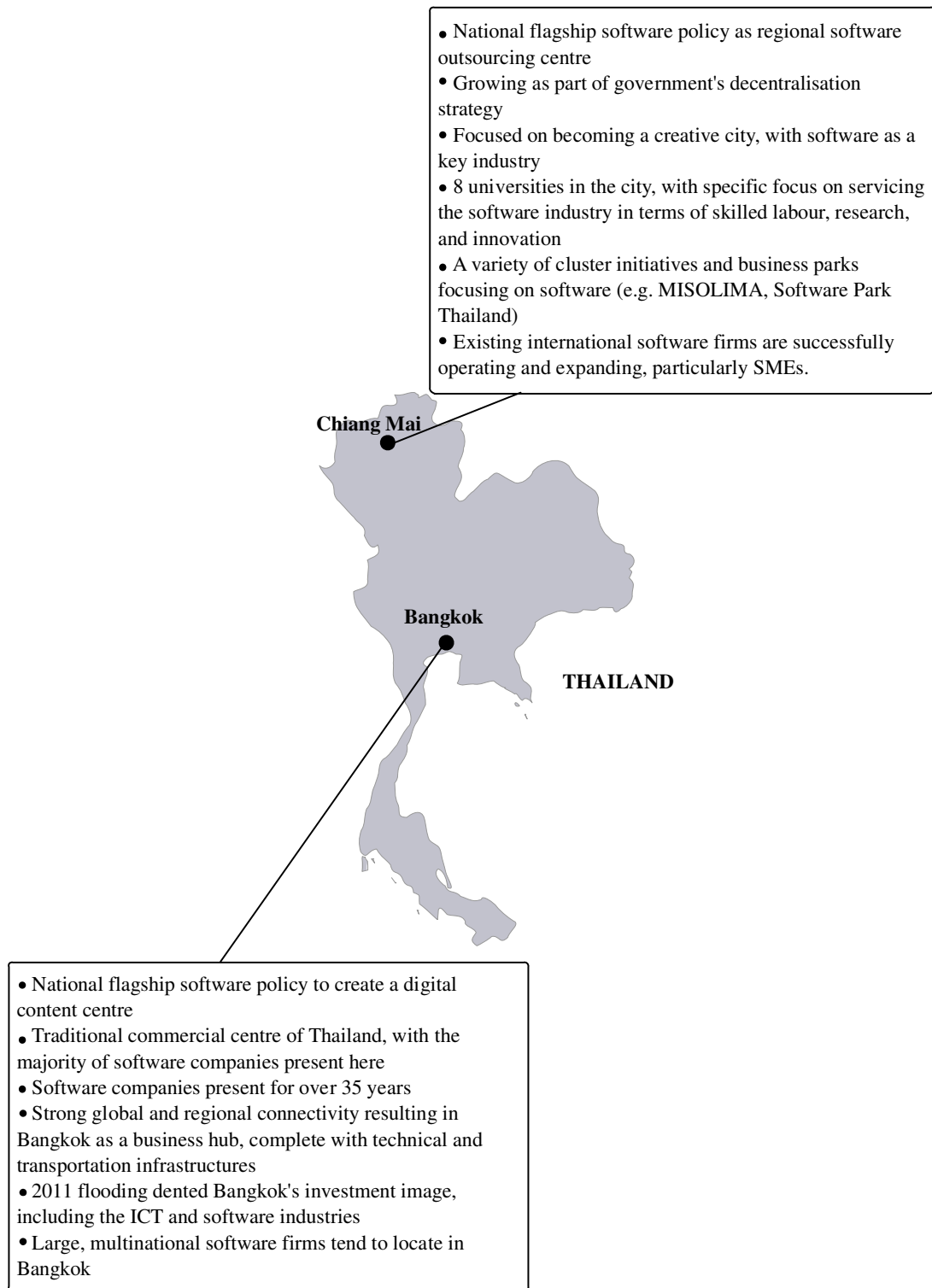
### **Software and FDI in Thailand**

Thailand's economy has shifted towards knowledge-based industries, creative activities, and the generation and exploitation of knowledge, and is rapidly moving away from its agrarian roots to increasingly focus on innovation and creativity as drivers of growth (Intarakumnerd, Chairatana & Tangchitpitoon, 2002). In 2011, the World Bank reclassified Thailand's economy from a lower income to middle income economy, signifying the changes taking place within the Thai economy (World Bank, 2011). While India, China and Brazil host the largest emerging software development industries (Veloso, Botelho, Tschang, Amsden & Stefanuto, 2003), Thailand is developing a reputation as a creative and innovative player within the domain of software (Thailand Investment Review, 2012). Geographically, the two major areas of focus for software development are Chiang Mai in the north of Thailand, and Bangkok in the south. Figure 1 illustrates key features of Thailand's software development industries in these two locations, which focus on software outsourcing, and the production of innovative IT content.

While Figure 1 shows the Thai software industry is primed for growth, developing economies such as Thailand face significant issues in delivering effective knowledge workers. Perhaps most critically, there is a mismatch between employer needs and the outputs of the education system, which often causes difficulty in supplying industries with appropriate knowledge workers. The most common method to circumvent such issues has been the development of industry clusters, where universities, businesses, and infrastructure are agglomerated to improve competitive advantage. Industry clusters through the Triple Helix of university-industry-government relations have been a particular focus in Thailand's software industry. Research suggests that in Thailand, the fundamental economic conditions are more significant to attracting FDI than short-term government incentives (Larsson & Vankatesh, 2010). For example, an adequate source of effective knowledge workers is considered more important than tax breaks or other forms of incentivisation. This corroborates the need to understand how foreign SMEs investing and offshoring in Thailand can effectively manage the cultural differences of Thai knowledge workers.

