Best practices integration during acquisitions—The roles of culture in knowledge sharing in cross-cultural acquisitions.

Law Yuet Yung, Florence
MBA (CUHK, Hong Kong), B.Sc. (HKU, Hong Kong)

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DECLARATION

Statement of Originality
I hereby certify that the work embodied in this Dissertation Project is the result of original research and has not been submitted for a higher degree to any other University or Institution.

Signature: _________________________ Date: 4 Jul 2014
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SYNOPSIS

In a fast-changing and volatile business world, firms draw on dynamic capabilities to create, extend and modify their resources and capabilities in order to enhance their competitive position. Cross-cultural acquisitions are one of the corporate strategies for firms to grow across borders and to gain access to new bases of knowledge and capabilities. Management desires to integrate the best practices from both firms after acquisition. Best practices are considered to be the best operational capabilities in various organizational functions to operate a firm effectively and efficiently. Operational capabilities draw on organizational routines that embody knowledge. Through sensing opportunities, seizing identified opportunities and reconfiguring resources and capabilities, firms can systematically integrate best practices in operational capabilities from the acquiring and acquired firms.

Knowledge sharing within the context of the three dynamic capabilities processes affects the knowledge-based routines that make up operational capabilities. Hence, knowledge sharing is embedded in the three dynamic capabilities processes that enable the integration of best practices in operational capabilities. There are intensive interpersonal interactions during the knowledge sharing process. In a cross-cultural context, culture plays an important role in knowledge sharing and hence affects best operational capabilities integration. This dissertation endeavors to explore how and when culture makes a difference to the efficiency and effectiveness of knowledge sharing, a change which is visible in altered operational capabilities, during the sensing, seizing and reconfiguring processes.

The qualitative case study approach supports this empirical research by obtaining rich contextual data and insightful information from interviewees to better understand the cross-cultural micro-foundations underlying knowledge sharing for the integration of best practices in operational capabilities. Three cross-cultural acquisition cases of one multi-national corporation were purposefully selected to reflect certain features of different types of acquisitions. The empirical findings from this research show that different cultural dimensions exert different impacts with different degrees of strength on the efficiency and effectiveness of the knowledge sharing during the sensing, seizing and reconfiguring processes. This in turn affects the integration of best practices in
operational capabilities. This empirical research contributes practical insights. In particular, it suggests the introduction of structured processes to facilitate knowledge sharing for integration of best practices systematically; such structured processes should account for different cultural dimensions affecting knowledge sharing in different processes in cross-cultural acquisitions. On a scholarly level, this study opens up future research opportunities with new perspectives on the duality of ostensive and performative dynamic capabilities.
1 CHAPTER ONE: INTRODUCTION

1.1 Background of the Research
Continuous growth is a goal of most companies. There are three major routes to growth and each has different implications. The pace of organic growth can be slow, where established competitors exist in the market limiting further penetration by a firm. The cost of growth through innovation can be high, as can the associated technical risk. Growth through acquisition gives the highest possibility of rapid growth among the three major routes (Lees, 2002). Indeed, mergers and acquisitions (M&As) are a popular way for firms to attain corporate diversity and business growth (Hitt, Harrison, Ireland & Best, 1998; Nahavandi & Malekzadeh, 1988). According to the World Investment Report 2013, cross-border M&As amounted to US$308 billion in 2012 despite the more restrictive regulatory concerns and the reduced M&A activities in developed countries after the financial crisis (United Nations, 2013).

Growing beyond national borders and leveraging global opportunities are important business strategies of multi-national corporations (MNCs). There is an increase in companies expanding across borders and pursuing global diversification (Brodbeck et al., 2000). Acquisitions are one way for MNCs to grow across borders (Brannen & Peterson, 2009). Through acquisitions, firms can strengthen their competitive advantages by deployment of dynamic capabilities to create, extend or modify their resource and capabilities bases (Capron & Anand, 2007). It is for this reason that acquisitions remain one of the viable growth strategy options for top management (Azan & Sutter, 2010; Hitt et al., 1998).

MNCs compete worldwide; in particular in globalized industries and markets. Consequently, they increase the deployment of cross-cultural acquisitions as one strategy to realize their growth targets and financial goals, and to achieve enhanced operational efficiency, greater market power and higher resilience against economic volatility (Brannen & Peterson, 2009; Hitt et al., 1998). By selecting the right acquired firm with a strategic fit, MNCs can gain access to a targeted market, technological know-how, innovative capabilities, new resources and a broader knowledge base (Capron & Anand, 2007; Greenberg, Lane & Bahde, 2005; Vermeulen & Barkema, 2001). Through integrating best practices in their respective operational capabilities
from the acquiring and acquired firms, firms can enhance their operational capabilities with the most suitable set of interlinked resources.

Operational capabilities including sales and marketing capabilities, production capabilities, innovation capabilities and services capabilities, which consist of patterned organizational behavior, enable firms to run the daily business and to sustain a living in the present (Helfat, 2007; Winter, 2003). Best practices are considered as best operational capabilities. The process of integrating best practices, or operational capabilities interchangeably, from both firms is conceptualized as deploying dynamic capabilities: sensing current operational practices, seizing combination or integration of current practices as the best approach, and reconfiguring best practices with a suitable set of pooled resources (Teece, 2007).

Knowledge sharing is a key element embedded in the dynamic capabilities processes that enable integration of best practices in operational capabilities (Denford, 2013). There are intensive interpersonal interactions to share knowledge during the sensing, seizing and reconfiguring processes (Holste & Fields, 2010; Jashapara, 2004). In a cross-cultural setting, culture plays an important role in knowledge sharing, affecting the extent (effectiveness) and the ease (efficiency) with which knowledge is shared (Bhagat, Kedia, Harveston & Triandis, 2002; McDermott & O’Dell, 2001). Therefore, it is important to understand the roles of culture in knowledge sharing for best practices integration in cross-cultural acquisitions within the dynamic capabilities framework in order to accomplish successful integration and to realize the anticipated benefits.

1.2 Culture as Affecting Best Practices Integration
Significant benefits such as synergistic learning, broadening of the knowledge base, decreasing inertia of firms, greater market power and removal of entry barriers can be derived through acquisitions and can lead to enhanced organizational and financial performance (Brannen & Peterson, 2009; Vermeulen & Barkema, 2001). However, acquisitions may also have negative consequences including the payment of a high takeover premium and work alienation incurred from acculturation stress induced by cross-cultural acquisitions (Eckbo & Langohr, 1989; Jarrell, Brickley & Netter, 1988;
Very, Lubatkin & Calori, 1996). Drawbacks like these can hinder the realization of expected benefits. Uhlenbruck (2004) identified cultural differences and cultural incompatibility as the major causes of failure in that they impair complementarity of resources between firms (Azan & Sutter, 2010). In fact, cultural incompatibility can obstruct acquisition of knowledge, and organizational culture is considered as a key barrier to leveraging intellectual assets (De Long & Fahey, 2000; Lyles & Salk, 2007).

Although practitioners and academic researchers have addressed aspects of cross-cultural issues and knowledge sharing in cross-cultural acquisitions, integrating best practices in a cross-cultural context remains a difficult management problem (Bresman, Birkinshaw & Nobel, 2010; O’Dell & Grayson, 1998; Szulanski, 1996). This dissertation endeavors to address this problem by investigating how and when culture makes an impact on knowledge sharing within a dynamic capabilities framework through a case study approach.

1.3 An Overview
1.3.1 Dynamic capabilities
The concept of dynamic capabilities sets the framework for this dissertation. The seminal work of Teece, Pisano and Shuen (1997) analyzed the sources of value creation and capture by firms in response to a changing environment. Sensing opportunities, seizing opportunities and reconfiguring organizational resources and capabilities are the three capacities of dynamic capabilities (Teece, 2007). Organizational routines are embedded in the concept of dynamic capabilities (Jashapara, 2004). Through sensing, seizing and reconfiguring processes, firms employ organizational routines to adapt their operational capabilities systematically to enhance organizational effectiveness (Jashapara, 2004; Zollo & Winter, 2002).

1.3.2 Acquisition-based dynamic capabilities
Firms can benefit from acquisitions through effective integration of capabilities and resources during post-acquisition integration to enhance their competitive advantages (Brock, 2005; Capron & Anand, 2007). There is some exchange of knowledge during
the pre-acquisition due diligence phase between the potential acquiring and acquired firms to assess strategic fit (Harvey & Lusch, 1998). However, knowledge sharing is limited due to regulatory boundaries and legal restrictions. There are limitations on time and information access (PricewaterhouseCoopers, 2013). For instance, the potentially acquired firm may not reveal the full limitations of their existing operational capabilities in order to remain attractive to, or negotiate for a higher premium from, the potential acquiring firm. Some information may be overlooked that would have precluded any acquisition decision (Davis, 2009). Right after the acquisition, the acquiring and acquired firms enter the integration phase. They engage in intensive exchanges going through the sensing, seizing and reconfiguring processes to assess the quality of each operating functional area, and to identify opportunities to modify systems and functions for accelerated integration and enhanced performance (Harvey & Lusch, 1998).

Evaluating the current operational practices and integrating the best practices from both firms involve social interactions, which themselves underlie knowledge sharing during the three processes of activities (Prieto & Easterby-Smith, 2006). In cross-cultural acquisitions, cultural differences affect knowledge sharing between the acquiring and acquired firms (Anantatmula, 2010; McDermott & O’Dell, 2001). It is, therefore, expected that the cultural impact on knowledge sharing is more prominent during the post-acquisition phase due to the greater interaction required to achieve greater knowledge transfer, as compared to the pre-acquisition phase. However, how culture affects knowledge sharing during the three respective processes, from sensing to seizing and reconfiguring, has not been a focus of research in extant literature (Barreto, 2010).

1.3.3 Culture as affecting knowledge sharing for best practices integration

Culture is the collective programming of the mind which can differentiate the members of one group from another (Hofstede & Bond, 1988). It is a salient context defining the value of resources and experience (Uhlenbruck, 2004). Values influence behavior and affect perception (Fernandez, Carlson, Stepina & Nicholson, 1997). Hence, culture is expressed in the way individuals respond to and solve problems (Trompenaars & Hampden-Turner, 1998). Societal culture and management style are interrelated (Brodbeck et al., 2000). Therefore, it is important to understand the national culture, which establishes the framework to understand organizational culture. The seminal
work by Hofstede (1980), the extended research by Hofstede and Bond (1988), and the wide-ranging cross-cultural research in the Global Leadership and Organizational Behavior Effectiveness (GLOBE) project (House, Hanges, Javidan, Dorfman & Gupta, 2004) form the basis for the current study to depict the characteristics of different national cultures.

Hofstede and Bond identify five dimensions of national culture, namely, power distance, individualism, masculinity, uncertainty avoidance and long-term orientation (or Confucian dynamism) (Hofstede, 1980; Hofstede & Bond, 1988). The key assumption of Hofstede’s work is that cultural values are stable over time. As values and attitudes of individuals are stable over time, change is difficult (Barkema & Vermeulen, 1997; de Mooij, 2001).

National culture is the highest level of all forms of culture (Trompenaars & Hampden-Turner, 1998). Differences in national culture express themselves in many aspects like values, beliefs, assumptions, practices and behaviors (Kanter & Corn, 1994). It is not easy for any individual to have the same set of ideas and values as another, and this difficulty is magnified if the individuals involved hail from different national cultures. Therefore, culture is viewed as a major barrier to knowledge sharing within a company (McDermott & O’Dell, 2001). However, empirical research to study the influence of national cultural dimensions on knowledge sharing is limited (Ardichvili, Maurer, Li, Wentling & Stuedemann, 2006).

There is research showing that organizational culture also affects knowledge sharing (Kaweevisultrakul & Chan, 2007). Organizational culture can hinder leveraging of intellectual capital (De Long & Fahey, 2000). Certain factors of organizational culture such as rewards and organization structure play an important role in knowledge sharing (Al-Alawi, Al-Marzooqi & Mohammed, 2007).

1.3.4 Organizational learning
It is important for organizations to keep up with relevant knowledge as it emerges, and to maintain and build best practices. Development of operational capabilities to keep best practices can occur through organizational learning processes (Maritan, 2007).
Effective knowledge management thus becomes important in order to accomplish the strategic goals of increasing intellectual capital and enhancing organizational performance (De Long & Fahey, 2000; Jashapara, 2004). Knowledge transfer is vital for the success of linked organizations in codifying organizational routines across establishments to achieve standardization of business practices (Spender & Grant, 1996).

A company embodies a wide range of knowledge, and effective sharing of such knowledge improves financial performance, operational efficiency and organizational competence (O’Dell & Grayson, 1998). For effective knowledge management, it is essential to have good management of information systems and human resources (Jashapara, 2004). It requires a concerted effort and a holistic approach to improve the creation, dissemination and use of knowledge (Davenport, Prusak & Strong, 2008).

Organizational learning is a dynamic and repetitive process based on routines (Levitt & March, 1988). Therefore, an organization needs to develop information processing and control capabilities in order to coordinate activities across different environments (Barkema, Shenkar, Vermeulen & Bell, 1997). Multi-national corporations hold an advantage in cross-border knowledge building owing to their flexible use of multiple mechanisms of knowledge transfer, as well as their simultaneous integration and development of technical knowledge (Almeida, Song & Grant, 2002). However, they also face unusually complex problems in learning to work with and around differences in national and organization cultures and in integrating personnel and practices from widely different backgrounds into functionally cooperative teams.

1.3.5 Barriers to cross-cultural knowledge sharing
Knowledge sharing across cultures poses challenges to firms. A significant proportion of research specifies cross-cultural problems that are associated with knowledge sharing (Barna, 1976; Lyles & Salk, 2007), whereas limited research uncovers the benefits of cultural diversity in such cross-cultural contexts (Vermeulen & Barkema, 2001). For example, organizational culture has been found to be a major hurdle to leveraging intellectual capital (De Long & Fahey, 2000). Research shows that culture can be a barrier to knowledge sharing by shaping the social context in which individuals
communicate (Kaweevisultrakul & Chan, 2007; McDermott & O’Dell, 2001). Little, however, is known about the specific roles of culture in the process of knowledge sharing in cross-cultural ventures (De Long & Fahey, 2000). Consequently, this dissertation examines in depth the roles of culture in knowledge sharing in cross-cultural acquisitions with the goal of understanding how culture affects the efficiency and effectiveness with which knowledge is shared during each of the dynamic capabilities processes and what operational capabilities or best practices are developed as a result.

1.4 Research Questions

As cultural aspects can inhibit sharing of knowledge, this dissertation will focus on developing a better understanding of how culture affects knowledge sharing during the sensing, seizing and reconfiguring processes immediately after cross-cultural acquisitions. Addressing this question enables us to describe how to integrate best practices in cross-cultural acquisitions.

Accordingly, the specific research questions addressed in this dissertation are:

1) How does culture affect knowledge sharing during the sensing process after acquisition?
2) How does culture affect knowledge sharing during the seizing process after acquisition?
3) How does culture affect knowledge sharing during the reconfiguring process after acquisition?

1.5 Key Issues from the Literature

The extant literature on dynamic capabilities is mainly theoretical in tenor and little empirical research is available (Jashapara, 2004; Zheng, Zhang, Wu & Du, 2011). There is a need for further studies that deal with the international aspects of cross-cultural acquisitions because the knowledge sharing on which they are dependent can be affected by cross-cultural challenges.
The sensing process requires a capacity to learn (Teece, 2007). This learning capacity may be affected by national and/or organizational cultural differences in a cross-cultural acquisition context. Therefore, exploring this should produce a better understanding of how cultural dimensions affect the sensing process.

Firms can address opportunities by maintaining and enhancing operational capabilities and competences. The seizing process requires a capacity to make high-quality decisions in order to integrate current practices into the best approach (Teece, 2007). Effective communication and commitment are needed. These may be a greater challenge in cross-cultural acquisitions. It is for this reason important to understand the cultural impact on the seizing process.

The reconfiguring process requires the capacity to implement the agreed action plan so that the best practices with the right set of capabilities and resources can be configured (Teece, 2007). Integration of know-how and adaptation of structures may take place. Different values and behaviors in a cross-cultural context can pose significant challenges to the reconfiguring activities. It is, therefore, important to understand how culture influences this process.

An extensive body of literature in relation to the cultural impact on knowledge sharing exists (Bhagat et al., 2002). For instance, knowledge transfer is less effective when the transacting organizations show differences in attitudes towards individualism and collectivism (Bhagat et al., 2002). Social capital, which constitutes the firm’s stock of intellectual capital, is greater in more collectivistic cultures (Gudergan, 2007). However, further research is needed for empirical proof or validation with respect to the specific research questions posed in this dissertation.

1.5.1 Cross-cultural micro-foundations underlying dynamic capabilities

Cross-cultural acquisitions can strengthen the operational capabilities of firms by deploying dynamic capabilities processes in order to enhance organizational performance and to improve financial results (Brannen & Peterson, 2009; Capron & Anand, 2007; Vermeulen & Barkema, 2001). Acquisitions can provide to a firm resources and capabilities which are distinct and distant from its existing knowledge
base, as well as opportunities to reconfigure the pooled resources and capabilities for better organization and operation (Capron & Anand, 2007). During the integration phase, procedures and processes are put in place to leverage the newly acquired knowledge base. Yet, there are few, if any, systematic studies illustrating the internal stickiness impeding the transfer of best practices specifically with respect to the cross-cultural micro-foundations in these settings (Brewer, 2008; Szulanski, 1996).