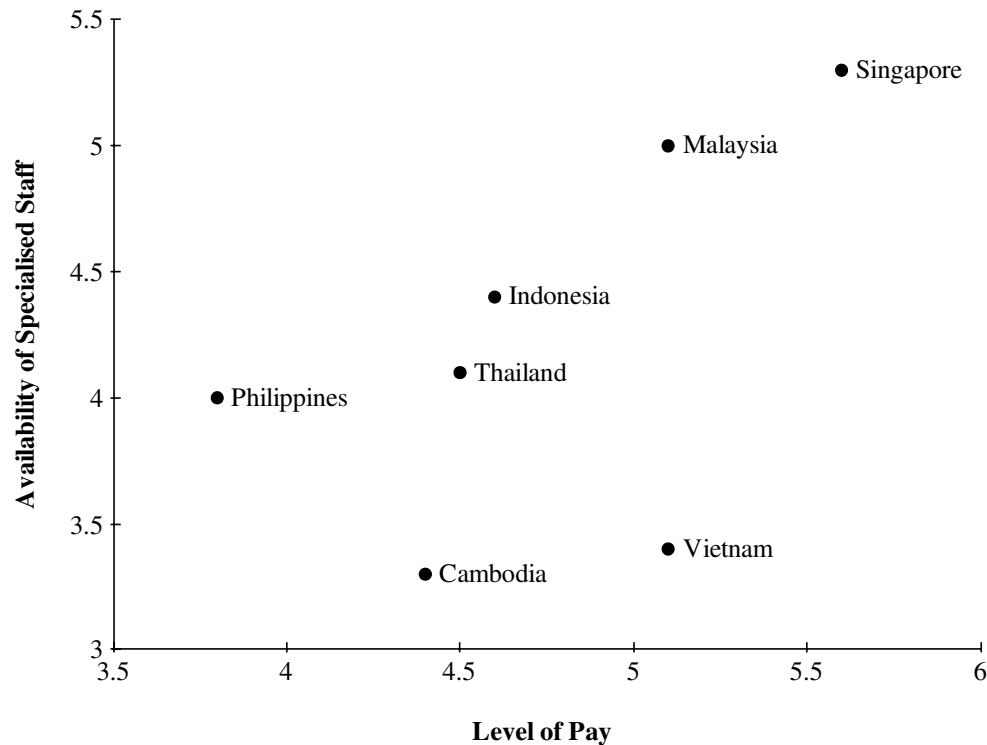
What is clear from the literature is that managing international knowledge workers with a view to achieving the most effective performance is challenging, particularly in terms of cultural differences, and is therefore an issue warranting further research. For Thailand, it is particularly important to understand the cultural issues that affect knowledge work, especially if the Thai government is to succeed in continuing to encourage FDI in its creative and knowledge-based industries. The Southeast Asian region offers significant potential for small firms who wish to offshore their business and many companies choose to offshore their activities to countries within ASEAN (Association of Southeast Asian Nations) region (Koubek, Weinert & Meyer, 2009). Figure 2 highlights that within the ASEAN, Thailand currently offers an attractive mix of relatively low cost labour and a high availability of skilled staff. While other countries in the region such as Singapore offer a very high

availability of specialised/skilled staff, they do so at an equally high cost. Cambodia and Vietnam appear to offer a relatively high cost of labour compared to Thailand, but with a lower availability of specialised staff.



**Figure 1** The two key clusters of software development in Thailand (Data sources: Glassman & Sneddon, 2003; SIPA, 2007; MICT, 2012)





**Figure 2** Pay levels versus availability of knowledge workers in the seven ASEAN countries where data is available. (Data source: The World Bank, 2011)

Offshoring to Thailand has often been investigated from a regional perspective where research focuses on Confucian management methods and other related Asian management styles, particularly how Japanese managers work with Thai subordinates (e.g. Swierczek & Onishi, 2003) and Korean systems of management (Chen, 2004). There has been far less research relating to the use of western styles of management in Asia and the cultural discontinuities these represent. There has also been little in terms of how these cultural discontinuities can affect knowledge work, which is frequently the domain of SMEs who offshore their operations. The research gap filled by this paper aims to understand the Thai culture with specific reference to the knowledge workplace, and how this affects SMEs engaged in offshoring their knowledge work to Thailand. The research approach is via a German case firm operating in Thailand's software development sector.

## METHODOLOGY AND CASE STUDY RESEARCH APPROACH

### The Case Firm

Cross-cultural discontinuities are explored via a case study at a German SME offshoring to Thailand. The software industry is vital to the German economy (Hoerndlein, Schreiner, Benlian, Hess & Picot, 2012), and according to Casper and Vitols (2006), German software services and technologies are prospering. German software companies spend approximately 8% of their revenue on innovation, and the success of the German software industry contradicts the typical assumption of US industry dominance in software (Leimbach, 2008). However, despite success, issues have emerged as a result of this sustained growth and success. One of the largest problems is the lack of qualified and skilled knowledge workers. This has led to a widening skills gap (Nicholson, 2001) and an acute shortage of accessible labour within the software industry. The difficulty in finding qualified knowledge

workers has led German firms to offshore, which can successfully bridge the skills gap, but requires time and structural adjustment. Successfully offshoring requires considerable effort in the form of navigating legal and political issues, and comprehending the host country's culture and work style (Peeters, Lewin&Massini, 2009). This raises the question of how to understand and successfully manage the cultural differences between German culture and the culture of the host country, which in this case study, is Thailand.

In line with these issues and the general aims stated in the introduction, there were two key research objectives:

1. To identify the cultural discontinuities from the perspective of both German managers and Thai knowledge workers (software developers).
2. To assess the potential impacts of these cultural discontinuities on work performance and quality.

The methodological approach in this work is based on a qualitative case study at a German SME operating in Chiang Mai, Northern Thailand.

Since 2005, the case firm has provided a wide variety of both standard and customized software solutions to international customers and in 2012 turnover reached 23 million Euro. Company headquarters are in Berlin, where there are approximately 280 employees. The Thai affiliate in Chiang Mai employs 80 locally recruited staff for its offshore software development business. The company maintains close relations with local universities in Thailand to assist when recruiting knowledge workers and developing the business.

Business decisions to offshore software development activities to Thailand (Chiang Mai) were for a variety of reasons, including:

- The presence of an existing and successful IT industry cluster. Such business clusters are reported to increase the productivity and competitiveness of companies, both nationally and internationally (Porter, 2000).
- The cost of labour in Chiang Mai is significantly lower compared to hiring knowledge workers in Germany. According to the International Labour Office (2012), the average wage rate of a new software developer in Thailand was approximately \$400 USD per month versus approximately \$4400 USD per month in Germany.
- There is a sufficient supply of skilled knowledge workers in Chiang Mai, which is being developed as a creative city (UNESCO, 2011). In addition, Chiang Mai has pioneered initiatives such as Software Park Thailand (Mongkolnam, 2009), and there are also a number of universities in Chiang Mai contributing to the industrial growth in these regions (Glassman & Sneddon, 2003), particularly through the supply of skilled knowledge workers.
- The infrastructure in Chiang Mai is effective for international business and includes high quality Internet connectivity and convenient air links. According to the CIA (2012), Thailand ranks above some of its ASEAN neighbours (including Indonesia and the Philippines) in terms of the number of Internet hosts.