Micro-foundations have emerged as an important focus in business research. This is because understanding of some issues demands attention to the explanatory mechanisms that are embedded at the micro-level where individual action takes place (Abell, Felin & Foss, 2008). Micro-foundations are conceptualized as foundations rooted in individual action and interpersonal interaction (Foss, 2011). Individuals are the starting point for firms that embody collective structures, routines and capabilities (Felin & Foss, 2005). Human interaction occurs at the individual level. Individuals and teams are, therefore, enablers and inhibitors influencing the evolution of dynamic capabilities. Dynamic capabilities are embedded in organizational processes and routines as well as in individuals and teams. Micro-foundations of dynamic capabilities thus associate organizational dynamic capabilities with individual and team dynamic capabilities (Sprafke, Externbrink & Wilkens, 2012). Macro-level phenomena are mediated by the micro-level action and interaction that occurs on the individual and team level (Foss, 2011). Dynamic capabilities are operationalized on these three levels of individual, team, and firm. Research shows that individual dynamic capabilities contribute to firm-level dynamic capabilities with mediation by team-level dynamic capabilities (Sprafke et al., 2012).

The core essence of dynamic capabilities is entrepreneurial, and hence the entrepreneurial acts of individuals are accountable for sensing opportunities, seizing the identified opportunities and reconfiguring resources and capabilities for implementation (Augier & Teece, 2009; Sprafke et al., 2012). However, the roles of human factors and individual actions are not sufficiently examined in existing research, and a systematic integration of individual competences, team skills and organizational capabilities with a causal relationship is missing (Sprafke et al., 2012). Therefore, this dissertation addresses the cross-cultural aspects in micro-foundations with the intent to fill this gap.
1.5.2 How and when culture makes a difference

Culture matters in international business management and its importance is well recognized (Hofstede, 1994; Trompenaars & Hampden-Turner, 1998). Cultural dimensions have been defined and the effects of cultural dimensions on different disciplines such as social capital and leadership have been studied (Bhagat et al., 2002; Brodbeck, Frese & Javidan, 2002; Gudergan, 2007; Hofstede & Bond, 1988; House, Javidan, Hanges & Dorfman, 2002).

During the sensing, seizing and reconfiguring processes for integration of best practices in operational capabilities, intensive sharing concerning organizational routines and experience of their deployment takes place among the employees from the acquiring and acquired firms (Helfat, 2007; Teece, 2007). A cross-cultural context influences the knowledge and experience sharing processes and thus influences the extent to which and the ease with which knowledge is shared. Ultimately, it affects the integration of the best practices in operational capabilities. Therefore, it is important and pragmatic to explore when and how culture makes a difference (Leung, Bhagat, Buchan, Erez & Gibson, 2005). It is the objective of this research to investigate how (which cultural dimensions affect the knowledge sharing process and their impact on associated outcomes) and when (in the sensing, seizing and reconfiguring processes) culture makes a difference.

1.6 The Research Methodology

1.6.1 Case study with interviews

A case study approach is an appropriate research design in business research that has a bounded focus on certain parameters for intensive and detailed examination (Bryman & Bell, 2011). Ellram (1996) shows that the case study approach is suitable for theory building, providing detailed explanation of best practices, and exploring and understanding ‘how’ and ‘when’ research questions. Furthermore, carrying out interviews is an effective means to collect useful data in qualitative research and is considered a social encounter and an interactional event (Bryman & Bell, 2011; Davies & Dodd, 2002; Rapley, 2001; Sturges & Hanrahan, 2004; Suchman & Jordan, 1990). It allows the researcher to solicit rich and detailed answers from interviewees.
In this study, the processes of integrating best practices in operational capabilities and knowledge sharing are set in the context of cross-cultural acquisitions which requires the collection of rich empirical data related to such acquisitions (Silverman, 2005; Yin, 2003). Therefore, a qualitative methodology was chosen for this exploratory study. In light of the research objective to explore micro-level knowledge sharing processes across the three dynamic capabilities processes, a representative sample was not feasible as the sampling method would preclude certain data collection methods required by the intensive investigation necessary for this empirical research. Therefore, an in-depth case study approach was chosen to deliberately reflect certain features of the population, i.e. an MNC engaged in cross-cultural acquisitions in culturally distant contexts (Ritchie, Lewis & Elam, 2003). The aims are to obtain in-depth and first-hand information and to tap the thoughts, ideas and experiences of participants in cross-cultural integration processes through relatively intense interactions (Levine, Gallimore, Weisner & Turner, 1980). Semi-structured interviews were therefore carried out with members of a Germany-based MNC who have been involved in cross-cultural acquisitions. Questions were open-ended so that the interviewees could express themselves freely and with depth. In this dissertation the ‘cross-cultural acquisition’ unit of analysis refers to the organizational setting that combines the acquired firm and the relevant parts of the acquiring firm and their respective employees.

1.6.2 Interview mode
Individual interviews were determined to be the best approach so that every interviewee could express his or her own views freely. The interviewees worked in different countries across the globe, including Hong Kong, Taiwan, China and Germany. When travel schedules matched well, they were visited and face-to-face interviews were conducted. Due to travelling costs and time constraints, telephone interviews were arranged if the interviewees were not easily accessible.

1.7 Ethical and Safety Implications
Ethics is a basic principle and an integral part of rigor in research practices (Davies & Dodd, 2002). Therefore, ethical considerations are essential in conducting interviews for
empirical research. Before conducting the field research, prior ethical approval was obtained from the University of Newcastle. Subsequently, letters asking for voluntary support from the top management of the Germany-based MNC and its employees were sent in advance. After receipt of the agreement by the organization and its employees, interviews were conducted. Prior consent was obtained before any taping of responses (Ostrower, 1998). Moreover, interviewees were explicitly made aware of their right to withdraw from participation at any time without giving any reason. After the interviews, the transcripts were sent to the participants for review and editing. To ensure the confidentiality of the participants, pseudonyms are used for the names of the organizations and the participants such that their identities cannot be recognized.

1.8 Limitations
All research has limitations, and this study is no exception. The first concerns the research methodology. Since the data collected from qualitative research are not readily codified, this raises the general issues of reliability and validity. Therefore, to ensure rigor in this piece of qualitative research, I adopt procedures such as thick description, peer review and proper analysis of the interviews (Creswell & Miller, 2000; Seale & Silverman, 1997).

The use of Hofstede’s and the GLOBE’s work on cultural dimensions may impose another kind of limitation. Using country borders to measure cultural differences is perhaps oversimplified (Barkema & Vermeulen, 1997). The conceptual framework in this study draws on insights from Hofstede and the GLOBE project and considers their relative relevance in the context of the empirical data. However, this approach is consistent with the research problem of not knowing how culture will affect the dynamic capabilities processes. It is not clear which cultural dimensions play a role during the integration of operational capabilities. Nevertheless, this approach also responds to the recent calls for international management researchers to use qualitative methods when a theoretical lens sheds only partial light on phenomenon in the MNC context and to resist the temptation to rely on a single theoretical lens (Doz, 2011).
Like most studies that rely on a single or a small number of case studies, the validity of the findings may be confined to a few acquisition cases (Azan & Sutter, 2010). We cannot generalize confidently. Nevertheless, this study still contributes specific and comparatively deep insights into the research problem (Yin, 2003). In addition, it helps theory building on a number of levels, from problem definition to construct validation based on empirical data (Eisenhardt, 1989).

1.9 Conclusions
Top management desires to integrate best practices in cross-cultural acquisitions. But the challenge lies in how to achieve this goal. Understanding the roles of culture in knowledge sharing is an important gateway to accomplish the objective. Based on this context, this introductory chapter has set the scene and laid the foundation of this study.

To close this chapter, the structure of this dissertation is presented in the following schematic diagram.

<table>
<thead>
<tr>
<th>Chapter One: Introduction</th>
<th>* Outline of the study</th>
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<tbody>
<tr>
<td><strong>Chapter Two: Literature Review</strong></td>
<td>* Existing theoretical framework * Research opportunities</td>
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<tr>
<td><strong>Chapter Three: Research Methodology</strong></td>
<td>* Research design * Data collection</td>
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<tr>
<td><strong>Chapter Four: Results and Discussion</strong></td>
<td>* Data analysis * Data findings</td>
</tr>
<tr>
<td><strong>Chapter Five: Conclusion</strong></td>
<td>* Conclusion of the study * Implications and future research * Limitations</td>
</tr>
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</table>
Chapter One gives an overview of the whole study: the research topic and questions, theoretical framework, gaps in the literature, research design, ethical and safety implications, and the contributions and limitations of the study. After the overview, Chapter Two reviews and appraises the extant literature concerning knowledge sharing for best practices integration in cross-cultural acquisitions. Following the literature review, Chapter Three presents the research methodology. It explains and also justifies the use of qualitative interviews for data collection. Chapter Four examines the data and derives findings from the field research within the context of established theory. Lastly, Chapter Five concludes and discusses the implications and limitations of the study.
2 CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction
Chapter One established the issue of how to integrate best managerial practices after acquisitions and specified the research problem as one of understanding the roles of culture in knowledge sharing in cross-cultural acquisitions within a dynamic capabilities framework. The present chapter provides a more comprehensive literature review, particularly of best practice integration in cross-cultural acquisitions, and critically appraises how the existing scholarship relates to this research problem. Specifically, it explores what the cross-cultural aspects affecting this integration are and what we know and do not know about their effects and roles.

To start, I examine dynamic capabilities and acquisition-based dynamic capabilities more comprehensively to understand the nature of best practices integration in acquisitions. Further insights are then developed through discussing the concepts of knowledge sharing and integration. The aggregate concepts of knowledge sharing processes requires further research to construct micro-foundations by exploring how knowledge sharing processes are related to social interactions, and to better understand micro-level processes in organizational knowledge flow through social interaction (Foss, Husted & Michailova, 2010; Foss & Pedersen, 2004). Moreover, cultural aspects are examined to explain when such integration of best practices is fostered or hindered. The chapter concludes with a set of research opportunities and related research questions with sub-questions.

The following schematic diagram outlines the structure of Chapter Two.
2.2 Dynamic Capabilities for Sustainable Organizational Development

2.2.1 Importance of dynamic capabilities

It is important for firms to exploit and explore changes in order to adapt effectively in a dynamic and volatile business environment (Zheng et al., 2011). A seminal article by Teece, Pisano and Shuen in 1997 introduced the dynamic capabilities framework and addressed how firms cope with the changing environment by purposefully creating, extending and modifying their resource bases. Since then, there has been a growing attention to this question in the literature of strategic management and business...
management in recent years (Barreto, 2010; Teece et al., 1997). This confirms the increasing interest in the concept of dynamic capabilities among scholars over time. In the extant literature, discussion of dynamic capabilities ranges from specific processes to collective behavior or capabilities (Enkel, Rosenø & Mezger, 2012). Despite the rapid growth in this scholarship, there remain substantial gaps (Zheng et al., 2011). The only peer-reviewed scholarly article having the key words of dynamic capabilities and international acquisitions focuses on the importance of the top management team (TMT) of the acquired firm, which affects the success of the acquisition (Kiessling, Harvey & Moeller, 2009). This study, however, does not examine the roles of culture during the integration phase. Hence, there appear to be no studies that specifically examine the roles of culture in knowledge sharing within the context of cross-cultural acquisitions and that consider a dynamic capabilities conceptualization. It is this research gap that this dissertation addresses. Moreover, there is little empirical research on dynamic capabilities in any context so far (Zheng et al., 2011).

Dynamic capabilities are defined as the ability of the firm to integrate, build and reconfigure both internal and external operational capabilities in order to cope with the changing environment (Teece et al., 1997). The essence of dynamic capabilities is the firm’s capacity to create, modify and stretch its resource base purposefully (Capron & Anand, 2007). The capability of exploring and exploiting external knowledge is an important element of innovative capabilities, which are part of operational capabilities (W. M. Cohen & Levinthal, 1990). The dynamic capabilities framework focuses on how organizations regenerate their resource-based competitive advantages in a dynamic manner (Zheng et al., 2011). Dynamic capabilities embody organizational routines (Jashapara, 2004). Organizational routines, in general, benefit firms through enhancing reliability and efficiency; and ultimately improving organizational performance (M. D. Cohen & Bacdayan, 1994). Dynamic capabilities represent organizational routines to learn new routines (Jashapara, 2004). This enables firms to then develop and adapt their operating routines systematically through structured, persistent and collective activities and process improvements to enhance organizational effectiveness (Zollo & Winter,

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1 Browsing through the EBSCO research database using dynamic capabilities as key words, I found 3,598 peer-reviewed scholarly articles published between January 1997 and December 2013.

2 For instance, there were only 29 peer-reviewed scholarly articles with dynamic capabilities and knowledge transfer as the key words, and 1 peer-reviewed scholarly article with dynamic capabilities and international acquisitions as the key words during the same period.
Consequently, firms can secure long-term business performance through creation, deployment and protection of their unique asset bases (Teece, 2007).

In a static environment, organizational routines prevail, which are characterized by stable and predictable patterns of practice and behavior (Jashapara, 2004). However, markets can change quickly and are sometimes turbulent. For instance, the global financial crisis in 2009 and the Euro crisis in 2011 led to an agitated and restless business environment. Under conditions of market dynamism, firms benefit from learning to modify and adapt their operating routines so to maintain their competitive advantages. Hence, dynamic capabilities can be conceptualized as a series of learning processes to handle knowledge resources in addressing dynamic markets or volatile environments (Zheng et al., 2011).

Dynamic capabilities are comprised of three capacities, namely sensing opportunities, seizing opportunities, and reconfiguring organizational resources and operational capabilities (Teece, 2007). Details of each capacity are described in the next sections.

### 2.2.2 Sensing opportunities

In a fast-changing world, new business opportunities emerge, that, in turn, can represent possible avenues for firms to change their strategic operations. The capacity to sense opportunities reflects a firm’s ability to scan, create, learn and interpret information and knowledge (Teece, 2007). This ability is encapsulated in organizational routines that facilitate the gathering, organizing, filtering and prioritizing of information by individuals and teams (Sprafke et al., 2012). This forms the basis for the firm to develop the propensity to sense any emerging opportunities and potential threats (Barreto, 2010).

### 2.2.3 Seizing opportunities

The next step after sensing opportunities is to seize them. The capacity to do so may demand new services or processes, which in turn requires adaptation of enterprise structures, procedures or designs from the firm (Teece, 2007). During this seizing process, individuals and teams need to provide and ask for feedback actively, integrate knowledge and expertise, and make high-quality decisions about possibly new
specifications or potential solutions for reconfigurations that are associated with a decision to invest or not based on complex information (Sprafke et al., 2012).

### 2.2.4 Reconfiguring resources and capabilities

Following the seizing of opportunities, firms develop specifications to reconfigure and to recombine organizational resources and operational capabilities to leverage those opportunities of which it has decided to take advantage and to proceed to realize them (Teece, 2007). During the process of specifying reconfigurations, individuals and teams benefit from organizational routines that facilitate applying experiences and knowledge to new situations; communicating comprehensively and precisely; shifting perspectives; and adapting to others (Sprafke et al., 2012).

During the sensing, seizing and reconfiguring processes, human interactions occur to share and transfer information and knowledge. In cross-cultural settings, a range of questions arises concerning such interactions. The questions are summarized in Table 2.1. Empirical understanding of these cross-cultural micro-foundations underlying knowledge sharing within the dynamic capabilities framework is currently limited (Ambrosini & Bowman, 2009; Jashapara, 2004; Zheng et al., 2011).

<table>
<thead>
<tr>
<th>Process</th>
<th>Questions arise in a cross-cultural context</th>
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<tbody>
<tr>
<td>Sensing</td>
<td>How do the behaviors of individuals from different cultural backgrounds affect knowledge sharing?</td>
</tr>
<tr>
<td></td>
<td>Which cultural dimensions influence knowledge sharing?</td>
</tr>
<tr>
<td></td>
<td>What are the outcomes for knowledge sharing?</td>
</tr>
<tr>
<td>Seizing</td>
<td>How do the behaviors of individuals from different cultural backgrounds influence the sharing of knowledge?</td>
</tr>
<tr>
<td></td>
<td>Which cultural dimensions affect the sharing and integration of knowledge?</td>
</tr>
<tr>
<td></td>
<td>What are the outcomes for knowledge sharing?</td>
</tr>
<tr>
<td>Reconfiguring</td>
<td>How do the behaviors of individuals from different cultural backgrounds influence knowledge sharing?</td>
</tr>
<tr>
<td></td>
<td>Which cultural dimensions affect knowledge sharing and implementation of action plans?</td>
</tr>
<tr>
<td></td>
<td>What are the outcomes for knowledge sharing?</td>
</tr>
</tbody>
</table>
2.3 Acquisition-based Dynamic Capabilities

Capron and Anand (2007) identify three major aspects of acquisition-based dynamic capabilities. The first is acquisition selection capability, which is the ability of a firm to identify when to adopt acquisition as the appropriate mode to obtain new resources. The second is acquisition identification capability, which is the ability of a firm to screen and negotiate with the selected targets. The third is the acquisition reconfiguration capability, which is the ability of a firm to reconfigure the combined resources and capabilities from the acquiring and acquired firms (Karim & Mitchell, 2000). The focus of this research is on this last aspect: examining the integration of best operational capabilities in cross-cultural acquisitions.

Dynamic capabilities can be exemplified by the firm’s ability to manage acquisition project effectively and to plan and implement the post-acquisition integration process successfully. Implementation of effective post-acquisition integration contributes to sustainable learning, which leads to realization of expected synergies (Holland & Salama, 2010). During the execution process, both the acquiring and acquired firms learn to modify and adapt their operating routines systematically (Zollo & Winter, 2002). The learning mechanism consists of experience accumulation, articulation and codification of knowledge (Zollo & Winter, 2002). Experience accumulation strives to establish a joint understanding on the causal inference between action taken and performance outcome. Knowledge articulation is a key aspect of the learning process, through which individuals develop a shared understanding through discussion and dialogue. This externalization process is important to turn tacit knowledge into explicit knowledge. Codification of knowledge allows reflection on and critical review of existing operating routines which work or do not work, and the reasons why. It may lead to the writing up of manuals, development of decision support systems and preparation of guide books of best practices (Jashapara, 2004; Zollo & Winter, 2002). Eventually, firms can use cross-cultural acquisitions to obtain new resources and operational capabilities which are remote from their existing knowledge base, in order to grow and develop in a sustainable fashion, and help improve their evolutionary fitness (Capron & Anand, 2007). In summary, pooling resources and operational capabilities through cross-cultural acquisitions is a strategy of firms to attain synergistic benefits for accomplishment of performance improvements.
2.3.1 Potential hindrances to successful acquisitions

Section 1.2 of the previous chapter noted that cultural differences and cultural incompatibilities have been found to be primary factors in impairing resources complementarity between the acquiring and acquired firms (Azan & Sutter, 2010; Uhlenbruck, 2004). Culture clash can prevent learning, and organizational culture may compromise leveraging of intellectual assets (De Long & Fahey, 2000; Lyles & Salk, 2007). To realize the expected synergies and to capitalize on the anticipated financial benefits, it is critical to have full understanding of the cultural differences between firms to achieve successful integration (Schweiger & Lippert, 2005). However, there is a lack of systematic studies on the influence of cultural factors on knowledge transfer in international acquisitions (Sarala & Vaara, 2010).

2.3.2 Knowledge sharing for best practices integration

Knowledge sharing as part of knowledge management

Knowledge management is a continuous process of going through the cycle of knowledge discovery, knowledge generation, knowledge evaluation, knowledge sharing and knowledge leverage (Jashapara, 2004). Knowledge is generated through a spiral conversion between tacit knowledge (know how) and explicit knowledge (know what) (Nonaka, 1994). Explicit knowledge is objective and can be articulated in formal language, codified, documented or embedded in standardized processes; whereas tacit knowledge is subjective and personal, and it cannot be articulated with formal language easily or codified (Dhanaraj, Lyles, Steensma & Tihanyi, 2004; Jashapara, 2004; Lee, 2000; Nonaka & Takeuchi, 1995). Explicit knowledge is the building block, tacit knowledge the cementing structure in learning (Dhanaraj et al., 2004).

Knowledge sharing is an essential activity of knowledge management, which involves human aspects and individual micro-level participation (Foss et al., 2010; Jashapara, 2004; Lee, 2000). Knowledge sharing is defined as the transfer of useful information and know-how (Appleyard, 1996). Effective knowledge sharing across the organization can contribute to newly created competitive intelligence and achievement of best practices (Lee, 2000).
The importance of organizational learning

As knowledge sharing is considered to be the most fundamental process for knowledge management, it contributes to the success of multi-national or chained organizations in codifying the organizational routines from one site to another for standardization of operational practices (Bock & Kim, 2002; Spender & Grant, 1996). Organizational learning is an ongoing and repetitive process based on operational routines (Levitt & March, 1988). Firms need to develop information processing and control capabilities in order to coordinate activities across different environments and to establish routines and procedures (Barkema et al., 1997). MNCs are at an advantage in cross-border knowledge building due to their adaptive use of combined mechanisms of knowledge transfer, and simultaneous integration and development of technical knowledge (Almeida et al., 2002).

Firms possess insights, ideas, expertise, know-how and best practices (O’Dell & Grayson, 1998). Indeed, knowledge is a productive resource of the company (Zheng et al., 2011). Capturing all this information and knowledge yields better financial performance and improves operational efficiency and organizational competence (O’Dell & Grayson, 1998).

Acquiring knowledge from external sources is important in strengthening firms’ organizational capabilities (W. M. Cohen & Levinthal, 1990). Successful international acquisitions necessitate learning to operate across national boundaries as well as learning to cooperate. In reality, knowledge transfer is a key driver of post-acquisition integration. There may be constraints on capacity, infrastructure, and lack of motivation discouraging knowledge transfer in integrating organizations (Azan & Sutter, 2010). Culture plays an important role in knowledge sharing (Anantatmula, 2010; De Long & Fahey, 2000; Kwaevisultrakul & Chan, 2007). Therefore, it is important to understand cross-cultural micro-foundations underlying knowledge sharing in order to accomplish successful integration.

Knowledge transfer during the post-acquisition phase

Normally the acquiring firm takes the lead in the post-acquisition process, and decides on the level of integration and adjustment of the management of individuals in the acquired firm. Establishing a process for information exchange and knowledge sharing
among individuals, teams and companies during the post-acquisition integration is an early and fundamental step. This learning process then supports future learning for value creation (Greenberg et al., 2005).

As part of post-acquisition integration, reconfiguration, leveraging, learning and creative integration take place through the managerial deployment of dynamic capabilities processes (Ambrosini & Bowman, 2009). Reconfiguration concerns the transformation and recombination of resources and capabilities. This may involve consolidation of certain functions to optimize operational efficiency. Leveraging comprises replication of a process, procedure or practice operating in the acquiring or acquired firm into the other. Learning entails performing tasks in a more effective and efficient way by building on previous experiences of success or failure. And creative integration results in the integration of resources and capabilities into a new configuration.

There is empirical evidence that knowledge codification supports acquisition performance (Zollo & Singh, 2004). However, it may be unwise to simply clone management practices across different cultural contexts without any adaptation, as has been shown specifically for the case of western companies in Asia (Walker & Dimmock, 2000). Nevertheless, the integration of teams in MNCs is often complicated due to the diversity of nationalities in the composition of their teams. The integration of acquisitions in MNCs is further complicated by the need to effectively merge the organizational cultures of acquired firms. The next section examines these cultural challenges to integration.

2.4 Culture as Affecting Knowledge Sharing

2.4.1 Complexity of culture
Culture is complex and abstract (Schein, 2010). Its definition varies in different schools of thought. Hofstede (1980) defines culture as the collective programming of the minds of individuals conditioned by the same education and set of experiences. It differentiates the members of one category from those of another. Moreover, culture is a prominent context that determines the value of resources and experiences (Uhlenbruck, 2004).
Schein (2010) categorizes culture into three different levels. Artifacts as the surface level are tangible and visible, and its manifestation is overt. The second level is espoused beliefs and values, which may reflect rationalization of observed behaviors and processes. The deepest level is that of basic, underlying assumptions, which are deeply rooted in the minds of individuals and are unconscious. In broad terms, culture is constituted by the values, beliefs, norms and behavioral patterns shared by a group, such as a nation (Leung et al., 2005). Culture affects the ways a business is managed and it is expressed in how individuals solve problems (Greenberg et al., 2005; Trompenaars & Hampden-Turner, 1998).

National culture is an integral part of the environment in which organizations operate. There is a general assumption that differences in national cultures influence the way business is conducted in the real world (Goodstein, 1981). Therefore, organizational culture should be affected by the national culture (House et al., 2004). Consequently, there is an interrelationship between societal culture and management style (Brodbeck et al., 2000). Much as he earlier defined culture in general, Hofstede (2001) defines organizational culture specifically as the collective mental programming which differentiates the members of one organization from another; while Schein (2010) defines organizational culture as a set of shared values, beliefs and practices of individuals in the organization. Therefore, understanding national culture is a gateway to understanding organizational culture. Conversely, organizational culture also reflects differences in national cultures (Hofstede, 1994).

The complexity of culture is further complicated by multi-culturalism. An individual is bound by a multi-level and multi-layered culture construct (Leung et al., 2005), as portrayed in Figure 2.1.
Global culture is created by global organizations with global networks transcending national cultural borders and constitutes the most macro-level component in this scheme. Moving down through national cultures to organizational cultures and finally to group cultures, the individual displays the cultures that shape himself or herself. Each level has a multi-layered construct which consists of observed artifacts and behaviors as the external layer, values as the next layer, and basic assumptions as the deepest layer. During interaction among individuals of different cultural groups, ‘subtractive multiculturalism’ may occur, in which individuals of a cultural group lose some of their major characteristics, or ‘additive multi-culturalism’ may be seen, in which individuals of a cultural group absorb certain characteristics of other cultural groups (Leung et al., 2005).

De Mooij (2003) argues that cultural differences remain prominent in spite of converging wealth across the globe. The persistence of cultural diversity urges local adaptation of business strategies upon global companies (De Mooij & Hofstede, 2002). Effective international business strategies need to be differentiated by culture cluster (De Mooij, 2001). It is thus important to understand the highly complex ways in which culture affects our social interactions in business activities.

### 2.4.2 Cross-cultural micro-foundations underlying dynamic capabilities

The ground-breaking early work of Hofstede (1980), and its later refinement by Hofstede and Bond (1988), and the extensive research by GLOBE (House et al., 2004),
on defining cultural dimensions of various nations form the basis on which this research illustrates the attributes of different national cultures. The differentiation of national cultural dimensions is detailed in Appendixes 1A and 1B. Shared national character is more visible to foreigners than to local inhabitants. The stability of cultural values over time implies that it is difficult to change values and attitudes (Barkema & Vermeulen, 1997; de Mooij, 2001; Hofstede, 1980). Cultural dimensions can then be used for prediction of individuals’ behaviors and practices under defined contexts. Although these cultural dimensions are the common elements within each nation, this does not mean that every individual in the nation exhibits them (Hofstede, 1980). Since everyone is culturally bound, each has his or her own cultural lens through which he or she sees the world and interprets the information received (Goodstein, 1981; Leung et al., 2005).

Other than Hofstede, the Global Leadership and Organizational Behavior Effectiveness research project (GLOBE) has also extensively investigated the influence of cultural variables on leadership and organizational effectiveness. It is a long-term cross-cultural research program launched by Robert House in 1993 through an extensive network of about 170 social scientists and management scholars from 62 cultural societies. The cultural societies are further categorized into 10 clusters. Furthermore, nine cultural dimensions are predefined. Uncertainty avoidance, power distance, institutional collectivism, in-group collectivism, gender egalitarianism, assertiveness and future orientation are the nine cultural dimensions used by GLOBE in its research (House et al., 2004). The nine cultural dimensions are defined in Appendix 1B. Some of these are derived from the work of Hofstede and other scholars. The fundamental questions about leadership attributes and behaviors include some which are generally accepted across different cultures and some which are culturally specific (Koopman et al., 1999).

Many scholars have used Hofstede’s cultural dimensions conceptual framework in a great variety of empirical research and academic studies (Bhagat et al., 2002; Brannen & Salk, 2000; Lucas, 2006; McSweeney, 2002; Rapp, Bernardi & Bosco, 2011). As of today, his cultural classification remains perhaps the most influential (Kirkman, Lowe & Gibson, 2006). Trompenaars and Hampden-Turner (1998) credit Hofstede for his stimulation of and contribution to the study of intercultural management, and for creating awareness about the importance of cultural issues in management. Some studies discuss the impact of particular cultural dimensions on certain societies or their connection to certain attributes. For instance, Walker and Dimmock (2000) argue that
power distance plays an important role in Chinese societies and similar formations. Another study hypothesizes a negative relationship between social capital and power distance (Gudergan, 2007). Bochner and Hesketh (1994) predict that countries of high power distance show more formal, hierarchical relationships, a preference for closer supervision and a tendency to be more task-oriented. Yet despite this wide application of the framework, empirical research associated with dynamic capabilities is insufficient (Zheng et al., 2011). There is no study as to which cultural dimensions have an impact during the sensing, seizing and reconfiguration processes or how respective cultural dimensions affect activities during the three processes and to what extent.

As mentioned in section 1.5.1 earlier, the concept of micro-foundations, which are rooted in individual action and interpersonal interaction, may provide a valuable intermediary level of analysis to address this problem (Foss, 2011). Research on micro-foundations in knowledge-based value creation is, however, largely non-existent. Probable reasons are data collection costs, the unfamiliarity of relevant statistical methods and difficulties in linking micro-mechanisms and macro-variables (Foss, 2011). Organizational dynamic capabilities are a positive function of individual dynamic capabilities mediated by team dynamic capabilities (Sprafke et al., 2012). One theme of the micro-foundations approach is to address macro-constructs such as organizational routines and capabilities in terms of individual action and interpersonal interaction (Foss, 2011; Gavetti, 2005). There is a need to understand the underlying processes by which organizational routines vary and change in order to craft a good theory that draws on all branches of social and behavioral sciences (Pentland & Feldman, 2005).

2.4.3 Cross-cultural micro-foundations underlying cross-cultural acquisitions within the dynamic capabilities framework

As discussed above in section 2.3, firms use acquisitions to obtain new resources and capabilities and to reconfigure these pooled resources and combined capabilities (Capron & Anand, 2007; Karim & Mitchell, 2000). Indeed, acquisitions act as mechanisms for change in business reconfiguration, providing opportunities for firms to acquire different resources and capabilities while building on existing resources and capabilities (Karim & Mitchell, 2000). Cross-cultural acquisitions offer firms access to
geographically distant resources and capabilities including technical skills, market knowledge, vendor relationships or political ties, which may improve competitiveness and so be desirable to firms (Capron & Anand, 2007).

There are extensive studies on cross-cultural acquisitions (Capron & Anand, 2007; Stahl & Voigt, 2008). Four schools of thought are well established. The most prominent is the financial economic school that analyzes the financial performance of M&As. The strategic management school studies the effect of relatedness, similarity and complementarity on organizational performance. The organizational behavior school examines the impact of transactions on firms, individuals and organizational cultures. The last, but not the least, is the process school. Derived from the strategic management and organizational behavior schools, the process school investigates the integration processes for successful transactions (Bauer & Matzler, 2014). The existence of these four developed approaches illustrates the fact that M&As are complex phenomena spanning a broad spectrum of issues for practitioners and academics to investigate.

Research suggests that cross-cultural acquisitions can enhance the business performance of acquired firms (Branko & Dušan, 2013). Studies on how cultural differences affect acquisition performance report diverse findings (Brock, 2005). An inductive study by Orr and Scott (2008) shows that intercultural friction and costs are incurred from failed comprehension of institutional differences in regulative, normative and cultural-cognitive elements, which beset cross-cultural projects and ventures and affect their performance. Moreover, institutional theory hypothesizes that differences between cultures and social structures can inhibit the success of cross-cultural and cross-societal collaborations. Brock (2005) illustrates that a mismatch in individualism and power distance between the acquiring and acquired firms may result in difficulties in resources sharing. However, it is not clear precisely how these cultural dimensions affect resources sharing and capabilities learning. Besides this, acquisitions may expose some employees to cross-cultural work alienation (Brannen & Peterson, 2009). Therefore, it is important to consider cultural implications prior to integration (Brock, 2005).

In addition to national cultural differences, organizational cultural differences may lead to culture clash among employees when the acquiring and acquired firms have different operational practices (Brock, Barry & Thomas, 2000 cited in Brock, 2005). However,
there are studies showing that both national and organizational cultural differences can be positively linked to knowledge transfer (Sarala & Vaara, 2010; Vaara, Sarala, Stahl & Björkman, 2012). Some scholars view culture as a dynamic amalgam of various spheres of cultural influences, which include, but are not limited to, the national cultures of the employees from the acquiring and acquired firms (Brannen & Peterson, 2009). There is also scholarship showing positive influences of cultural compatibility between the acquiring and the acquired firms on the eventual success of acquisitions (Bauer & Matzler, 2014).

Despite the extensive research on acquisitions, few studies take a holistic view of this complex subject (Bauer & Matzler, 2014). Currently, there is no established understanding as to which cultural dimensions have an impact on acquisition integration during the sensing, seizing and reconfiguration processes in the context of dynamic capabilities. Nor is there sufficient knowledge of how and to what extent specific cultural dimensions affect knowledge sharing activities and eventually best operational capabilities integration during the three processes.

As discussed earlier in section 1.5.1, the essence of dynamic capabilities is entrepreneurial (Sprafke et al., 2012). Indeed, entrepreneurship is defined as exploring and exploiting opportunities based on entrepreneurial judgements made, and beliefs held by individuals (Felin & Zenger, 2009). It is the function of entrepreneurs to identify, look into and take advantage of opportunities based on their observation and experience (Felin & Zenger, 2009).

2.4.4 Cross-cultural micro-foundations underlying knowledge sharing for best practices integration in cross-cultural acquisitions within the dynamic capabilities framework

Knowledge is a source for enhancing operational capabilities through managerial deployment of dynamic capabilities processes (Prieto & Easterby-Smith, 2006). The existing literature covers knowledge-based dynamic capabilities with a focus on knowledge management practices within a dynamic capabilities framework (Prieto & Easterby-Smith, 2006; Zhou, 2012). Indeed, culture plays a key role in implementing successful knowledge management strategies (Gan, Ryan & Gururajan, 2006). It is
important to develop one’s knowledge management approach to fit the organizational culture (McDermott & O’Dell, 2001). Limited research has been conducted into the impact of culture on knowledge sharing, and in particular on the cultural barriers hindering successful knowledge management and influencing individual behavior with regards to knowledge sharing (Bock & Kim, 2002; Kaweevisultrakul & Chan, 2007). Kaweevisultrakul and Chan (2007) argue that low-trust and face-saving cultures prevent collaboration and constrict knowledge sharing. Soley and Pandya (2003) identify language as an obvious cultural difference when dealing with international partners. However, there is a lack of empirical research to validate their statements and to understand how these cultural factors make an impact on human interaction.

**Cultural issues illustrated from the existing literature**

Several cultural issues can be identified that shed some light on the influence of culture on knowledge sharing broadly defined. These include trust, face saving, language and cultural diversity. I discuss the major findings for each issue in the following sections.

**Trust**

Knowledge sharing during the sensing, seizing and reconfiguring processes happens at the micro-level of individual interaction. The literature on knowledge sharing flags the tacit components of knowledge to be shared through highly interactive conversations, collaboration and interpersonal interactions that require trust (Droege & Hoobler, 2003; Kaweevisultrakul & Chan, 2007; Zack, 1999). Trust is an important determinant in knowledge sharing among organizational members (Al-Alawi et al., 2007). It indicates the reliability of individuals’ relationships. Trust supports more social interaction and encourages open sharing of ideas and knowledge among individuals. On the contrary, a sense of isolation is created among individuals when there is no trust, which inhibits knowledge sharing and idea exchange (Al-Adaileh, 2011). Therefore, interpersonal trust is essential in the process of enhancing cooperation and strengthening knowledge sharing among members of a team (Politis, 2003).

Similar to culture, trust is a complex and multi-faceted construct. It is a psychological state consisting of the willingness to accept vulnerability based on positive anticipations of the intentions or behavior of another (Kim, Dirks & Cooper, 2009). Trust reflects the
reliability of the relationship and the nature of social interaction among individuals (Al-Adaileh, 2011).