The primary activities of the case study firm are related to software development and web design, which can be separated into four main business areas. Table 1 illustrates the firm's key activities according to these particular business areas.

<b>Table 1</b> <b>KEY BUSINESS AREAS IN WHICH THE CASE STUDY FIRM OPERATES</b>			
BUSINESS AREAS			
BUSINESS/WEB APPLICATIONS	DIRECTORY SERVICES	MOBILE APPLICATIONS	DESIGN
<ul style="list-style-type: none"> <li>• Super office</li> <li>• Research interface</li> <li>• Lead list interface</li> <li>• Domain admin tool</li> <li>• Designer backend</li> <li>• DCIA (Diamond Connection Interface Agent)</li> <li>• Accounting</li> <li>• CCB (Credit Card Billing)</li> <li>• SEM Tool (Search Engine Marketing)</li> </ul>	<ul style="list-style-type: none"> <li>• Office Finder</li> </ul>	<ul style="list-style-type: none"> <li>• Day Planner</li> </ul>	<ul style="list-style-type: none"> <li>• Websites</li> <li>• Flyers</li> <li>• Logos</li> <li>• Banners</li> </ul>

To meet the research aim and objectives, the research design was developed to include a variety of perspectives including the expatriate German management, Thai knowledge workers as well as the opinions from the German headquarters. Research design is explained below in detailed methodological steps.

## RESEARCH DESIGN

There were three main methodological steps in the research, these were:

1. Identification of appropriate sample groups and data collection.
2. Analysis of cross-cultural discontinuities via Hofstede's cultural dimensions.
3. Linking work performance/quality issues to cross-cultural discontinuities through cause and effect (fishbone) analysis.

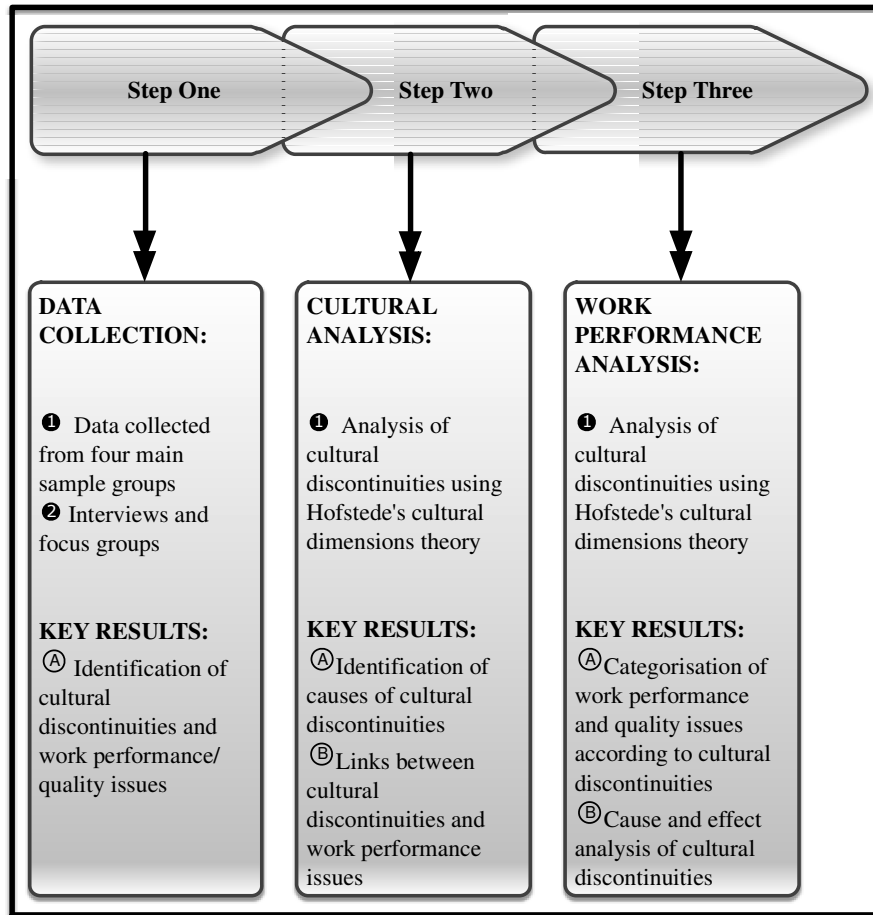
Figure 3 illustrates the three research steps, along with the main outputs.

### Sample Groups and Data Collection

The research gathered the perspectives of four main stakeholders: German managers working in Thailand, locally recruited Thai staff, German software developers working at the headquarters, and German managers, also in Berlin. Key data collection instruments were semi-structured interviews and focus groups which were carried out with each of the four main sample groups. These sample groups along with the rationale for their selection are presented in Table 2.

It is important to note that the sample sizes are relatively small, however the focus was on depth of understanding rather than range and frequency. In addition, the case firm had a limited population from which to gather data, and Mason (2010) argues that in qualitative studies, there is a point of diminishing return as sample size increases, and that the frequency of samples is rarely important. Similarly, Crouch and McKenzie (2006) illustrate that in qualitative cultural studies, the objective is to provide meaning rather than propagate wide-ranging or general hypothesis statements. A limitation of this study is that sample sizes may not be enough to achieve saturation and could preclude the generation of themes and patterns. The triangulation of results from different sample groups and the fact that this is a case study approach minimize potential impacts of this limitation. Future work will utilize the overall research process to build on results, expand sample sizes and contribute to making wider ranging and more generalizable conclusions. Thus the sample size in this research meets the objectives and principles associated with qualitative research and provides in depth

understanding of the cultural issues faced by the case firm. It is expected that results from this case study will apply to other firms in a similar situation.



**Figure 3** The three key methodological steps along with data collection techniques and key outputs (results)

SAMPLE GROUP	SAMPLE SIZE	RATIONALE
Expatriate German managers working in Thailand	2	To gather cultural perspectives of the German expatriate managers responsible for effectively managing Thai staff.
Locally recruited Thai software developers	13	To understand how Thai knowledge workers feel about German management and working within the German-Thai culture.
German developers located at German HQ	6	To understand the perspective of German knowledge workers when collaborating in the cross-cultural German-Thai workplace.
German managers located at German HQ	3	To gather perspectives of German management working at the home country in terms of cultural discontinuities and how they affect the company's knowledge work.

Focus groups were conducted with each one of the four sample groups and were used to provide an informal and relaxed discussion about issues of culture. Morgan (1998) suggests that focus groups provide an ideal platform from which to listen, communicate and learn, minimising constraints and without an intimidating atmosphere that can often plague other data collection techniques. In dealing with the sensitive issue of culture, focus groups were considered to be the most appropriate tool to question the Thai knowledge workers.