**Face saving**

Face saving, identified by Kaweewisultrakul and Chan (2007), is consistent with the low assertiveness of the GLOBE study. The notion of assertiveness as a cultural dimension partly originates from the masculinity of Hofstede’s cultural dimensions (House et al., 2004). Individuals from societies with a higher assertiveness score are more likely to be dominant, confrontational and expressive. Societies with a lower assertiveness score, on the contrary, tend to value modesty, harmony and solidarity (Brodbeck et al., 2002; House et al., 2004).

Humane orientation is another cultural dimension likely to discourage open confrontation due to fear of losing face (House et al., 2004). Face is a symbol of pride and dignity for an individual. During the knowledge sharing process, there may be a risk of losing face (Kanzler, 2010). Therefore, the desire to save face may inhibit sharing of knowledge (Ardichvili et al., 2006).

**Language**

Language plays an important role in intercultural interactions and is a vehicle for conveying individuals’ thoughts (Hofstede, 2001). Therefore, language is an obvious cultural difference that needs to be dealt with in business (Soley & Pandya, 2003). Language skill is one of the culture-related challenges in daily life (Benet-Martinez & Haritatos, 2005). It can be a natural barrier to effective communication and hence knowledge sharing. Indeed, language is considered to be one of the main difficulties in sharing tacit knowledge, which is held in non-verbal form (Haldin-Herrgard, 2000). On the contrary, similar cultural clustering resulting from similarity in language and native origin help shape belief systems, which contribute to easier knowledge transfer (Lucas, 2006).

**Cultural diversity**

Merging two companies with different cultural backgrounds can broaden the knowledge base for synergistic learning (Brannen & Peterson, 2009). The more structurally diverse the work group is, the higher the value of knowledge sharing is (Cummings, 2004).
Structural diversity of the team offers a broad base of knowledge and decreases inertia, factors which help enhance the viability of knowledge management development (Vermeulen & Barkema, 2001). However, it is not clear if cultural diversity is always a positive factor in knowledge sharing.

There are numerous studies associating cultural diversity or differences as negative factors. Various terminologies imply a negative view of cultural differences: culture shock, culture clash, cultural barrier, cultural gap, culture wall, cultural resistance, cultural tension, cultural conflict, culture war and so on (Badii & Sharif, 2003; Barkema, Bell & Pennings, 1996; Barna, 1976; Huong, Katsuhiro & Chi, 2011; Lyles & Salk, 2007; McDermott & O’Dell, 2001). Specific examples can be easily found in the literature. For instance, failure of knowledge management initiatives and efforts is attributed to hitting the culture wall; the primary inhibitor of effective knowledge sharing is cultural resistance (McDermott & O’Dell, 2001). Research shows that cultural barriers interrupt organizational learning (Barkema et al., 1996); culture clash impedes acquisition of knowledge (Lyles & Salk, 2007). Moreover, culture shock occurs when a person comes across a culture other than his or her own and the experience leads to avoidance of and withdrawal from further contact and communication (Barna, 1976). Cultural gaps slow down the process of knowledge transfer in offshore outsourcing as evidenced in a case study of Japanese and Vietnamese software companies (Huong et al., 2011). Furthermore, organizational knowledge integration activities can create cultural tensions which may cause loss of competitive advantages to the firms involved (Badii & Sharif, 2003).

Nevertheless, cultural diversity is becoming a norm due to increasing globalized activities (Anantatmula, 2010). UNESCO (2001) has declared that cultural diversity is a living and renewable treasure that should be preserved in order to guarantee the survival of humanity. In a multi-national organization, the level of cultural diversity affects the way individuals interact and hence the processes by which individuals share knowledge (Lauring, 2009). Challenge is always associated with cultural diversity. Once such challenges are met, however, valuable connections are made (Trompenaars & Hampden-Turner, 1998). Cultural diversity entails cultural difference, which is a source of learning and competitive advantages and can be a source of value creation in cross-cultural acquisitions (Boyle, Nicholas & Mitchell, 2012; Vaara et al., 2012).
Nevertheless, how culture affects knowledge sharing in the different processes of a dynamic capabilities framework after acquisition and whether culture exerts different strengths of impact during different processes is not known.

**The sensing process**

During the sensing process, employees from the acquiring and acquired firms who put into practice organizational routines need to share knowledge so they can learn the best operational capabilities from each other for respective functions. Indeed, learning is part of the activities for sensing emerging opportunities (Teece, 2007). As discussed in section 2.2.1 above, individuals and teams need to bundle, organize, screen and prioritize information during this sensing process (Sprafke et al., 2012). Before integration, the employees of the acquiring and acquired firms may not know each other. Hence, the problem of knowledge transfer grows with geographical and cultural distance in cross-cultural acquisitions (Bresman et al., 2010). It is not clear from existing research how culture affects the ease and quality of information sharing during this process.

**The seizing process**

Employees from the acquiring and acquired firms who implement organizational routines need to work closely to seize the identified opportunities. As discussed in section 2.2.2, individuals and teams need to give and request feedback actively, combine others’ knowledge and expertise into new or creative solutions, and make high-quality decisions based on complex information during this seizing process (Sprafke et al., 2012).

The activities during the seizing process are different from those during the sensing process. The teams from the acquiring and the acquired firms need to review their current operational practices and discuss which approach is better so that they may adapt the most suitable process and procedures to enhance efficiency and performance. We know little about how culture affects the depth of human interaction during this process, and if the cultural dimensions affecting the seizing process differ from those affecting the sensing process.
The configuration process

As discussed in section 2.2.3, individuals and teams, having sensed and seized opportunities, next need to apply their experiences and knowledge to new situations; adapt existing and established routines; communicate comprehensively and precisely; shift perspectives; and adapt to others (Sprafke et al., 2012). The activities during the reconfiguring process are distinct from those of earlier phases. The employees involved must reconfigure the pooled resources and operational capabilities to implement the agreed approach. How culture affects the depth of human interaction during this process, and if the cultural dimensions affecting the reconfiguring process vary from those influencing the sensing and seizing processes, remain unknown.

2.5 Research Opportunities: Exploring the Unknown

The importance for firms to enhance operational capabilities through managerial deployment of dynamic capabilities processes such that they can purposefully integrate, build and reconfigure internal and external resources and capabilities to cope with the fast-changing environments for sustainable performance and organizational development has been discussed in previous sections (Teece, 2007; Teece et al., 1997; Zheng et al., 2011; Zollo & Winter, 2002). Moreover, cross-cultural acquisitions remain attractive for firms as a way to grow across national boundaries for improved organizational performance and sustainable development, and to access new resources and operational capabilities (Brannen & Peterson, 2009; Brock, 2005; Capron & Anand, 2007; Karim & Mitchell, 2000). After post-acquisition integration, firms need to transform and recombine resources and capabilities (Ambrosini & Bowman, 2009). Operational capabilities are embedded in organizational routines, which are knowledge-based (Jashapara, 2004; Zollo & Winter, 2002). Therefore, knowledge sharing is a key driver of post-merger integration to combine the best operational capabilities from both firms. Employees from the acquiring and acquired firms need to share knowledge for best practices integration. To do so effectively, they go through the three processes of sensing opportunities, seizing the identified opportunities and reconfiguring the resources and capabilities (Teece et al., 1997). Culture plays an important role in knowledge sharing (Anantatmula, 2010; De Long & Fahey, 2000; Kaweevisultrakul &
Chan, 2007). Therefore, it is important to understand cross-cultural micro-foundations underlying knowledge sharing in order to accomplish successful integration.

Given the need to understand the cross-cultural micro-foundations underlying knowledge sharing for best practices integration in the context of cross-cultural acquisitions within the dynamic capabilities framework and the lack of relevant scholarship, I propose the following research question and sub-questions to explore this opportunity. The findings help fill the gap in the literature and contribute empirical knowledge to illuminate this important problem.

The research question:
What are the cross-cultural micro-foundations underlying knowledge sharing for best practices integration in cross-cultural acquisitions within the dynamic capabilities framework?

The research sub-questions:
1) How does culture affect knowledge sharing during the sensing process after acquisition?
2) How does culture affect knowledge sharing during the seizing process after acquisition?
3) How does culture affect knowledge sharing during the reconfiguring process after acquisition?

The key focus for each sub-question:
1. What are the cultural dimensions that have a positive impact on knowledge sharing?
2. What are the cultural dimensions that have a negative impact on knowledge sharing?
3. What are the cultural dimensions that have an insignificant impact on knowledge sharing?
4. What are the outcomes for knowledge sharing effectiveness?
5. What are the outcomes for knowledge sharing efficiency?
2.6 Conclusion

Subsequent to the establishment of the managerial problem of best practices integration after acquisitions and defining the research problem at hand in Chapter One, this chapter has examined the existing literature with respect to this problem statement. Research on dynamic capabilities, acquisition-based dynamic capabilities and dimensions of culture affecting knowledge sharing was critically reviewed. A gap in the literature regarding the cross-cultural micro-foundations underlying knowledge sharing for best practices integration in cross-cultural acquisitions within a dynamic capabilities framework was identified. Consequently, my research project, with its defined research question and sub-questions, is designed to address this lacuna in the scholarship.

Figure 2.2 summarizes the discussion of the theoretical framework and the development of my research questions.

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**Literature Review**

**Dynamic Capabilities**
To purposefully create, extend and modify firm’s resource base to cope with changing environment (Teece, Pisano & Shuen, 1997)

**Acquisition-based Dynamic Capabilities**
To obtain new resources and capabilities through acquisitions (Capron & Anand, 2007)

**Best Practices Integration**
To share knowledge for best practices integration. To reconfigure for transformation and recombination of resources and capabilities. To understand cultural impact on knowledge sharing.

**Cross-cultural Acquisitions**

**Dynamic Capabilities**

**Cross-cultural Micro-foundations**
- Sensing
- Seizing
- Reconfiguring

**Outcomes for knowledge sharing effectiveness**

**Outcomes for knowledge sharing efficiency**

**Cross-cultural micro-foundations underlying knowledge sharing for best practices integration within the dynamic capabilities framework**
- Roles of culture in knowledge sharing during the sensing process
- Roles of culture in knowledge sharing during the seizing process
- Roles of culture in knowledge sharing during the reconfiguring process
- Cultural dimensions having positive impact on knowledge sharing
- Cultural dimensions having negative impact on knowledge sharing
- Cultural dimensions having insignificant impact on knowledge sharing

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3  CHAPTER THREE: RESEARCH METHODOLOGY

3.1  Introduction

The review of the literature in the preceding chapter confirms that culture does matter. But how and when? My research objectives are to provide insights into the cross-cultural micro-foundations underlying knowledge sharing for best operational capabilities integration in cross-cultural acquisitions within the dynamic capabilities framework; to make recommendations on effective ways to manage cross-cultural acquisitions; and to outline areas for future research.

This chapter focuses on the research methodology—a case study approach with qualitative interviews—adopted for this exploratory study. I first discuss the research design, and then give an outline of the research strategy in relation to the research problem. I also cover in more detail ethical and safety issues, which are important in business research.

The following schematic diagram outlines the structure of the chapter.
3.2 Research Design

Conducting business research is a complex process demanding skilful planning at all stages: selection of a research approach, organizing data collection, providing critical data analysis and interpretation, application of findings to answer the research problem, and finally report writing (Sekaran & Bougie, 2010). Qualitative research and quantitative research are two different approaches to business research in terms of correlation between theory and research, epistemological orientation and ontological considerations (Bryman & Bell, 2011). The distinction between qualitative and
quantitative research is summarized in Appendix 2. Because of the different approaches and foci, different types of knowledge are derived from these two research methods (Golafshani, 2003).

### 3.2.1 Qualitative vs. quantitative approach

Qualitative methodology is a research strategy emphasizing words in data collection, and the analysis and interpretation of underlying meaning in contextual data. Often, it is an inductive approach in which theory is an outcome of research. Its epistemological orientation is one of interpretivism, meaning that individuals interpret their social world, while its ontological approach is one of constructivism, or viewing social reality as a constantly changing property of individuals’ creation (Bryman & Bell, 2011).

In contrast, quantitative methodology emphasizes quantification in data collection and analysis of numbers and measurement. Commonly, it is a deductive approach in which theory guides research. In essence, usually it is about the testing of theories and hypotheses (Golafshani, 2003). Moreover, its epistemological orientation is based on the models of natural science and of positivism, while its ontological approach is objectivist (Bryman & Bell, 2011).

My key research objective is to investigate how and when culture affects the process of knowledge sharing after acquisitions. Knowledge sharing involves a complex social process among individuals of different cultural backgrounds. Through relatively intense interaction with selected participants, which is only possible using qualitative methodology, I can obtain in-depth and first-hand information about the experiences with, and ideas and thoughts on, the defined topic of my study from study participants who have gone through the cross-cultural acquisition process (Carson, Gilmore, Perry & Gronhaug, 2001b; Levine et al., 1980). Indeed, qualitative research is particularly appropriate to open the black box in order to unfold the nature of organizational processes and to understand their micro-foundations (Doz, 2011). Moreover, as qualitative data can be contextualized in a number of ways, including social processes and sets of experiences, such an approach is particularly suitable to this study as I seek to understand social reality from the perspective of the ‘actors’ tasked with integrating best practices during cross-cultural acquisitions (Silverman, 2005).
The qualitative case study is considered to be the more appropriate strategy to address ‘how’ and ‘when’ research questions. It can be used for both descriptive (describing how a process happens) and exploratory (explaining when a specific event occurred and making causal inferences) purposes (Yin, 1981a). In a non-probabilistic sample of the kind used for qualitative research, the cases and participants are chosen deliberately to reflect certain characteristics or features of the sampled population (Ritchie et al., 2003). The focus of the case study on details and process allows a relatively close-up view of the experiences of the participants during cross-cultural acquisitions and hence nuanced insights into the cross-cultural acquisition process. Therefore, I chose a qualitative case study approach to fulfil my research objectives.

3.2.2 Qualitative case study with interviews
There are many types of qualitative approaches to the collection and analysis of data. Ethnography, participant observation, interviewing, focus groups, conversation analysis, content analysis and documentary analysis are common tools to conduct qualitative research (Ambert, Adler, Adler & Detzner, 1995; Bryman & Bell, 2011). In view of the nature and depth of information required, I decided on interviews as the best methodology to operationalize my research project.

Case selection—Deutsche Chemical
A case study approach is a suitable research design in business research which has a focus restricted to certain parameters for intensive and detailed investigation (Bryman & Bell, 2011). It is useful to examine real-life contemporary phenomena in context. Moreover, it is particularly useful when the borders between phenomenon and context are not distinct (Yin, 1981b). Furthermore, a case study approach is suitable for theory building, for giving a detailed explanation of best practices, and for exploring and understanding the ‘how’ and ‘when’ research questions (Ellram, 1996). A case study helps tell a story, and the inclusion of quotations gives life and adds realism, which facilitates better understanding of the topic under study (Herreid, 1998).

My case study design is instrumental to exploring the roles of culture in knowledge sharing in cross-cultural acquisitions. A key criterion of selecting the case is maximization of learning from the chosen case (Stake, 1995). Since research time and
access for fieldwork are often limited, it is also important to select cases which offer ease of access and are hospitable to the research problem (Stake, 1995).

With the support of the top management of my company for my research project (granted without any conditions attached), I selected this company, pseudonym Deutsche Chemical, for this case study. By means of the support of management and my own network in Deutsche Chemical, I gained access to participants of heterogeneous backgrounds to inquire about their thoughts on, and to get insights into their experience in, cross-cultural acquisitions. None of the interviewees has a direct reporting relationship to me and their confidentiality is assured. This helps avoid any conflict of interest and potential bias. Therefore, this chosen case can maximize learning about and understanding of my research problem.

My case study–One case site with three acquisition instances

Deutsche Chemical, like some other MNCs, has gone through different types of acquisitions; these range from acquiring another large MNC to acquiring small- or medium-sized enterprises (SMEs). This study is based on one case site with three instances of acquisitions to explore knowledge sharing under cross-cultural conditions.

One primary and two secondary cases

The acquisition of a Taiwanese SME (pseudonym Formosa Polymer) in 2007 is chosen as the primary case. A number of participants representing various functions from different organizational levels were interviewed in order to collect sufficient data to develop appropriate understanding. Considering resource practicality, I also cover two other acquisitions but not in the same depth as the primary case. One of them is the acquisition of a Dutch SME (pseudonym Tulip Specialty) in 2008 and the other is the acquisition of a United States (US)-based MNC (pseudonym Eagle Solution) in 2000.

The two additional acquisition instances serve as secondary cases to help substantiate and triangulate the findings from the primary case. I expect that organizational size and cultural closeness may affect the outcome of the cross-cultural acquisitions and the ease with which colleagues interact to share knowledge (Leung et al., 2005). Therefore, to enhance the reliability of my findings and to make my study more robust, I look at two other examples with characteristics that could have an impact. Figure 3.1 illustrates the
relative position of the four companies in a quadrant matrix of MNC-SME organizational culture and western-eastern societal culture.

Figure 3.1 Relative position of companies under study in a quadrant matrix

![Quadrant Matrix of MNC-SME Organization]

3.3 The Setting of the Cases

3.3.1 The primary Formosa case–Acquisition of Taiwanese SME by Deutsche Chemical

Deutsche Chemical is a diversified chemical company with worldwide operations. It is one of the Fortune Global 500 and Forbes Global 2000 companies, and is listed on the stock exchange in Germany. The workforce exceeds 100,000 worldwide. Continuous growth and improved financial performance are part of its core strategies. In the assessment of company management, the elastomer business offered promising growth with decent return on sales. The elastomer business is knowledge-driven and relationship-based.

Formosa Polymer was the market leader in the elastomer sector in the Asia Pacific region when Deutsche Chemical started to gain a strong foothold in the region during the first years of the twenty-first century. Formosa Polymer was a Taiwanese SME with a staff of about two hundred individuals; the company was owned by a handful of major shareholders, who established and ran the business in specific areas of respective
expertise. Its headquarters was in Taiwan with production and sales offices in Taiwan and China. Due to their flexibility and responsiveness in business operations, they were successful in developing a market leadership position within ten years.