Focus groups with each of the sample groups lasted for approximately one hour and a set of predetermined discussion topics ensured the appropriate topics were covered as well as encouraging conversation and communication if the participants dried up during the session.

After completion of the focus groups, data was analysed to assess issues of German and Thai culture at the case firm, and particularly how this impacted upon work, including the performance of knowledge workers and the quality of the work itself. In addition to focus groups, the German managers were questioned more closely with respect to how they felt work performance and qualities were affected by culture. Interviews lasted approximately one hour and were structured according to three main sections. Firstly, the issues managers faced with Thai knowledge workers, secondly, the potential impacts on company productivity and finally, ways these three issues might be overcome. All interviews and focus groups were recorded and transcribed prior to analysis. Following data collection via interviews and focus groups, the results were analysed by applying Hofstede's cultural dimensions (Hofstede, 1984).

### **Analysis via Hofstede's Cultural Dimensions**

A key objective in this research relates to the cultural discontinuities that occur when international firms offshore to Thailand. While the case study is a German software developer, it acts as a reference framework and it is expected that some of the key cultural differences and challenges might occur with different cultures (albeit skewed to a different degree of influence). While software development is a quintessential knowledge industry, other knowledge based offshoring is also likely to be affected by cross-cultural discontinuities. One of the most well known cultural theories was used to underpin the cultural findings at the case firm, and acted as a frame of reference when assessing and analyzing cultural differences between the German and Thai knowledge workers.

Figure 4 illustrates the five key cultural dimensions of Hofstede's cultural dimensions theory (Hofstede, 1984), each of which has a significant impact on the way individuals act in terms of their everyday life and work.

Hofstede, Hofstede & Minkov (2010) show that the five cultural dimensions are effective at understanding the behavior of different individuals in a cross-cultural business environment. Each of the cultural dimensions are briefly outlined below.

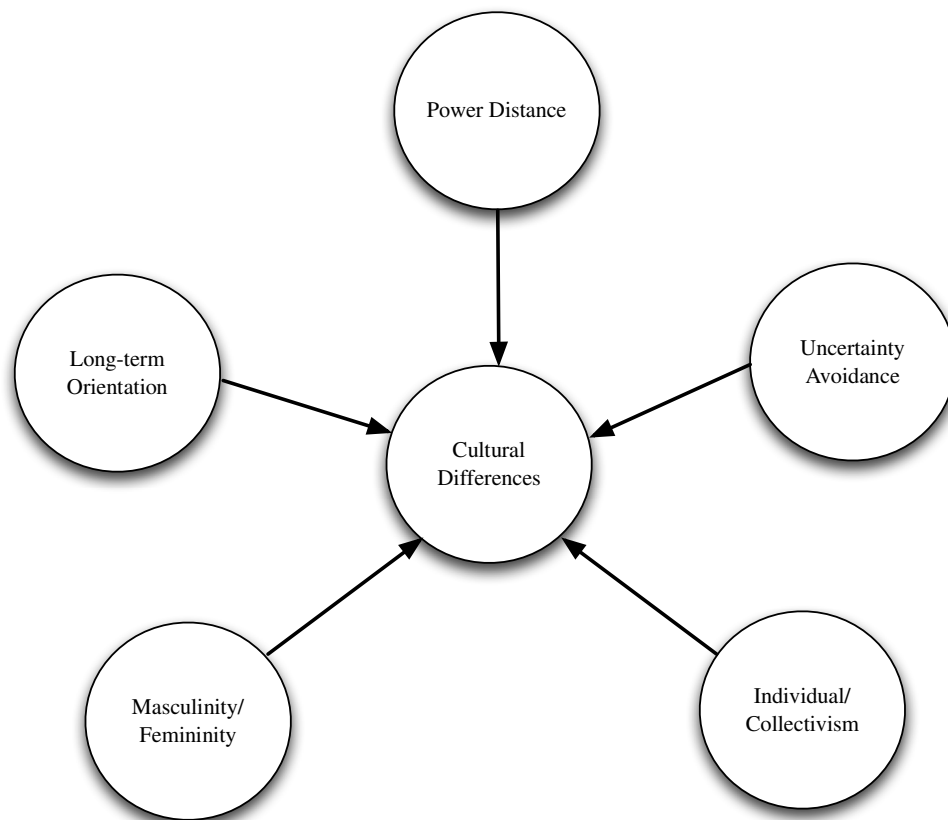
**Power distance relationship:** This can be defined as the degree to which less powerful individuals within an organisation expect and/or accept that power is distributed unevenly (Hofstede, Hofstede & Minkov (2010)). In an organisation, this depicts how a subordinate might expect a boss to treat staff and make decisions. For example in a low power-distance relationship, staff may prefer their bosses to consult and treat them as equal, while conversely, in a high power distance relationship, there might be an expectation and preference for autocratic decision making.

**Uncertainty avoidance:** This relates to tolerance of ambiguity (Hofstede, Hofstede & Minkov, 2010) and how threatened or worried individuals feel about ambiguous situations.

**Individual/collectivism:** The emphasis on individuals or on groups distinguishes the individual/collectivism cultural dimension (House, Hanges, Javidan, Dorfman & Gupta, 2004). Some societies place emphasis on individuals and their own personal identities, while others place emphasis on working together as a unit for the collective good of a group.

**Masculinity/femininity:** This dimension refers to the degree of importance placed upon what are considered masculine traits: earnings, achievement, recognition, and advancement. The feminine aspects in this dimension relate to employment security, cooperation, working relationships, and the living environment related to a job (Hofstede, Hofstede & Minkov, 2010).