As more global players entered the Asia Pacific region, Formosa Polymer saw the emerging threat they represented and recognized that the company had reached its ceiling in terms of product innovation and market growth. The two companies started to negotiate and entered into due diligence study in 2004. An agreement on the acquisition deal was made less than three years after the first contact. Approval by relevant authorities was granted in 2007.

The leadership of Deutsche Chemical believed that they could gain market entry through acquisition of Formosa Polymer faster than by greenfield investment. However, they were also aware of the challenges resulting from the cultural distance between the two firms. As shown in Figure 3.1, this acquisition was culturally distant in both national and organizational cultures.

There are 23 in-depth interviews of different individuals in this primary case, 13 from the acquiring firm (Deutsche Chemical) and 10 from the acquired firm (Formosa Polymer). This group of participants is quite diverse and has a good mix of gender, nationality, job functions and organizational levels. Among the 23 participants, 17 are males and 6 are females. Five nationalities are represented, including 10 individuals from Taiwan, 5 from Hong Kong, 5 from Germany, 2 from China and 1 from Britain. In terms of job functions, 9 are from Sales and Marketing, 6 from Production and Technical Operations, 6 from Supply Chain Management, and 1 each for General Management and Finance and Accounting. As regards to organizational hierarchy, 8 are managerial staff while 15 are operational staff.

Of the interviews, 22 were face-to-face interviews and conducted in Germany, Taiwan, China and Hong Kong; 1 was an overseas call. English, Mandarin and Cantonese were the languages used for the interviews. The average length of interview was 52 minutes.

Each interviewee was assigned a 9-alpha-numeric code in order to preserve the privacy of individual identities. The first two letters indicates the names of the companies: D for
Deutsche Chemical, F for Formosa Polymer. If the code starts with D, it means the interviewee is from the acquiring firm. The third letter denotes the nationality of the interviewee: G for German, T for Taiwanese, H for Hong Konger, C for Chinese and B for British. The fourth letter indicates the gender: M for male and F for female. The following two letters represent the job function: GM for General Management, FA for Finance and Accounting, SM for Sales and Marketing, PT for Production and Technical Operations, and SC for Supply Chain Management. The two numerals indicate the sequential number of interviews. The last letter denotes the hierarchy of the interviewees: M for managerial staff, O for operative staff.

Due to the fact that there are single representatives of a certain nationality or job function or a unique combination of various attributes, the full code is not expressed in this paper. The respective code is then covered as X for nationality, gender or hierarchical level, and XX for job function.

### 3.3.2 The secondary Tulip case–Acquisition of Dutch SME by Deutsche Chemical

Tulip Specialty was a Dutch SME with production and sales offices in the Netherlands. It was specialized in polymer systems for use in household appliances and construction. Its extensive know-how and decades of experience in the field attracted Deutsche Chemical to acquire it. Through the acquisition of Tulip Specialty in 2008, Deutsche Chemical expected to strengthen its network in the key markets of Europe, the Middle East and Africa, and to speed up new product launch in the market. These two firms were proximate in national cultures while distant in organizational cultures, as indicated in Figure 3.1.

There are 5 subjects of in-depth interviews, 1 from Deutsche Chemical and 4 from Tulip Specialty. This group of participants is diverse in nationality, job function and organizational level. Among the 5 male participants, 1 is German and 4 are Dutch. In terms of job functions, there is 1 each from General Management, Sales and Marketing, Production and Technical Operations and Supply Chain Management; of these, 2 are managerial staff while 3 are operational staff in the organizational hierarchy.
3.3.3 The secondary Eagle case—Acquisition of US-based MNC by Deutsche Chemical

Eagle Solution was a US-based MNC. It had a product line supplementary to Deutsche Chemical’s portfolio. Moreover, it was a market leader in a key raw material that was essential for the production of this supplementary product required by Deutsche Chemical. The acquisition of Eagle Solution by Deutsche Chemical would secure their core business in the polymer sector in the long run. Through this acquisition in 2000, Deutsche Chemical took over various production sites in the United States, Europe and Asia; it also secured a long-term supply of the key raw material.

The acquisition of Eagle Solution is the latest acquisition of an MNC by Deutsche Chemical in recent decades. Deutsche Chemical has been active in acquiring SMEs in various countries for the last ten years. The two firms were proximate in both national and organizational cultures. Therefore, the acquisition of Eagle Solution is a valid case to triangulate the research findings as both companies are MNCs; its inclusion rules out the possibility of cultural differences due to organizational size.

There are 8 subjects of in-depth interviews, 4 from Deutsche Chemical and 4 from Eagle Solution. This group of participants is diverse in nationality, job function and organizational level. Among the 8 male participants, 4 are from Hong Kong, 2 from Taiwan, 1 from Germany and 1 from America. In terms of job functions, 5 are from Sales and Marketing, 1 from Production and Technical Operations, 1 from Supply Chain Management, and 1 for General Management. Of the 8 participants, 4 are managerial staff while 4 are operational staff in the organizational hierarchy.

3.3.4 Selection of interviewees—36 interviewees of diverse background

In qualitative research the population for study is determined by using non-probabilistic samples. In my samples, individuals are intentionally chosen to reflect particular features or experiences so that I can explore specific issues in detail and study my research problem in the best manner possible (Ritchie et al., 2003).

The criteria for selecting the interviewees in my study are:
* having had direct contact or interaction with their counterparts from the respective acquiring or acquired firm such that they encountered a different culture during the integration process;
* having worked in the acquiring or acquired firm for at least one year before and one year after the acquisition and having had sufficient exposure to cultural change and best practices integration;
* representing various functions at different levels so that the findings are representative.

Participants who have no direct contact or interaction with their counterparts from the respective acquiring or acquired firm are not appropriate for this project study.

The interviewees are of different background in terms of gender, nationality, function and organizational level. In total, there are 36 interviewees, 20 from the acquiring firm and 16 from the three acquired companies. Of these, 30 are males while 6 are females. The participants represent 7 nationalities: 12 Taiwanese, 9 Hong Kongers, 9 German, 2 Dutch, 2 Chinese, 1 British and 1 American. As for their places in the organizational hierarchy, 24 of the participants are managerial staff while 12 work on the operational level. The participants represent different functions spanning General Management, Finance and Accounting, Sales and Marketing, Production and Technical Operations, and Supply Chain Management. Table 3.1 provides a detailed breakdown of the interviewees’ backgrounds while Table 3.2 lists the interviewees from the acquiring and acquired firms.
### Table 3.1 Background of interviewees

<table>
<thead>
<tr>
<th>Function</th>
<th>Level</th>
<th>2007</th>
<th>2008</th>
<th>2000</th>
<th>DC</th>
<th>3 Acquired firms</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>10</td>
<td>7</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
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<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>German</td>
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<td>5</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Taiwanese</td>
<td></td>
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<td>8</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Hong Konger</td>
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<td>5</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Chinese</td>
<td></td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
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<td>1</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Finance and Accounting</td>
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<td>-</td>
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<td>-</td>
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<td>4</td>
</tr>
<tr>
<td>Supply Chain Management</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
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<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
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<td>7</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>11</td>
</tr>
</tbody>
</table>

DC: Acquiring firm, pseudonym Deutsch Chemical  
FP: Acquired firm, pseudonym Formosa Polymer  
TS: Acquired firm, pseudonym Tulip Specialty  
ES: Acquired firm, pseudonym Eagle Solution

### Table 3.2 List of interviewees: 20 interviewees from the acquiring firm:

<table>
<thead>
<tr>
<th>Code in thesis</th>
<th>Nationality</th>
<th>Gender</th>
<th>Function</th>
<th>Language of interview</th>
<th>Face-to-face / Telephone</th>
</tr>
</thead>
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<td>Telephone</td>
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</tbody>
</table>

- To be covered due to single representation or unique combination of certain attributes
The study expends significant effort to achieve heterogeneity of the acquisition cases and a cultural mix of interviewees. By these means, it aims to capture as much diversity as possible within the bounds of a small qualitative sample. This helps enhance the reliability of the findings and conclusions.

3.4 Research Strategy

In summary, a qualitative research methodology was selected in order to obtain in-depth information on the research topic. An exploratory case study approach allowed solicitation of insightful views and less tangible input from the interviewees through interactional interviews. Content analysis was conducted subsequent to recording and transcribing the conversations.

3.4.1 Semi-structured interview

Interviews are frequently used to collect data in qualitative research (Bryman & Bell, 2011; Sturges & Hanrahan, 2004). In general, a qualitative interview is much less
structured than a quantitative interview. Furthermore, the emphasis is more on interviewees’ perspectives, an approach which facilitates the collection of substantive responses. Therefore, the interview process is flexible. Unstructured and semi-structured interviews are the two major types of qualitative interview. In the former, the interviewer has an interview guide covering a list of topics or issues. The style of questioning is often informal. The unstructured interview is similar to a conversation and allows the interviewee to respond freely. In contrast, for a semi-structured interview, the interviewer holds to an interview schedule with a series of questions on fairly specific topics. The questions are usually general in the frame of reference.

While allowing free conversation and focusing on the research questions, I chose the semi-structured interview format for all interviewees. Open-ended questions encouraged interviewees to answer as they wished and at length. The interview schedule served as a framework to compare responses among interviewees within case and across cases in the data analysis and interpretation.

### 3.4.2 Interview mode

Face-to-face meetings are commonly used for conducting in-depth and semi-structured interviews, while the telephone is normally used for short and structured interviews in quantitative research (Sturges & Hanrahan, 2004). Qualitative interviews can be conducted on an individual basis or in a group. The focus group interview is a research technique to collect data through a group dynamic on a topic selected by the researcher (Morgan, 1996). If the topic is sensitive or emotionally charged, it is more appropriate to have a smaller group or to conduct the interviews on a one-to-one basis in order to attain a high level of involvement.

Davies and Dodd (2002) suggest developing a rapport based on shared understanding of and empathy about the research topic in order to have effective in-depth interviews. Gaining trust from interviewees and engaging them facilitate a smooth interview process and enable the participants to feel comfortable to share their thoughts, opinions and feelings faithfully.
36 Interviewees in 9 locations–31 face-to-face interviews in 7 cities

I selected individual interviews so that every interviewee could express his or her own view freely. Face-to-face or phone interviews were conducted in different locations of Deutsche Chemical. The interviewees work in Hong Kong, Taiwan, China, Singapore, the US, the Netherlands and Germany. I visited them and conducted face-to-face interviews when travel schedules fit well. Due to travelling costs and time constraints, telephone interviews were arranged if face-to-face meetings with the interviewees could not be accommodated. Ultimately, 31 interviews were conducted face-to-face in seven cities in Germany, Taiwan, Hong Kong and China. Only 5 interviews could not be conducted in this manner; this was partly due to no trips being scheduled to the Netherlands and Singapore, and partly due to scheduling problems. The average duration of face-to-face interviews is 53 minutes while that of telephone interviews is 47 minutes. The similar duration of face-to-face and telephone interview shows that detailed and in-depth discussions can be achieved by both interview modes.

3.4.3 Sampling method

In general, qualitative interviews strive for depth instead of breadth. The aim is to generate an in-depth analysis in order to understand how and why individuals behave as they do, and why they believe that what they do makes sense (Ambert et al., 1995). Therefore, the issue of sampling representativeness is less important in qualitative research than in quantitative research (Bryman & Bell, 2011). Random or convenience sampling are the usual methods adopted in qualitative research. However, purposive or theoretical sampling with intentional inclusion of outliers may address the problem of bias inherent to convenience sampling (Barbour, 2001). The details of my sample have been given above in section 3.3.4. It includes a range of individuals from both the acquiring and acquired firms who represent a mix of different nationalities, genders, and organizational positions and who have substantial experience with cultural change and post-acquisition integration (Table 3.2). The purpose of having different group mixes is to increase the diversity of the interviewees within the bounds of a small qualitative sample.
3.4.4 Interview schedule

The objective of the empirical research is to find out the roles played by culture in knowledge sharing for best operational capabilities integration in cross-cultural acquisitions within the dynamic capabilities framework. This is also the principal research question. In addressing this question, the following specific aspects need to be addressed:

1) How does culture affect knowledge sharing during the sensing process after acquisition?
2) How does culture affect knowledge sharing during the seizing process after acquisition?
3) How does culture affect knowledge sharing during the reconfiguring process after acquisition?

Guiding questions were developed in six parts to obtain relevant information and to encourage the interviewees to reflect on and share their experiences (Appendix 3). The interview schedule as a framework to conduct semi-structured interviews was used to solicit input from the participants and to compare their responses within case and across cases during the data analysis and interpretation phases.

3.4.5 Pre-test

Since interview questions may be misinterpreted by respondents, a pre-test is important to address possible quality issues, such as bias, by checking the validity of questions and identifying the root causes of any response errors (Desimone & Le Floch, 2004). However, there are some drawbacks with pre-testing. Where the sample size is inherently small, a pre-test is likely to be embedded with potential bias; it is also time consuming (Phipps, Butani & Chun, 1995).

I selected three participants who had gone through cultural change from working or living abroad for pilot interviews to confirm understanding of the interview questions. The pilot interviews were conducted in three different languages, namely English, Cantonese and Mandarin. These languages were the media used during the field research. Despite the drawbacks of pre-tests noted above, the pre-test was still helpful
to check the validity of the questions and duration of the interviews. Although the data collected during the pre-test were not used for data analysis in the subsequent stage, the responses were useful to confirm the clarity of the questions and plan the interview appointments.

The feedback of the interviewees suggested that the questions were clear. The pre-test was also helpful in building experience to conduct the actual interviews for the research study. After listening to the audio recordings of the pre-test interviews, I adjusted my interviewing techniques so that I would speak more slowly and tolerate dead air to allow interviewees to think more deeply during the interviews.

3.4.6 Data collection and analysis

Audio recording and transcription

Interviews are best conducted in a quiet and uninterrupted space. Asking for the interviewee’s consent to audio recording the conversation prior to the interview is essential (Ostrower, 1998). Audio recording and transcribing the conversation are helpful for subsequent content analysis. It also allows the researcher to focus on listening and interpreting the conversation, and it supplements the limited memory of the interviewer (Bryman & Bell, 2011).

On the other hand, recording and transcribing interviews are time consuming and require good equipment. Technical problems like defective devices may happen (Oliver, Serovich & Mason, 2005). The ratio of write-up time to actual field work time can be as high as three to one (Levine et al., 1980). A one-hour interview may demand three hours for transcription.

Transcription ranges from naturalized to denaturalized approaches. The former mode transcribes all details as closely as possible and is often employed for conversation analysis. The latter concentrates on informational content and is associated with grounded theory and discourse analysis. Illustrative examples of these two approaches are provided in Appendix 4. The choice of focus between an empirical description of the speech and capturing the meaning in a transcript requires reflection and should be
made in light of the most appropriate method to answer the research question (Oliver et al., 2005).

Finally, the employment of multiple languages introduces another set of concerns. Xian (2008) identifies some problems which arise in translating qualitative interviews conducted across different languages. The potential problems are of linguistic, cultural and methodological types; they include the incommensurability of language, possible confusion introduced by literary and historical references, and the influence of the translator as problems inherent in cross-language qualitative interviews. Researchers need to be alert to these possible issues and to avoid them where possible (Appendix 5).

As most interviewees and I were used to multi-lingual environments from working in the MNC, there were no major linguistic issues. Besides, the review of transcripts by the interviewees confirmed good understanding on both sides during the interviews.

**Unit of analysis**

As qualitative data can be contextualized in a number of ways including organizational settings and social processes, a ‘case’ can be defined differently from study to study (Silverman, 2005). Punch (1998) explains that every case has boundaries and it is up to the researchers to decide, at an early stage in the research, what these are. In line with this view, a ‘case’ in this study must help the researcher explore the phenomenon of interest, that is to say, best practices integration during cross-cultural acquisitions, thus providing and clarifying the unit of analysis. In this dissertation the ‘cross-cultural acquisition’ unit of analysis refers to the organizational setting that combines the acquired firm and the relevant parts of the acquiring firm and their respective employees. Having defined the cross-cultural acquisition unit of analysis, the interviewees were chosen as appropriate informants. Informants were selected as individuals who belong to the group that has experienced the cross-cultural acquisition and therefore have adequate knowledge to provide information on all the variables of interest to the researcher; their purpose in agreeing to be interviewed is to provide information about the case rather than just about themselves (Kervin, 1992; Kitay & Callus, 1998).
**Content analysis**

Analysis and interpretation are the process of making sense of all the fragmented parts (Stake, 1995). Qualitative content analysis interprets meaning from documents or text data with the use of coding schemes and adherence to naturalistic paradigms. It helps bring to the surface the underlying themes in the text being examined (Bryman & Bell, 2011; Hsieh & Shannon, 2005). It is a cumulative process; it begins with basic pattern analysis and descriptive coding of important factors in the research question studied, followed by interpretive coding, which in this case focuses on explaining the roles of culture in knowledge sharing and the integration of best operational capabilities. With this technique, the analytic process involves both the presentation of major themes in the data and an evaluation of the data in the context of the conceptual framework.

As part of such a process, the transcriptions of the interviews are coded and categorized. Narrative notes are organized around the cultural dimensions affecting knowledge sharing during the sensing, seizing and reconfiguring processes; and various pieces of evidence are integrated from various contextual data elements from different interviewees addressing the same topic (Yin, 1981b). On this basis, the researcher may identify any similarities and differences among the textual data, explore any themes in relation to the research questions, and derive an explanation of the identified phenomenon. Finally, conceptual findings may be developed.

Any outliers need to be specified during data analysis. Once these are identified, the researcher determines whether there are any unique aspects that go beyond the norm or normal expectations and that might be worthwhile understanding.

I used Excel to organize the interview data for analysis. Because of the large volume of data, I arranged the data by generating a set of themes and concepts (Spencer, Ritchie & William, 2003). The data were coded and categorized into different groups, which were related to different cultural dimensions that were assumed to affect knowledge sharing during the respective processes. The findings were summarized to address the research questions set out in Chapter Two.
3.4.7 Reliability and validity

Since qualitative research data are not as readily codified as quantitative research data, the issues of the reliability and validity of qualitative research arise (Seale & Silverman, 1997). Therefore, it is particularly important to ensure rigor in qualitative research and necessary to have alternative relevant criteria for evaluating its quality (Barbour, 2001; Bryman & Bell, 2011; Cutcliffe & McKenna, 1999). The existence of diverse perspectives on interpreting the validity of qualitative research leads to various procedures to establish such rigor. These include triangulation, thick description, peer review, member checking and external audit (Creswell & Miller, 2000). Proper analysis of interviews contributes to the rigor of qualitative research.

As an employee of Deutsche Chemical with personal experience of the integration after the acquisition of Formosa Polymer, I understood the context easily during the interviews. However, there may be cognitive bias on my part due to preconceptions regarding the contextual process; because I am both the interviewer and the interpreter of the data, this is an important question. To address this issue, in the data analysis a confessional account of how data are being interpreted is presented. This is a technique used to provide transparency to the role of the researcher in the analysis of qualitative data (Bryman & Burgess, 1994). With this technique I am also able to assess and reassess any bias in my interpretations throughout the data analysis.

3.5 Ethical and Safety Issues

3.5.1 Ethical approval

The importance of ethics in research practices, including interviews, has been outlined earlier in section 1.7 of Chapter One. For instance, surreptitious taping is not acceptable, and explicit consent must be obtained before any taping of conversations (Ostrower, 1998). Before beginning this research project, I applied for ethical approval with detailed provision of the research design to the Human Research Ethics Committee (HREC) of the University of Newcastle. The field research commenced after receipt of written confirmation of full approval by the HREC.
3.5.2 Voluntary participation—Consent by organization and participants

After any procedures for ethical approval have been completed, organizational consent is sought. In the case at hand, a letter asking for voluntary support from the top management of the Germany-based MNC and explaining the desired role of the Human Resources Department in the recruitment process was sent. After receipt of the organizational consent, I approached the Human Resources Department to shortlist the potential interviewees and to independently send out an invitation to these individuals requesting confidential expressions of interest to participate in the study. An information statement and consent form were attached to the invitation as recruitment material; the participants thus had the opportunity to review the information statement in order to provide an informed consent. Recruitment through the Human Resources Department assures non-identification of the participants by their superiors.

Once potential interviewees had contacted me, I wrote to each participant with the information statement and consent form, and requested their formal approval of participation. Voluntary participation and strict confidentiality were emphasized to every single participant. Interviewing and audio-recording the conversation were arranged accordingly. For practical reasons including participant convenience, the interviews were conducted in the offices of the participants. This is the norm for most organizational research. However, if confidentiality was a concern, I was ready to arrange the interview in a location outside the organization. The rights of interviewees to withdraw participation at any time and to review the transcripts were reiterated explicitly.

Although I work in the same company as the interviewees, I have no reporting relationship with them. They have no reason to feel obligated, pressured or coerced to participate due to organizational hierarchy. I respect the decision of the interviewees to participate or not. Therefore, there is no conflict of interest.

3.5.3 Confidentiality of participation and information

As is standard in research involving human subjects, a number of measures have been taken to preserve the anonymity of participants and the confidentiality of participation. Firstly, a list of interviewees and their assigned codes is maintained so that an
interviewee’s data can be identified and taken out should any participants wish to withdraw. Furthermore, the participation of interviewees and the information they provide are kept strictly confidential. In my report, aggregate findings about the subject area are discussed. No specific interview is identifiable from the data. I provide to the organization and to the participants individually a summary of the research findings to share the insights gained from this research into the roles of culture in knowledge sharing in cross-cultural acquisitions. Finally, when transcription of the audio-recordings was outsourced to a third party, a non-disclosure agreement was signed between the transcriber and myself.

3.5.4 Safety approval
The safety risk was negligible as the interviews were conducted in the offices of the business organization or public locations and the travel destinations were low-risk overseas locations. I obtained prior safety approval from my project supervisors and complied with the travel policy and procedure of the University.

3.6 Conclusion
In summary, I selected a qualitative research methodology to study the roles of culture in knowledge sharing for integration of best operational capabilities in cross-cultural acquisitions under the framework of dynamic capabilities. This choice was justified by the case study approach. A Germany-based MNC, Deutsche Chemical, was chosen as it has gone through different cross-cultural acquisitions. Three acquisition instances were studied with the primary case being the acquisition of a Taiwanese SME, and two secondary cases being acquisitions of a Dutch SME and a US-based MNC. In-depth interviews with 36 participants were conducted in order to solicit in-depth information from them. Guiding questions were prepared for conducting semi-structured interviews with the interviewees. Thick data with transcripts containing 206,000 words were obtained for data interpretation. Content analysis was subsequently conducted. The selection of multiple acquisition cases and the diverse background of participants enhanced the reliability and robustness of this research finding. Lastly, I also addressed the ethical and safety issues associated with the selected research strategy.
4 CHAPTER FOUR: RESULTS AND DISCUSSION

4.1 Introduction

This chapter summarizes the results and findings from the data collected according to the research methodology outlined in Chapter Three. Thick and rich data were collected from 36 interviewees with diverse backgrounds from three acquisition cases. After transcribing the data into text, the transcripts contained 206,000 words. Data analysis and interpretation were conducted based on the basis of this information.

There are six sections in this chapter. The first introduces the structure of this chapter, followed by an overview of the dominant cultural profiles of the employees from the acquiring and acquired firms for this case study. The third provides the findings in relation to the research question of how culture plays a role in knowledge sharing during the sensing process. The fourth presents the findings concerning the seizing process, and the fifth those of the reconfiguring process. The sixth section provides a summary of the findings.

The following schematic diagram outlines the structure of Chapter Four.
4.2 Dominant Cultural Profiles of Employees from Acquiring and Acquired Firms

Table 4.1 shows the dominant cultural profiles of the employees from the acquiring and acquired firms for this empirical research. The cultural index values are from the Hofstede study and the GLOBE’s society practices by cultural dimensions (Hofstede, 2012; House et al., 2004). The GLOBE measured both the societal cultural values (the way things should be) and practices (the way things are) (House et al., 2004). I chose the GLOBE’s cultural practices to manifest the reality of the physical world instead of cultural values to project the ideals. The GLOBE has two cultural dimensions, namely uncertainty avoidance and power distance, with the same construct as Hofstede (House et al., 2002). Therefore, both of them appear once on their own.
These dominant cultural profiles were used as reference for the cultural context in the data interpretation. It would be helpful to see how the empirical findings do or do not match the theoretical cultural measures. Certainly, there are some inherent limits to these measures in that I had to use the national cultural profiles of Germany and the US for the two culturally diverse MNCs as the best profiles available to represent the majority of the employees.

Apart from this, the GLOBE’s institutional collectivism and in-group collectivism are derived from Hofstede’s collectivism. When I interpreted my data, I made judgments based on the subject context and input by the interviewees as to which one of these three cultural dimensions fitted the best. This avoids the illusion that there was a doubled or tripled impact from these similar cultural dimensions as might arise if I picked more than one cultural dimension from these three simultaneously. Furthermore, I applied the same approach to the GLOBE’s gender egalitarianism and assertiveness with Hofstede’s masculinity as the former two cultural dimensions have their roots in the latter (House et al., 2002).

Deutsche Chemical was the acquiring firm in the three acquisition cases, with its headquarters located in Germany. The majority of the interviewees from this company, 9 out of 20, were Germans. Because of the dominance of German culture in this Germany-based MNC, the national cultural values of Germany from the Hofstede and

<table>
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<th>Acquiring company</th>
<th>Acquired company</th>
<th>Organizational culture</th>
<th>MNC</th>
<th>SME</th>
<th>SME</th>
<th>MNC</th>
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<td>Acquiring firm</td>
<td>Deutsche Chemical</td>
<td>Formosa Polymer</td>
<td>Tulip Specialty</td>
<td>Eagle Solution</td>
<td>MNC</td>
<td>SME</td>
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<td>Ireland</td>
<td>Netherlands</td>
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<td>NC difference</td>
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<td></td>
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<td>66%</td>
<td>37</td>
<td>9%</td>
<td>40</td>
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<td>17</td>
<td>-75%</td>
<td>80</td>
<td>19%</td>
<td>91</td>
<td>36%</td>
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<td>45</td>
<td>32%</td>
<td>14</td>
<td>-79%</td>
<td>62</td>
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<td>69</td>
<td>6%</td>
<td>53</td>
<td>-16%</td>
<td>46</td>
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<td>181%</td>
<td>44</td>
<td>42%</td>
<td>29</td>
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<td>-14%</td>
<td>4.32</td>
<td>-5%</td>
<td>4.55</td>
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<td>4.46</td>
<td>18%</td>
<td>4.2</td>
<td>11%</td>
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<td>5.9</td>
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<td>3.7</td>
<td>-8%</td>
<td>4.25</td>
<td>-6%</td>
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<td>Future Orientation</td>
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<td>3.96</td>
<td>7%</td>
<td>4.61</td>
<td>8%</td>
<td>4.15</td>
<td>-3%</td>
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<td>Gender Egalitarianism</td>
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<td>3%</td>
<td>3.5</td>
<td>13%</td>
<td>3.34</td>
<td>8%</td>
</tr>
<tr>
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<td>3.86</td>
<td>21%</td>
<td>4.17</td>
<td>31%</td>
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<tr>
<td>Performance Orientation</td>
<td>4.25</td>
<td>4.56</td>
<td>7%</td>
<td>4.32</td>
<td>2%</td>
<td>4.49</td>
<td>6%</td>
</tr>
</tbody>
</table>

1) Hofstede’s cultural dimension index
2) GLOBE’s society practices by cultural dimensions
3) Pseudonym
4) MNC: multi-national corporation; SME: small-/medium-sized enterprise
5) % difference in national cultural dimension as compared with Germany: ±10% & ±20%
6) % difference in national cultural dimension as compared with Germany: ±10% & ±20% in green font
7) NC: National culture
8) OC: Organizational culture
9) US: United States; G: Ghana; N: Nigeria; SL: Sierra Leone
10) TC: Taiwan; H: House; Formosa Polymer; S: Taiwan; T: Tulip Specialty; E: Eagle Solution
11) China: Beijing; Russia: Moscow; Denmark: Copenhagen; USA: Washington DC; Switzerland: Zurich; 12) China: Beijing; Russia: Moscow; Denmark: Copenhagen; USA: Washington DC; Switzerland: Zurich
the GLOBE studies are assumed to best represent the dominant cultural profiles of the employees working for Deutsche Chemical.

In the primary Formosa case, the acquired firm had its headquarters in Taiwan. Most of the interviewees from Formosa Polymer were Taiwanese (8 out of 10). Therefore, the national cultural values of Taiwan from the Hofstede and the GLOBE studies are assumed to represent the dominant cultural profiles of the employees working for Formosa Polymer.

In the secondary Tulip case, the acquired firm had its headquarters in the Netherlands. All of the interviewees from Tulip Specialty were Dutch. Therefore, the national cultural values of the Netherlands from Hofstede and the GLOBE studies are assumed to represent the dominant cultural profiles of the employees working for Tulip Specialty.

In the secondary Eagle case, the acquired firm had its headquarters in the United States. Although the nationalities of the interviewees varied, which is typical of MNCs, and Americans did not constitute the majority of the interviewees from Eagle Solution, most of the non-American interviewees in the acquired firm referred to the American culture of their company during the interview (e.g. EDXXXX10M & EDXXXX19M). Therefore, I chose the national cultural values of the United States from the Hofstede and the GLOBE studies to best represent the dominant cultural profiles of the employees working for Eagle Solution. Knowing that this is not a very perfect measure, I made provision during my data interpretation that the findings might not all fit this US profile as it was just the most common ‘profile’ available at the outset.

It is important to note that not all individuals in the nation display all the national cultural characteristics as listed in Table 4.1 (Hofstede, 1980). Moreover, some might display specific cultural dimensions more vividly than others. Individuals shape their cultural identity through additive or subtractive multi-culturalism (Leung et al., 2005). My data interpretation for the three cases studied supports this finding. Some of the interviewees did not exhibit fully the typical national cultural values, probably due to multi-culturalism.
4.3 Roles of Culture in Knowledge Sharing during the Sensing Process

Before acquisition, the acquiring and acquired firms were rivals fighting for customer base, market share, or leadership in technology and innovation. Because of anti-trust laws and other regulatory constraints, they were not allowed to cooperate closely, as this might jeopardize the interests of their customers. Their relationship was like that of enemies at war. There was no win-win scenario, only a winner and a loser. During the pre-acquisition due diligence, there were limited exchanges between the acquiring and acquired firms (Harvey & Lusch, 1998).

After approval by the relevant Securities Exchange Commissions for acquisition, the acquiring and acquired firms became an amalgamated firm. Consequently, the relationship among the employees of the two firms started to change from one of competitors to colleagues. Without the presence of any legal barriers, they should in theory now be open to forms of cooperation such as sharing knowledge and information for non-hostile acquisitions.

During the sensing process, the two parties needed to share knowledge such that they could learn the current organizational routines, which were the basis of operational capabilities, from each other in respective functions in order to integrate the best practices in operational capabilities. Indeed, learning is part of the activities for sensing emerging opportunities (Teece, 2007); sensing opportunities is one of the processes making up dynamic capabilities deployment (Wilden, Gudergan & Lings, 2009).

Section 2.5 of Chapter Two outlined the research questions and key focus: How does culture affect knowledge sharing in each case during the sensing process? In particular, which cultural dimensions have a positive impact on knowledge sharing? Which cultural dimensions have a negative impact on knowledge sharing? What is the strength of the impact? How is knowledge sharing affected in terms of effectiveness and efficiency? Knowledge sharing effectiveness is the extent to which knowledge has been shared, whereas knowledge sharing efficiency is the ease with which knowledge has been shared. Since this research is qualitative in nature, the relative strength of the impact of various cultural dimensions is judged by an integrated approach based on the subject context and the interviewees’ responses. The data findings for each case will be discussed in the next sections.
4.3.1 The primary Formosa case–Acquisition of Taiwanese SME by Deutsche Chemical

During the sensing process, I found cultural diversity, collectivism, language difference and organizational cultural differences to be the most prominent cultural dimensions affecting knowledge sharing in the primary Formosa case. The other cultural dimensions, including power distance, masculinity, uncertainty avoidance, long-term orientation, assertiveness, institutional collectivism, in-group collectivism, future orientation, gender egalitarianism, humane orientation and performance orientation, showed an insignificant impact on knowledge sharing. In the next sections, I discuss how the identified cultural dimensions had respective positive and negative impacts and how they affected the outcomes for knowledge sharing. Figure 4.1 summarizes which cultural dimensions influenced knowledge sharing with different strengths and impacts. The strength of impact was interpreted based on a holistic evaluation of the subject context, frequency of findings in my data, and interviewee statements. The interviewees gave qualitative descriptions about the strength of impact. For instance, this was a very important or big issue, or it was definitely a barrier and so on. The background analysis to derive the data findings is detailed in Appendices 6 and 6A.
Collectivism underlying trust as an important gateway to knowledge sharing

Formosa Polymer was a Taiwanese company with a greater proportion of individuals with collectivistic values. Individuals from societies that feature a high degree of collectivism tend to have a tighter social framework than individuals from societies characterized by a high degree of individualism. Within the in-group, individuals have a high level of trust such that they have a strong identity within the group and a strong consciousness of ‘we’ (Hofstede, 1980). Trust emerged as a common theme having a strong impact on knowledge sharing from the data collected. This was supported through statements made in the interviews that trust was an important issue affecting effective knowledge sharing in the primary Formosa case. “Building trust is very important at the beginning” (DFHMSM21O). “Everything was about communication which relied on trust eventually” (DFHMSM18O). Once trust was built up, the forum for sharing current organizational routines and practices in each function between the employees from the acquiring firm and those from the acquired firm was established. “If
they think you are in the circle, then they can openly talk about everything with you” (DFHMSM21O).

This empirical research shows that when the two teams built trust and established a good relationship, the team members felt free to share knowledge and expressed their opinions openly. The higher the trust level, the more open the team members were, and the more in-depth information was shared. These findings are also supported through the comments given by the interviewees. “Trust is a very important issue, especially in Asian culture. I think you need to really trust the people in order to talk a lot, and to talk more deeply” (DFXXXX16O). “So I think it really depends on building trust and probably you have to be open first...and then they will be open and then share the information with you” (DFHFSC17O). “The more you trust the people, then the better it is!” (DFXXXX28M).

Cultural diversity as enhancing collective intelligence

Cultural diversity was another dimension found to enhance knowledge sharing in the primary Formosa case. Consistent with the extant understanding of the positive impacts of culture, in this case site cultural diversity contributed to knowledge resources by combining different perspectives and leading to new and creative ways of improving business operations (Lauring, 2009). Collective intelligence is the positive outcome of cultural diversity, providing a broader access to ideas and a deeper level of insights.

The data from this empirical research illustrate that the employees of the acquiring and acquired firms gained the benefits of cultural diversity for knowledge sharing and specifically anticipated such a positive impact with reference to the broader portfolio of expertise available as a consequence of this diversity. “Of course cultural diversity has a big positive effect in knowledge sharing. This is because my scope of vision and thinking are not limited in a certain area only” (FDTMSM24O). When the employees of the acquiring and acquired firms shared how they ran their businesses from production to supply chain management, the two teams broadened their knowledge base and increased their comprehension of functional possibilities and operational capabilities. “Cultural diversity can create value. I think this is synergy because it’s the best of both worlds. You can do it in the western style and you can do it in an eastern style. Both are successful. But both also may have their limitations. And cultural
“Diversity just enlarges the scope and you could describe it as a toolbox. If you have both tools, you must be more successful because you can deal with more and different things” (DFXXXX03M). The amalgamated firm might realize that they could stretch their perceived limits by combining their intellectual resources and operational capabilities in respective functions.