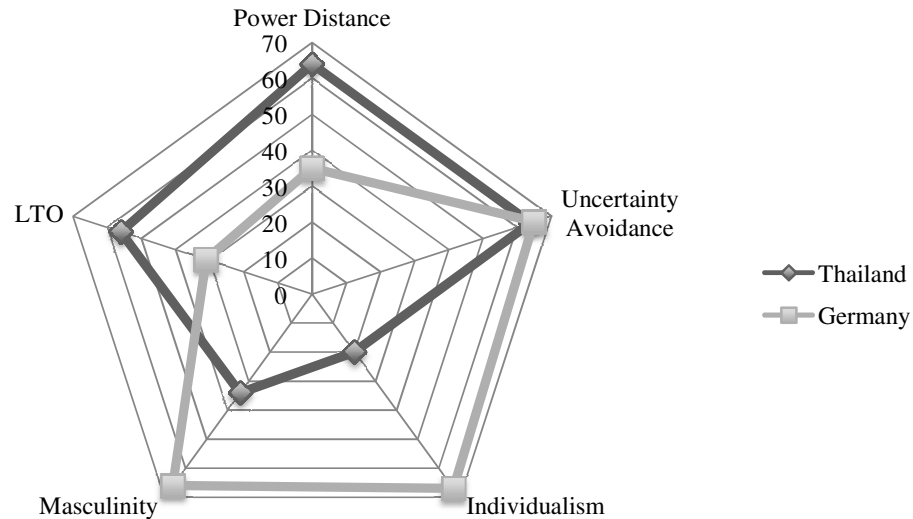
**Long-term orientation:** is the degree to which individuals are focused either on future reward, or the past and the present (Hofstede, Hofstede and Minkov, 2010). Those with a long-term orientation place importance on thrift and perseverance, while those with a short-term orientation respect tradition and saving “face”.



**Figure 4** Hofstede's five cultural dimensions (Hofstede, 1984)

Figure 5 illustrates how the five cultural dimensions relate specifically to the Thai and German culture investigated in this research, and shows the contrast between the two national cultures. These theoretical (but empirically based) cultural differences are expected to translate into cultural discontinuities in the workplace, and at the case firm. The analysis using Hofstede's cultural dimensions thus interprets the cultural issues arising from the focus groups and interviews according to these five cultural dimensions.

Figure 5 shows significant differences in four of the five cultural dimensions. After analysis using the cultural dimensions, the final step of the methodology sought to assess how these cultural dimensions affected work performance at the case firm. This was undertaken via a cause and effect analysis.



**Figure 5** The difference in Hofstede's five cultural dimensions between Thailand and Germany

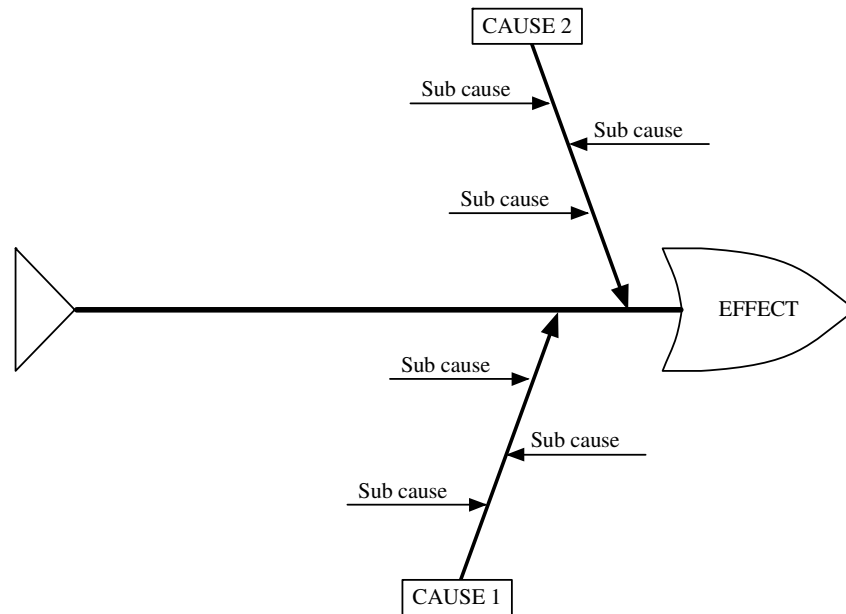
### **Cause and Effect Diagram (Fishbone Analysis): Linking Cultural Discontinuities with Work Performance and Quality**

Once the specific aspects of culture had been identified at the case firm, the research assessed how these affected work performance of the Thai software developers. Although many of the work issues identified in the interviews and focus groups related to the cultural dimensions, a sizeable number were general day-to-day issues, which might be present in any workplace. The cause and effect diagram and analysis thus aimed to isolate the more specific cultural issues from general day-to-day issues. After the focus groups and interviews were completed and analyzed, a cause and effect diagram (fishbone analysis) (Ishikawa, 1986) focused on structuring the issues. The fishbone analysis technique is detailed as a reliable and useful method for diagnosing business problems (e.g. Kettinger, Teng & Guha, 1997). Figure 6 illustrates an example pro forma fishbone diagram, indicating how it was used to analyse causes and sub causes of issues leading to a particular effect.

## **RESULTS AND DISCUSSION**

The results are split into two main parts. Firstly, results from the interviews and focus groups, which identify the cultural issues and how they affect work performance and quality. Secondly, cultural aspects are isolated from more general work performance issues via a fishbone analysis. The perspective of each sample group (i.e. German expatriate managers, German managers at headquarters, as well as German and Thai software developers) is considered when analyzing and discussing the cross-cultural discontinuities and how they affect the workplace. Finally, the results discuss the findings from a more holistic perspective

including all four sample groups and the wider context of cultural issues that arise when offshoring.



**Figure 6** An example fishbone diagram, also known as a cause and effect diagram or Ishikawa diagram

### Identifying Cultural Discontinuities

Culture is considered as the shared and collective learning of a group, which influences their response in different circumstances and these ideas are embedded into organisational culture (Pinto, 2010). When people from distinctive backgrounds work together, they share a set of assumptions, beliefs, values and norms, which represent the main composition of their work surroundings (Newstrom & Davis, 2002). Approaching knowledge work through the lens of differing German and Thai cultures shows that culture has significant impacts on work performance. Table 3 shows Hofstede's cultural dimensions for Germans and Thais and calculates quantitative differences between each of the five dimensions.

<b>Table 3</b> <b>DIFFERENCES BETWEEN GERMAN AND THAI NATIONAL CULTURES</b> <b>(Data Adapted from Hofstede, 1984)</b>			
CULTURAL DIMENSIONS	GERMAN SCORE	THAI SCORE	DIFFERENCE BETWEEN CULTURAL DIMENSIONS
• Power distance	35	64	+29
• Individualism	67	20	+47
• Masculinity	66	34	+32
• Uncertainty avoidance	65	64	+1
• Long-term orientation	31	56	+25

As Table 3 shows, the greatest difference is between aspects of individualism (a difference of 47). Individualism refers to the emphasis placed by society on encouraging individualism or conformity. Cultures with high individualism place importance on



individual achievement and initiative. In contrast, cultures with low levels of individualism emphasise group loyalty and dependence on groups, or organisations. This theoretical perspective on the apparent difference of individualism between Germans and Thais was evident in some of the observations at the case firm. For example, the large difference between individualism is exemplified by Thai software developers who prefer communicating as a group versus the usual German approach of all individuals communicating equally.