“I think cultural diversity is very important. I would say it is a driver for knowledge sharing” (DFHMSM21O). “Definitely it is a contributing factor... If everybody...puts ideas together, it must be a good thing... I think a combination of cross-country culture is definitely better than a single culture” (DFXXXX09O). Even in examples where interviewees were not explicit about how culture helped, they seemed to be predisposed to or to expect positive effects as they were conscious that cultural diversity added a broader breath of experience from which they could draw. Cultural differences make individuals expect different perspectives from different countries and be more open to different ideas. Consequently, the acquiring and acquired firms benefitted from the belief that cultural differences potentially lead to new ideas, even before this happened.

**Cultural dimensions having negative impact on knowledge sharing**

**Language difference as posing a great barrier to communication and social interaction**

A predominant theme emerging from the data was that the language barrier impeded the knowledge sharing process. Language is one of the explicit markers of cultures, which can be easily observed and are the symbols of a deeper level of culture (Soley & Pandya, 2003; Trompenaars & Hampden-Turner, 1998). Therefore, it came as little surprise that language was an easily articulated challenge to knowledge sharing amongst interviewees. The data from this research support the expectation that language was a serious or very serious issue in communication and knowledge sharing in the primary Formosa case. A few informants did not mention the language problem. Probably they experienced less of a language problem than the others did, as their supervisors, who came from the acquiring firm, were bilingual.

The language barrier occurred in daily interactions in the primary Formosa case. “It was foreseen that there would be a language barrier with the Taiwanese” (DFXXXX16O). “Language has been...a big issue” (DFGMPT05M). “Language is really a problem during our communication” (FDXXX11O). “Language was definitely a barrier. I
think that was huge” (DFXXXX28M). “People with the same language were usually closer” (DFHMSM18O). The language problem became apparent right after acquisition due to the abrupt change in the means of communication within Formosa Polymer. This bombarded the daily business activities of the acquired firm such as discussions, meetings, emails and telephone conferences. “In the past, we didn’t need to use English. But from Day One there were suddenly many English terms. It was a big headache” (FDCFSC26O). “English is the second, the third, or even the fourth language for a Chinese” (FDTMSM27O).

When it came to technical issues that involved tacit knowledge, the language barrier was amplified and could not be overcome by translation. There are significant linguistic differences between Chinese and English. For example, some Chinese words have no direct equivalent in English. The differences in grammatical structures between Chinese and English may lead to confusion and misunderstanding as Chinese language does not use tenses and verbal Chinese does not distinguish gender in pronouns (Xian, 2008). This issue of literal translation became an issue in a number of scenarios that involved technical vocabulary. Interviewees noted, “Although we had someone who was translating, who spoke English very well, he was not technical, he was not an engineer. So he did not understand 100% of all the technical issues” (DFGMPT02M). This conforms with the scholarship suggesting that language is one of the main difficulties in sharing tacit knowledge as tacit knowledge is held in non-verbal form (Haldin-Herrgard, 2000).

Collectivism as demanding trust building

Drawing on the data from this empirical research, we can see that trust was an important issue affecting knowledge sharing in the primary Formosa case. After acquisition, the acquiring firm acted as the host company in which employees stayed within their own culture. On the contrary, the employees of the acquired firm entered into a new working environment with different cultures, organizational routines and operational requirements. The employees from the acquired firm experienced a higher degree of change and faced demands for a higher level of adaptation than those from the acquiring firm. Virtually, all employees from the acquiring firm were strangers to the employees from the acquired firm, who needed to adapt to the organizational culture of the acquiring firm and the operational environment of the amalgamated firm. “There might
have been psychological barriers right at the beginning of the integration. So I did not think they were very open to sharing any information... There was no mutual trust at the beginning... The culture in Hong Kong and Germany was completely different. Building up mutual trust took more time than in Taiwan” (FDTMSM24O). “If there was no trust, all the communication would be useless” (DFHSM18O). “If they don’t think you are in the circle, they don’t want to share anything with you” (DFHSM21O). “So it took me really a lot of time and effort to gain the trust of this person” (DFXXX03M). Trust building is a time-consuming process involving social interaction and communication among individuals in the team across teams.

Cultural diversity as bringing disadvantages in communication
Although the employees of the acquiring and acquired firms perceived cultural diversity as a positive factor contributing to knowledge sharing in the primary Formosa case, some of them experienced disadvantages as well, a fact illustrated in the interview data. These disadvantages were commonly articulated in terms of time diseconomies as evidenced in quotes from the informants. “You have to work harder because you have to overcome the cultural differences” (DFXXX03M). “Sometimes there was a problem (with cultural diversity) because of the language” (FDTMSM07M).

Organizational cultural differences as introducing a high level of formalization from the MNC
The organizational cultural differences between the acquiring and acquired firms were significant in the primary Formosa case. There is a great range of culture profiles that organizations may develop (Cameron & Quinn, 2006). During the initial contact right after acquisition, the differences in organizational cultures were obvious. “One is really an MNC with plants, offices all around the world. Well, as for Formosa Polymer, it is a local Taiwanese company. So, in terms of the number of people, the organization size is very different already. And then we come to the way of working” (DFHFSC17O). MNCs have more formalized ways of communication than SMEs. Deutsche Chemical had the characteristics of a hierarchical culture; it was formalized and structured, and had procedures to govern the actions of employees via formal rules and policies (Cameron & Quinn, 2006). Formosa Polymer had the characteristics of an adhocracy culture: an external focus and a high degree of flexibility (Cameron & Quinn, 2006). “We were a small company. So we basically talked over the phone. Deutsche Chemical was a big
company. There were many internal emails... Our emails in the past were mainly external. At Deutsche Chemical, they would prepare minutes for internal meetings. It was so much to read, those minutes” (FDTSM07M). “We rarely had meetings before. The ratio might be as high as one to ten... There were too many meetings” (FDTSM08M).

It is important to note that the employees in the primary Formosa case exhibit a multifaceted culture with blending of their respective national cultures and organizational cultures. This phenomenon is more distinctive in the MNC. During the interaction with colleagues of different nationalities, the employees are culturally baptized and take up other cultural values on top of their own national cultures. Therefore, some of the German employees do not show the typical characteristics of German culture. By the same token, employees of other nationalities also do not show the typical characteristics of their respective national cultures. Individuals who were used to working in a multi-cultural environment encountered fewer cultural issues during integration as they were more adaptive than those who were used to working in a mono-cultural environment.

**Cultural dimensions having insignificant impact on knowledge sharing**

Power distance, masculinity, uncertainty avoidance, long-term orientation, assertiveness, institutional collectivism, in-group collectivism, future orientation, gender egalitarianism, humane orientation and performance orientation showed an insignificant impact on knowledge sharing during the sensing process in this primary Formosa case. The reasons might vary from one cultural dimension to another. As discussed earlier, the GLOBE’s institutional collectivism and in-group collectivism were derived from Hofstede’s collectivism. Since I deduced collectivism as the primary cultural dimension affecting knowledge sharing, the other two similar collectivism dimensions were not picked in order to avoid the impression of having multiple impacts from collectivism.

As listed in Table 4.1, Germans and Taiwanese place similar cultural values on uncertainty avoidance and gender egalitarianism. It is likely, therefore, that they have similar behaviors or expectations. Consequently, no significant impact from these cultural dimensions on knowledge sharing is expected.
Although the average German places higher cultural values on masculinity, assertiveness and future orientation than does the average Taiwanese, influence from these cultural dimensions on knowledge sharing was not significant during this sensing process for the primary Formosa case. It is probable that the employees did not demonstrate strongly these cultural features due to multi-culturalism. Deutsche Chemical regularly sends selected employees to work overseas within its global network. Some of the employees from Deutsche Chemical in this primary Formosa case were expatriates transferring from Germany to Hong Kong or Taiwan during the acquisition and integration period. Before their departure from Germany, they attended training on culture to become conscious of cultural differences in order to get them prepared and to set their expectations (DFXXXX01M). Some other employees also had experience living abroad through study or overseas job assignments. Therefore, some of the German dominant cultural characteristics were shattered or lost through subtractive multi-culturalism (Leung et al., 2005).

Similarly, although the average German registers lower cultural values for power distance, long-term orientation, humane orientation and performance orientation than does the average Taiwanese, influence from these cultural dimensions on knowledge sharing was not conspicuous. The reason might be the multi-culturalism of the employees. German employees were not typical of Germans, nor were Taiwanese employees typical of Taiwanese. The employees from the acquiring firm might strengthen or take up some of the non-typical German cultural characteristics through additive multi-culturalism (Leung et al., 2005).

Outcomes for knowledge sharing effectiveness
With collectivism and cultural diversity as contributing factors in knowledge sharing, the primary Formosa case was illustrative of a firm being able to share knowledge effectively during the sensing process. There were sufficient exchanges on current organizational routines and operational capabilities of each function in respective teams such as supply chain management, research and development, and sales and marketing. The teams understood the current operational capabilities of respective functions.

The supply chain management had a great deal of expertise in and knowledge about the process from receipt of order to payment. The workflow and process were the key
knowledge to share during the sensing process. “We all needed to know how it (Customer Service Department) worked in the past and how it needs to work after merging. So we were open to share completely. Very good. In the past, the Order Management team (of Deutsche Chemical) helped us communicate so that the workflow is running well now” (DFCFSC26O). “It was very intensive because people try to explain to the opposite party the way it works. So each party then has to try to understand what the way of (Supply Chain Management) working is on the other side” (DFHFSC17O). Knowledge sharing on the supply chain function was effective such that each member in the team understood how the daily operation in this logistic function worked.

Research and development has significant expertise in product development and the production process. It is a center of innovation and a key to the future success of the company. Intellectual property and know-how are particularly rich in this function. Hence, information can be sensitive and confidential. “When we had a specific technical task, for example, transfer grade A from Germany to Taiwan, we obviously sat together, either in person or by phone and mail, and tried to discuss how we did this (in the past). And that was then a learning phase” (DFGMPT05M). The acquiring and acquired firms were open to share technical knowledge when they introduced a supply shift project involving substantial knowledge transferred from Germany to Taiwan about Deutsche Chemical’s product and knowledge transferred from Taiwan to Germany about Formosa Polymer’s technical facilities and capabilities.

Improved marketing intelligence was the synergy attained by the acquiring and acquired firms. Better understanding of the market dynamics and knowledge about the customer-supplier relationship was vital for the company to create sensible marketing strategies to defend their market position and to grow sustainably. “Actually before the integration, I would say that we knew only about 50% to 60% of the market when only selling Deutsche Chemical products. Deutsche Chemical products were imported anyway. The local production covering the low to median end of the market was a very big piece of cake that we were not involved in. We really did not understand the market. At that time Formosa Polymer targeted the middle or a point a little bit lower in the market. So after the integration, we captured almost, I would not say 100%, 80% to 90% of the market knowledge” (DFXXX09O). Because of the product complementarity and hence
market coverage, the acquiring and acquired firms gained a fuller picture of the market they served and hence developed better insights into market development through open sharing of market and customer information, which were the basis of the sales and marketing capabilities.

Outcomes for knowledge sharing efficiency
Although knowledge was shared effectively during the sensing process, the efficiency was hindered by the cultural factors of language difference, collectivism, cultural diversity and organizational cultural differences. The knowledge sharing process was slow and progress took place in small steps. First of all, it took time to build trust. The language barrier hindered social interaction further, which slowed down the trust building process. Secondly, the language difference posed significant challenges in communication. There were repetitive discussions for back and forth clarification. The Taiwanese SME had its knowledge more in tacit form, creating challenges for sharing through extra documentation or reports. Because of the different perspectives brought in by cultural diversity, it took time to review every piece of information and knowledge contributed by the employees in order not to miss any insightful or useful input.

The language barrier impeded the knowledge sharing efficiency significantly. The barriers took both verbal and non-verbal forms. English was not the daily language used by the employees of Formosa Polymer. Therefore, they did not speak English fluently. Time diseconomies during discussion and meetings were the consequence of the non-proficiency in English. “The communication takes much longer. And if you don’t take your time, then better not communicate at all. The communication was so critical” (DFGMXX01M). Slow response time was the common problem encountered. Misunderstanding due to language and linguistic differences leading to more discussions for clarification increased the time diseconomies further. “When we met the following time, it happened very often that we had to discuss it (matters from the previous meeting) again... It takes a lot of time... It was quite often that we had to discuss again, again, again and again” (DFGMPT02M).

The differences in organizational culture also hindered the process of knowledge sharing. Formosa employees relied on verbal communication in their daily operations. Deutsche Chemical employees were structured and formalized in their communications.
Therefore, the acquiring firm introduced extensive documentation to the acquired firm. “If you document all this knowledge in English, maybe it will take more time for Taiwanese colleagues to comprehend that information” (DFHFSC17O). “We were slowed down by reading that information... I may take only 3 minutes to read a Chinese article. But it may take me as much as 20 minutes if the article is in English” (FDXXXX11O). On one hand, the acquired firm received large amounts of information in explicit form, which was a burden to read. On the other hand, they were required to transfer their tacit information into explicit form, which was a burden to write. Both reading and writing in English demanded extra time and effort from the employees of Formosa Polymer.

4.3.2 The secondary Tulip case–Acquisition of Dutch SME by Deutsche Chemical

During the sensing process in the secondary Tulip case, cultural diversity and organizational cultural differences were relatively prominent in making an impact on knowledge sharing but with different strengths. The other cultural dimensions, including power distance, collectivism, masculinity, uncertainty avoidance, long-term orientation, assertiveness, institutional collectivism, in-group collectivism, future orientation, gender egalitarianism, humane orientation, performance orientation and language difference, showed an insignificant impact on knowledge sharing. In the next sections, I discuss how the identified cultural dimensions had respective positive and negative impacts and how they affected the outcomes for knowledge sharing. Figure 4.2 presents a summary of how culture affected knowledge sharing for the secondary Tulip case during the sensing process. The background analysis to derive the data findings is detailed in Appendices 6 and 6A.
Cultural dimensions having positive impact on knowledge sharing

Cultural diversity as enhancing collective intelligence

The acquiring and acquired firms visualized the benefits of cultural diversity on knowledge sharing by embracing broader insights and perspectives. This was evident from the statements made in the interviews. “I think nobody has a 100% right answer or right knowledge or right approach” (TDXXXX34M). People can leverage cultural diversity to create value and to enrich knowledge sharing (DTXXXX35M & TDXXXX33M). “There were clear examples where that was definitely positive. Because the difference can spark interest and curiosity in people, which will then encourage more information sharing. There were examples of that, where they said, ‘Wow, this is completely different from how we are doing it. This looks like an interesting approach.’” (DTXXXX22M). Collective intelligence opens up new dimensions of thought leading to generation of new ideas in managing the business.


**Cultural dimensions having negative impact on knowledge sharing**

**Cultural diversity as bringing disadvantages in communication**

Cultural diversity was perceived as a positive factor contributing to knowledge sharing by the acquiring and acquired firms in the secondary Tulip case. However, it brought disadvantages as well, an observation supported by the data from this case. Cultural diversity posed language related challenges and took more time for meeting and discussion (TDXX33O). “When somebody is not very good at a foreign language, it introduces tension about sounding stupid. Also, when you are very bright and when you cannot talk to somebody else in the right way, you still sound stupid and that’s a disadvantage” (TDXX34M).

**Organizational cultural differences as introducing a high level of formalization from the MNC**

Just as in the primary Formosa case, the organizational cultural differences between the acquiring and acquired firms were significant in the secondary Tulip case. During the initial contact right after acquisition, the differences in organizational cultures were more obvious. MNCs have more stakeholders from various functions and formalized ways of communication than do SMEs. “The company culture (of Tulip Specialty) is very different from the big Deutsche Chemical corporate culture” (DTXX22M). “There were so many people who wanted to know something” (TDXX35M).

Deutsche Chemical had the characteristics of a hierarchical culture; it was formalized and structured, and had procedures to govern the actions of employees via formal rules and policies (Cameron & Quinn, 2006). Tulip Specialty, similar to Formosa Polymer in the primary case, had the characteristics of an adhocracy culture: an external focus and a high degree of flexibility (Cameron & Quinn, 2006). “As a small company, a lot was done based on feeling and experience; and Deutsche Chemical—a lot was done with written data on paper” (TDXX34M). Written documentation was the standard means of communication in Deutsche Chemical.

**Cultural dimensions having insignificant impact on knowledge sharing**

Power distance, collectivism, masculinity, uncertainty avoidance, long-term orientation, assertiveness, institutional collectivism, in-group collectivism, future orientation, gender egalitarianism, humane orientation, performance orientation and language difference
showed an insignificant impact on knowledge sharing during the sensing process in this secondary Tulip case. As listed in Table 4.1, Germans and Dutch, on average, have similarities in power distance, performance orientation and language. These three cultural dimensions showed an insignificant impact on knowledge sharing. The Dutch and the German languages were similar, which was confirmed from the statements by the informants. Therefore, “language was not a barrier” (DTXXX36O).

Although the average German places higher cultural values on masculinity, uncertainty avoidance, assertiveness and in-group collectivism than does the average Dutch person, influence from these cultural dimensions on knowledge sharing was not significant during this sensing process for the secondary Tulip case. This was probably because the employees from the acquiring firm did not demonstrate strongly these cultural features due to multi-culturalism. The employees from Deutsche Chemical in this secondary Tulip case had multi-cultural exposure from prior overseas assignments. They received culture training before the acquisition to become conscious of any cultural differences and to set the right expectations. Therefore, like the primary Formosa case, some of the German dominant cultural characteristics were shattered or lost through subtractive multi-culturalism (Leung et al., 2005).

Similarly, although the average German places lower cultural values on individualism, long-term orientation, institutional collectivism, future orientation, gender egalitarianism and humane orientation than does the average Dutch person, influence from these cultural dimensions on knowledge sharing was not conspicuous. This might be due to the multi-culturalism of the employees. The employees of the acquiring firm might strengthen or take up some of the non-typical German cultural characteristics through additive multi-culturalism (Leung et al., 2005).