According to Table 3, there is also a large difference between Germans and Thais in terms of masculinity (difference of 32). Masculinity relates to the level of importance society places on either achievement, or nurture. Cultures with a high level of masculinity expect ambition, achievement and the acquisition of wealth. Those cultures with lower levels of masculinity emphasise nurturing for growth, and a high quality of life. This relates to the interview responses given by German managers, who suggest that Thai employees consider work of an adequate standard to be complete, and favour quality of life over work, whereas the German managers and developers strive for perfection and achievement.

Table 3 also indicates that the power distance relationship exhibits a large difference between German and Thai cultures (difference of 29). Power distance relates to the expectation of equality within an organisation. More specifically, the extent to which less powerful members of organisations expect inequality. Thais have a power distance number of 64, which is relatively high, and thus they expect power to be distributed unevenly, which would be represented by an autocratic management style. In contrast, Germans have a relatively low power distance number of 35, and expect all to be treated equally. This supports the various observations from Thai employees and German managers about the differences in their needs and expectations.

Uncertainty avoidance showed very little difference between Germans and Thais. Uncertainty avoidance signifies the degree to which individuals tolerate ambiguity or uncertainty in situations. In this respect, both Germans and Thais exhibit a similar dislike of uncertainty, and have relatively high uncertainty avoidance index. However, the responses from Germans and Thais, suggest that the uncertainty avoidance between them relates to different aspects of their work. For example, the focus groups suggest that Thais do not like uncertainty when given instructions, or in the organisation's chain of command. In contrast, Germans dislike uncertainty or ambiguity in terms of whether their Thai employees have understood a task, or whether a task is fully complete.

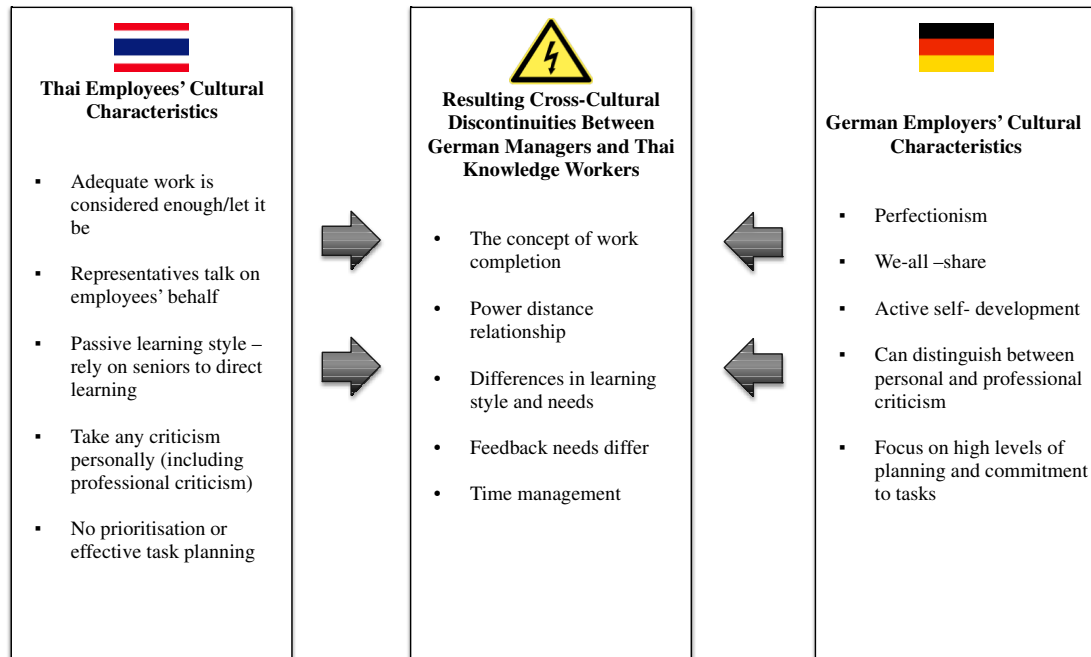
Long-term orientation (LTO) is another cultural dimension with a significant difference (difference of 25). A longer-term orientation (signified by a lower LTO number) is characterised by persistence, ordering relationships by status, and an ability to adapt. Conversely, a culture with a short-term orientation is more likely to respect tradition, focus on quick results, and not save for the future. In the context of the German-Thai working environment, this has significant implications for the performance of knowledge workers and the most appropriate ways to motivate them.

Results from Hofstede's cultural dimensions, interviews and focus groups show that there are significant differences between four of the five key cultural dimensions. Table 4 summarises the key characteristics of Germans and Thais taken from the literature and links these to the observed cross-cultural discontinuities and effects on work performance at the case firm.

<b>Table 4</b> <b>SUMMARY OF GERMAN VS. THAI CULTURAL CHARACTERISTICS AND THE EFFECTS ON WORK PERFORMANCE</b>			
TYPICAL CULTURAL BEHAVIOUR (From literature, Hofstede's dimensions and the case firm)		RESULTING CROSS- CULTURAL DISCONTINUITY	EFFECTS ON WORK PERFORMANCE OF THAI EMPLOYEES (at the case firm)
GERMANS	THAIS		
<ul style="list-style-type: none"> <li>• Strict (case study; Steers, 2010)</li> </ul>	<ul style="list-style-type: none"> <li>• Flexible cool-hearted (Jai Yen), considerate (Kreng-Jai) (case study; Komin, 1991)</li> </ul>	<ul style="list-style-type: none"> <li>• Power distance relationship.</li> <li>• Feedback needs differ</li> </ul>	<ul style="list-style-type: none"> <li>• Slow decision-making in work processes.</li> </ul>
<ul style="list-style-type: none"> <li>• Disciplined (case study)</li> </ul>	<ul style="list-style-type: none"> <li>• Not well-organised (case study)</li> </ul>	<ul style="list-style-type: none"> <li>• Concept of work completion</li> </ul>	<ul style="list-style-type: none"> <li>• Work tasks are not prioritised.</li> </ul>
<ul style="list-style-type: none"> <li>• Punctual (case study; Steers, 2010)</li> </ul>	<ul style="list-style-type: none"> <li>• Perform tasks at a pace they feel comfortable (case study), Slow work pace, (case study; Sriussadaporn, 2006)</li> </ul>	<ul style="list-style-type: none"> <li>• Time management</li> <li>• Concept of work completion</li> </ul>	<ul style="list-style-type: none"> <li>• Delays in delivering required products.</li> </ul>
<ul style="list-style-type: none"> <li>• Direct expression (case study; Hofstede, 1984)</li> </ul>	<ul style="list-style-type: none"> <li>• Indirect expression, avoid confrontation, no disputes (case study; Komin, 1991)</li> </ul>	<ul style="list-style-type: none"> <li>• Power distance relationship</li> </ul>	<ul style="list-style-type: none"> <li>• Problems remain unsolved or require time-consuming processes.</li> </ul>
<ul style="list-style-type: none"> <li>• Freedom provided for critical thinking and decision-making (case study)</li> </ul>	<ul style="list-style-type: none"> <li>• Follow commands(Kumbanaruk, 1987, Tansuvan&amp; Saeng-Xuto, 1993) obedient (Sriussadaporn, 2006)</li> </ul>	<ul style="list-style-type: none"> <li>• Differences in learning style and needs</li> <li>• Feedback needs differ</li> </ul>	<ul style="list-style-type: none"> <li>• No creativity to complete work tasks.</li> <li>• Follow orders but work without clear understanding.</li> </ul>
<ul style="list-style-type: none"> <li>• Serious (case study)</li> </ul>	<ul style="list-style-type: none"> <li>• Not serious, fun-working orientation (case study; Komin, 1990)</li> </ul>	<ul style="list-style-type: none"> <li>• Time management</li> <li>• Concept of work completion</li> </ul>	<ul style="list-style-type: none"> <li>• Work tasks are not undertaken with full competence.</li> </ul>
<ul style="list-style-type: none"> <li>• Prefer flat organisational hierarchy/equality (case study); low power distance (case study; Hofstede, 1984)</li> </ul>	<ul style="list-style-type: none"> <li>• Prefer strict organisational hierarchy (case study), high power distance (case study; Hofstede, 1984)</li> </ul>	<ul style="list-style-type: none"> <li>• Feedback needs differ</li> <li>• Power distance relationship</li> </ul>	<ul style="list-style-type: none"> <li>• Employees lose trust/respect for managers.</li> <li>• Managers lose credibility as leaders.</li> </ul>

Figure 7 summarises the key cultural differences identified from the interviews, focus groups and literature, showing how these differences create cross-cultural discontinuities in the workplace.

Each of the five cross-cultural discontinuities identified in Figure 7 are now discussed in more detail based on interview responses and focus groups at the case firm. To frame these cultural issues, where appropriate they are contextualised according to Hofstede's (1984) cultural dimensions.



**Figure 7** Cultural differences between Thai knowledge workers and German employers at the case firm based on interviews, focus groups and the resulting cross-cultural discontinuities

### Cross-Cultural Discontinuity One: The Concept of Work Completion

German managers stated that when Thai software developers sent completed versions of their software products to be tested by the software team at headquarters, the German team discovered the products were not fully functional, and not at the expected level of completion. The software products had significant aspects missing, or were simply incomplete. This highlights that the concept of product accomplishment is different between Thais and Germans. One German software developer based in Berlin elucidated this by stating:

*“I think the mindset for what is done by a Thai developer is different from what a customer expects...I think there really is a difference in the definition of what is done and complete. Maybe we will have to train and teach them about our definition of what being complete means.”*

One German team member expanded on this by noting:

*“...we need to ensure we all have the same definition of what being done means. Maybe here in Berlin we have a different expectation of quality. Maybe in Chiang Mai they have their own definition of what quality is, but we need to make sure we have the same understanding so we can all move in the same direction...”*

Another German team member hypothesised ways to overcome the different cultural definitions of work completion by recommending that Thai team members utilise checklists to ensure quality and completion:

*“...maybe it would help to give them more structure and/or to have one person that employees can talk to if there is a problem or if they don't understand...we really need a standard where if the work is marked as complete, it really must be checked and completed.”*

The evidence shows that there are key differences between the concepts of work quality and completion at the case study firm, which are related to the LTO and masculinity differences between Germans and Thais. Germans have a LTO characterised by a sense of persistence and shame, while Thais have a shorter-term orientation linked to personal stability. Germans are therefore more likely to persist to complete work, while Thais finish when they feel it is good enough. Germans also have a high masculinity, which relates to success and achievement, while Thais have a lower score in this area signifying they are more interested in personal relationships and a high quality of life. The key point is that for any small business offshoring to Thailand, they must be aware of these cultural traits and be prepared to effectively manage the differences in cultures and expectations.

### **Cross-Cultural Discontinuity Two: Power Distance Relationship**

The second cross-cultural discontinuity occurs due to differences in communication styles and expectations between the Thai developers and German managers. For example, when meeting and discussing work, either in Thailand or via teleconferencing, it is evident that most Thai software developers feel reluctant to share knowledge. They often nominate one or two representatives of the Thai team to speak on their behalf. One German team member responded to interview questions about communication as follows:

*“...I have not spoken to some team members, but they seem afraid to speak. If we have group meetings or videoconferences they don't talk, and this means they are not communicating. So you only have one or two people who are communicating with us and these people have to communicate for the others...”*

In contrast, Germans at the firm are keen on sharing and discussing various issues. Part of the communication problem relates to a language barrier, but part of the problem is based on the cultural dynamics of communication between Germans and Thais, which is ultimately related to the power-distance relationship.

### **Cross-Cultural Discontinuity Three: Differences in Learning Style and Needs**

German bosses at the case firm encourage Thai employees to use creative thinking when accomplishing work tasks, however, this is not always successful. Thai employees prefer to follow commands rather than thinking individually. As a result, Thai employees can learn more about work when their superiors pay attention to what they are doing, and provide guidelines. A Thai senior developer confirmed this:

*“Learning is somehow involved with cultural issues. Thais work mostly in silence and stay quiet despite difficulties. They try to sort out the solution, but with an empty head. However, when I sit and advise them closely, they seem to work with more confidence and even more quickly when I show them working steps such as 1,2,3...”*

This relates to the power distance relationship and the Thai preference for autocratic and clear management instructions as well as differences in individualism. Germans place a high emphasis on individualism, while Thais place a much lower emphasis on the individual and naturally prefer groups.

#### **Cross-Cultural Discontinuity Four: Feedback Needs Differ**

Results show that when giving feedback, Germans are straightforward in expressing their concerns and comments. If they find Thai workers underperforming, they openly discuss it and expect changes. Germans consider this form of feedback to be separate from the individual, and not personal. Nevertheless, Thai employees involve their emotions and personal feelings during feedback. Most feel that German management dislike them, and rather than trying to improve their work, Thai employees avoid contact. This causes frustration, degradation of their confidence, and according to management at the case firm, early resignation of Thai employees. This relates to masculinity/femininity differences where Thais place emphasis on their working environment and relationships.

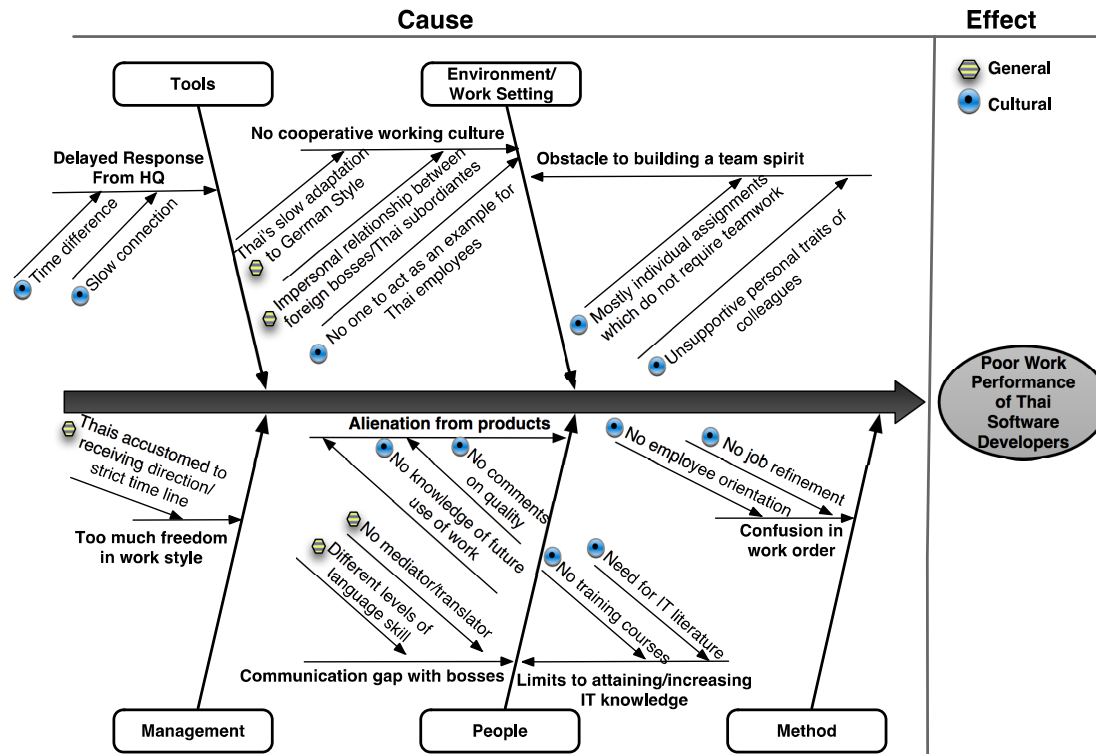
#### **Cross-Cultural Discontinuity Five: Time Management**

Time management is significant because the company subsidiary in Chiang Mai has to deliver the software product to the in-house customers (at German headquarters). Difficulties arise when Thai software developers cannot finish the final version of the software product. Cultural differences in terms of managing time relate strongly to planning and time management. The old adage of “fail to plan, plan to fail” is illustrated by Thais who do not plan their work and consequently spend significantly longer on the task than Germans who utilise their work time to plan effectively before starting a task. This again exemplifies the differences in LTO.

#### **Isolating Cultural Issues from Day-to-Day Work Problems**

The final step in the results and analysis sought to isolate the cross-cultural discontinuities from other more general day-to-day issues affecting the workplace. The rationale for this step was to corroborate the previously identified cross-cultural discontinuities and provide a summary of the cultural impacts on work performance at the case firm. Figure 8 shows the cause and effect diagram (fishbone) where each of the work performance issues identified during the interviews and focus groups has been categorised as either a cultural or day-to-day issue.

Figure 8 shows that the main issues affecting Thai knowledge workers at the case firm can be categorised into one of five categories: tools; environment/work setting; management; people; and work methods. Overall, there are 11 cultural issues and 5 general issues. This indicates that there are far more cultural issues at the case firm than general issues, and therefore has important implications for small businesses who offshore their knowledge work to Thailand. There are a variety of wider key implications to these cross-cultural discontinuities, which are brought together in the conclusion. The final section of the paper considers these cross-cultural discontinuities from a wider context and standpoint.



**Figure 8** Fishbone analysis to isolate the cultural from day-to-day work issues

## CONCLUSIONS AND WIDER IMPLICATIONS

There are a variety of preconditions for small businesses wishing to offshore their activities, however, this paper argues through the case study, that when offshoring knowledge work, there are critical aspects related to cross-cultural discontinuities. These are often overlooked until they become embodied in the firm's attempts to innovate and undertake effective knowledge work. The growing importance of knowledge work and innovation means that cross-cultural discontinuities have more importance than with traditional offshoring of simple manufacturing operations, and are more visible and relevant to small businesses, who are increasingly operating in a globalised economy with less standardised work and more emphasis on tacit knowledge tasks (Jorgensen and Koch, 2012).

Reflecting growth in the wider knowledge economy, the software industry is intrinsically knowledge based, and is structured with a high proportion of SMEs, many of which are born global (Kundu and Katz, 2003). The result is that these SMEs should consider cultural aspects as a critical feature contributing to their success or failure. While this paper has presented a German-Thai cultural perspective with specific and unique aspects, there are universally important implications, which suggest that an understanding of culture can have critical impacts on the effectiveness of small businesses engaged in knowledge work. Culture in the workplace should be considered by businesses when deciding whether to offshore as it can have a wide ranging and significant impact on the success of offshore business activities. Understanding culture is useful for developing economies such as Thailand who wish to encourage economic growth through FDI. It is perhaps even more crucial for SMEs, who must understand cultural interactions to ensure they remain at the forefront of offshoring, taking full opportunity of internationalisation rather than becoming hindered by it. The process and methodology in this paper has used well-established cultural dimensions

(Hofstede, 1984; Hofstede, Hofstede & Minkov, 2010) to understand cultural impacts on intrinsically knowledge related work (software development). The key value of this article is that it brings forward cultural considerations and insights that should be considered by SMEs who wish to offshore their knowledge work. The considerations and insights from this case study are consistent with those found in the existing literature and highlight some of the challenges that SMEs might face when working cross-culturally in a global environment. Impacts on productivity, service and the overall organisational aims are highlighted through the lens of Hofstede's cultural dimensions, which serve to reveal insights and perspectives that must be considered if SMEs want to gain the full benefits of offshoring in a global economy.

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