**Outcomes for knowledge sharing effectiveness**

With cultural diversity as a contributing factor in knowledge sharing, the secondary Tulip case evidently shared knowledge effectively during the sensing process. There were sufficient exchanges on current organizational routines and operational capabilities of each function in respective teams such as safety precautions in production, research and development, and customer complaint management. Current operational capabilities of respective functions were well understood.
The production team had a great deal of knowledge about safety production, which was important for supply reliability and responsible care. “The global operational team is operating in such a way that there is an agenda; safety is a big part of this agenda… it is easy to share safety telegrams and incident telegrams” (TDXXXX34M). This makes it clear that the acquiring and acquired firms had open exchanges on their safety measures and incident alerts, which were part of the production capabilities.

Maintaining customer satisfaction was important for customer retention for the company. The sales and marketing teams shared their customer complaint management (TDXXXX33M). The acquiring and acquired firms exchanged information as to how they addressed customers’ complaints and how they reacted to arrange remedial solutions when complaints arose.

Research and development had extensive knowledge of product development and the production process. It is an innovation hub and critical to the future success of the company. Intellectual property and know-how are particularly abundant in this function. Hence, information can be sensitive and confidential. The research and development teams were very open in sharing information and knowledge and looked into the ‘treasure chambers’ to see what technical developments were in process (DTXXXX22M).

**Outcomes for knowledge sharing efficiency**

Although knowledge was shared effectively during the sensing process, efficiency was hindered by the cultural factors of cultural diversity and organizational cultural differences. Because of cultural diversity bringing in different ideas and opinions, it took time to review every piece of information and knowledge contributed by the employees in order not to miss any insightful or useful input. The differences in organizational culture also slowed down the process of knowledge sharing due to the extent of formalization required by the MNC.

The hierarchical culture of Deutsche Chemical employed a formalized and structured way to share knowledge. It required tedious documentation for data collection. “For Deutsche Chemical, a lot was done via written data on paper” (TDXXXX34M). In addition, there was involvement of multiple stakeholders in the MNC due to the more
complex organizational set-up. “There were so many people (from Deutsche Chemical) who wanted to know something” (TDXXXX34M). The more individuals involved in the process, the longer it took for the knowledge exchange. The Dutch SME had its knowledge more in tacit form, creating challenges for sharing such as extra documentation or reports. They were expected to transfer their tacit information into explicit form, which created extra paperwork for them.

4.3.3 The secondary Eagle case—Acquisition of US-based MNC by Deutsche Chemical

During the sensing process in the secondary Eagle case, cultural diversity and collectivism were relatively prominent in making an impact on knowledge sharing but with different strengths. The other cultural dimensions, including power distance, masculinity, uncertainty avoidance, long-term orientation, assertiveness, institutional collectivism, in-group collectivism, future orientation, gender egalitarianism, humane orientation, performance orientation, language difference and organizational cultural differences, showed an insignificant impact on knowledge sharing. In the next sections, I discuss how the identified cultural dimensions brought respective positive and negative impacts and how they affected the outcomes for knowledge sharing. Figure 4.3 summarizes how culture affected knowledge sharing for the secondary Eagle case during the sensing process. The background analysis to derive the data findings is detailed in Appendices 6 and 6A.
Cultural dimensions having positive impact on knowledge sharing

Cultural diversity as enhancing collective intelligence

The acquiring and acquired firms visualized the benefits of cultural diversity on knowledge sharing by embracing broader insights and perspectives. This finding was evident from the accounts of the informants during the interviews. “Cultural difference in any case is a plus, is good... When we make any decision, set any goal, the most important thing is that we need to have as many options as possible. The quality of a decision depends on first, the quantity and the quality of the options. And diversity can always provide more options” (DEXXX31M). “It is good in that it hastens knowledge sharing” (EDXXX14M). “It was of course good regarding the know-how and the product complementarity” (DEHMSM23O). Collective intelligence is the summation of the knowledge and wisdom of everyone in the team, which helps stretch the intelligence limits of individuals and complements the blind spots of each perspective.
Collectivism underlying trust as an important gateway to knowledge sharing

As an MNC, Eagle Solution had a mix of individuals having collectivistic and individualistic values. Similar to the primary Formosa case discussed earlier in section 4.3.1, trust was found to be an important foundation for knowledge sharing in this secondary Eagle case (EDXXXX14M, EDXXXX19M & EDXXXX32O). “People tend to approach people they trust (for information exchange)” (DEXXXX30M). Once mutual trust was built, exchange of information and knowledge became easier. “These people (the employees from the acquiring firm) know me already or let’s say I had earned some trust already, and so it is not that difficult when I request technical information, confidential information that I get some support...from our German colleagues even back to the headquarters” (EDXXXX19M).

Cultural dimensions having negative impact on knowledge sharing

Collectivism as demanding trust building

In the secondary Eagle case, there were diverse individuals holding a mix of collectivistic and individualistic values. Some of the employees experienced trust as an important issue affecting knowledge sharing in the secondary Eagle case. The employees of the acquired firm experienced the trust issue more than their counterparts of the acquiring firm. This phenomenon is similar to the primary Formosa case, and might be due to similar reasons; the employees of the acquired firm needed to adapt to more changes from organizational culture to daily operational activities. “The openness to share knowledge was dependent on the level of trust. Different people had different approaches. I had reservations about sharing views on controversial topics” (EDXXXX32O). “There’re other businesses where the personal relationships aren’t strong... Yeah, it comes down to trust. Can you trust each other to do what you say you’re going to do and to help further the business?” (EDXXXX14M). It needed time to build up trust among the members of the team in order to open the gateway to knowledge sharing. The need for trust was culturally driven with its roots in collectivism as the employees from societies with a low individualism index raised the trust issue.

Cultural diversity as bringing disadvantages in communication

Although the acquiring and acquired firms in the secondary Eagle case expected cultural diversity as a contributing factor in knowledge sharing, some employees experienced
disadvantages from cultural diversity. This is revealed in the interview data; cultural diversity could introduce language barriers for some individuals and cause misunderstandings due to different expectations about individual behavior (EDXXXX10M). Besides, adaptation was needed when different cultures encountered each other. “There was a run-in period and risk associated with every change. You needed time to run-in” (DEHMSM15O).

Cultural dimensions having insignificant impact on knowledge sharing

Power distance, masculinity, uncertainty avoidance, long-term orientation, assertiveness, institutional collectivism, in-group collectivism, future orientation, gender egalitarianism, humane orientation, performance orientation, language difference and organizational cultural differences showed an insignificant impact on knowledge sharing during the sensing process in this secondary Eagle case. As listed in Table 4.1, Germans and Americans, on average, have similarities in the values they place on masculinity, long-term orientation, assertiveness, future orientation and organizational culture. These five cultural dimensions showed an insignificant impact on knowledge sharing.

Although Germans typically put a higher cultural value on uncertainty avoidance than do Americans, influence from this cultural dimension on knowledge sharing was not significant during this sensing process for the secondary Eagle case. This was probably due to the employees not possessing this cultural characteristic strongly because of multi-culturalism, which is a typical feature of an MNC. Some employees from Deutsche Chemical in this secondary Eagle case had prior overseas working experience in Asia or exposure to different cultures by working with individuals of different nationalities in the MNC. They received prior cultural training in order to become conscious of any cultural differences and to set the right expectations. Therefore, like the primary Formosa and the secondary Tulip cases, some of the German dominant cultural characteristics were shattered or lost through subtractive multi-culturalism (Leung et al., 2005).

Similarly, although the average German holds lower cultural values towards power distance, institutional collectivism, in-group collectivism, gender egalitarianism, humane orientation and performance orientation than does the average American,
influence from these cultural dimensions on knowledge sharing was not conspicuous. The reason might be the multi-culturalism of the employees. German employees were not typical of Germans. The employees from the acquiring firm might strengthen or take up some of the non-typical German cultural characteristics through additive multi-culturalism (Leung et al., 2005).

**Outcomes for knowledge sharing effectiveness**

With cultural diversity and collectivism as contributing factors in knowledge sharing, the secondary Eagle case showed evidence of sharing knowledge effectively during the sensing process. “Sharing existing information is not an issue at all because there is a very good mechanism that helps us know what information we need to share and what information has to be shared, etc. And at that time, we had a quite a good guideline that started from the management; for example, what are the expectations and then scope, etc.” (DEXXXX31M). The approach to share knowledge was structured and organized. This is inherent in the hierarchical culture of well-established MNCs, which enables them to be effective in accomplishing their objectives (Cameron & Quinn, 2006).

There were sufficient exchanges on current organizational routines and operational capabilities of each function in respective teams such as marketing information and production practices. The marketing team shared sales lists and customer lists, and the information communicated by the employees of the acquired firm was sharp, to the point and transparent (DEHMSM15O). They passed on their marketing information in a full set of PowerPoint presentations (DEHSM23O). “Deutsche Chemical people trusted me because I shared market information with them” (EDXXXX19M). Those individuals working in production shared their functional cost-saving strategies and core processes in HSEQ (health, safety, environment and quality) (EDXXXX10M). The teams well understood the current operational capabilities for respective functions.

**Outcomes for knowledge sharing efficiency**

Although knowledge was shared effectively during the sensing process, efficiency was hindered by the cultural factors of cultural diversity and collectivism. The knowledge sharing process took time. On one hand, cultural diversity brought in broader perspectives. On the other hand, it slowed down the efficiency of knowledge sharing due to adaptation among individuals with different cultural backgrounds right after
acquisition. One interviewee who stressed the need for an adjustment or “run-in” period (quoted above) explicitly stated that there was an impact on the business (DEHMSM15O). Because of the mix of individuals with collectivistic and individualistic values, individuals needed to build trust before sharing knowledge in an open fashion. “You need to earn their trust, and then they will be willing to open up to you” (EDXXXX19M). Earning trust means individuals required time to communicate and have social interactions with each other.

4.4 Roles of Culture in Knowledge Sharing during the Seizing Process
The sensing process of opportunity identification is followed by the seizing process of addressing the identified opportunities through new product or process development or adaptation of enterprise structures, procedures or designs (Teece, 2007). After sharing knowledge about current organizational routines and operational practices by the acquiring and acquired firms, the two teams needed to compare methods and select the better approach in their respective functions or job areas. During this seizing process, individuals had to interact intensively to discuss and sometimes debate with or critique each other so that they could objectively conclude which approach was better or more suitable for the defined circumstances.

4.4.1 The primary Formosa case–Acquisition of Taiwanese SME by Deutsche Chemical
During the seizing process, I found cultural diversity, collectivism, assertiveness, humane orientation, language difference and organizational cultural differences to be the most prominent cultural dimensions affecting knowledge sharing in the primary Formosa case. Two cultural dimensions that had not shown any obvious impact on knowledge sharing during the sensing process appeared to be important during the seizing process. These were assertiveness and humane orientation. This was probably due to the deeper level of interaction and greater exchange required during the seizing process. The other cultural dimensions, including power distance, masculinity, uncertainty avoidance, long-term orientation, institutional collectivism, in-group collectivism, future orientation, gender egalitarianism, and performance orientation,
showed an insignificant impact on knowledge sharing. In the next sections, I discuss how the identified cultural dimensions had respective positive and negative impacts and how they affected the outcomes for knowledge sharing. Figure 4.4 summarizes the findings, illustrating which cultural dimensions influenced knowledge sharing with different strengths and impacts. The background analysis to derive the data findings is detailed in Appendices 6 and 6B.

Figure 4.4: The primary Formosa case (Acquisition of Taiwanese SME): Knowledge sharing during the seizing process

<table>
<thead>
<tr>
<th>Cultural dimensions having positive impact on knowledge sharing</th>
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</thead>
<tbody>
<tr>
<td>Collective intelligence</td>
</tr>
<tr>
<td>Communication</td>
</tr>
<tr>
<td>Confrontation</td>
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<tr>
<td>Bureaucracy</td>
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Knowledge Sharing Outcomes
- Knowledge sharing effectiveness (i.e., the extent to which knowledge has been shared)
  - Effective evaluation and assessment of current routines and capabilities of each function in respective teams (e.g., pros and cons of supply chain operation systems, strength and weakness of different pricing strategies)
  - Consensus on better practices of each function
- Knowledge sharing efficiency (i.e., the ease with which knowledge has been shared)
  - Lengthy process
  - Repetitive discussion
  - Misunderstanding
  - Back and forth confirmation
  - Extra documentation/analysis
  - Challenges in conversion of tacit knowledge or ideas into explicit knowledge
  - Behind-the-scenes mediation

Cultural dimensions having positive impact on knowledge sharing

Collectivism underlying trust as key foundation to knowledge sharing

As discussed in section 4.3.1, Formosa Polymer had a greater proportion of individuals with collectivistic values. Trust building is important prior to knowledge sharing. Once mutual trust was built up during the sensing process, the acquiring and acquired firms were able to share information and knowledge in an uninterrupted fashion. The well-established trust facilitated intensive knowledge exchange during the seizing process such as sharing information about advantageous and disadvantageous aspects concerning various operational capabilities.
**Cultural diversity as enhancing collective intelligence**

Similar to the sensing process described in the section 4.3.1, cultural diversity enhanced knowledge sharing during the seizing process in the primary Formosa case. It made a positive contribution to knowledge resources by consolidating different perspectives and leading to new and creative ways of improving business operations (Lauring, 2009). Collective intelligence is the positive consequence of cultural diversity, providing a greater access to ideas and insights. The benefits of cultural diversity—bringing broader perspectives and creating more ideas—continue into the seizing process.

**Humane orientation lubricating relationships through benevolence**

As indicated in Table 4.1, Taiwanese place a higher cultural value on humane orientation, which means they put a higher priority on benevolence and kindness (Kabasakal & Bodur, 2004). They try to keep relationships harmonious, which would make the interactions more comfortable and pleasant during the intensive interaction process. Such an orientation helps avoid unpleasant or embarrassing situations. This finding is supported by the statements of the interviewees. “The atmosphere is to always keep the emotional and the interactive level of interaction in a state which helps both sides to not lose face. I never experienced really situations where one party behaved in a way that made the other party feel unhappy” (DFXXX01M). The goodwill shown by individuals of high humane orientation lubricates social relationships, which enhances intensive knowledge transfer. This is needed during the seizing process for in-depth discussion and interactive exchange.

**Assertiveness as stimulating open debate**

As illustrated in Table 4.1, Germans place a higher cultural value on assertiveness, which underlies their readiness to express their true thoughts and feelings to others in an open manner (Hartog, 2004). They are used to having open discussion and debate based on professional expertise regardless of hierarchical position. Individuals can openly disagree with each other without the fear of upsetting social relationships. “It’s absolutely normal with my direct report being a chemist. When we discuss chemical issues, we don’t discuss them as boss with worker. We discuss them as if we were on the same level. We do this technical discussion when I get involved in a technical discussion. I don’t participate as a boss. I participate as a chemist” (DFGMPT05M).
The cultural dimension of assertiveness can stimulate open debate and exchange on controversial subjects.

**Cultural dimensions having negative impact on knowledge sharing**

Some cultural attributes negatively influenced the process of knowledge sharing during the seizing process when intensive exchange and interaction took place. Cultural diversity, language difference, humane orientation, assertiveness and organizational cultural differences could impede the process.

**Cultural diversity as bringing disadvantages in communication**

Similar to the experience in the sensing process, cultural diversity brought disadvantages in terms of time diseconomies. “It always costs time to find a compromise and to understand the other side” (DFGMP0T2M). Therefore, the efficiency in knowledge sharing was slowed down due to consideration of input by every member.

**Language difference as a great barrier in communication and social interaction**

Language difference remained a barrier from the sensing process to the seizing process for the primary Formosa case. “The language was always a problem” (DFGMP0T2M). Language barriers cannot be resolved overnight. Although the employees of the acquired firm may learn English, their proficiency cannot be improved drastically over a short period of time. “If we learn English now, of course it’s not too late but it would take a lot of time” (FDXXX13O).

**Humane orientation, especially concerning the issue of face, as blocking open debate**

Although a humane orientation has the advantage of lubricating social relationships through benevolence, it has the disadvantage of suppressing open debate due to fear of loss of face. Face is about the social standing of an individual. Maintaining the face of others is a means of protection for the individuals in a social relationship. Knowledge sharing is a kind of social interaction. An individual might gain or lose face during the knowledge sharing process (Kanzler, 2010). The desire to save face in Asian cultures may inhibit active participation in knowledge sharing in an open or formal way (Ardichvili et al., 2006).
The data from this empirical research suggest that saving face is an important cultural element in Asia, especially among Chinese and Taiwanese. “From a face point of view, it is more important in Asia than anywhere else” (DFXXXX28M). Some westerners from the acquiring firm were aware of this issue. Since all expatriates of the acquiring firm had attended cultural training, they were conscious of this cultural trait in Asia. Therefore, they paid attention to this when interacting with the employees of the acquired firm who had a high humane orientation and were concerned with saving face. The employees of the acquired firm did not mention the issue of face, probably due to internalization of this deeply rooted value. They just behaved in line with their underlying values and assumptions.

The culture of face saving might prevent or discourage argumentation and debate, leading to no real or delayed consensual agreement among the team members. Some German employees of the acquiring firm experienced the avoidance approach by the Taiwanese employees of the acquired firm. “They don’t say directly, ‘It’s nonsense’, ‘It’s bullshit’, something like this. We sometimes do here (in Germany)... They don’t express their thought as straightforwardly as we are used to doing” (DFGMPT05M). Hence, this face-saving culture led to a non-confrontational approach during the seizing process. The participants did not want to upset the other parties so that nobody would lose face during group meeting. Therefore, controversial discussion was avoided.

**Assertiveness as triggering confrontation**

Individuals of high assertiveness are free to express their genuine thoughts and reveal their true feelings in an open way (Hartog, 2004). The style of communication is direct and explicit, which might easily cause confrontation during discussion.

An example cited during the interviews illustrates this. A salesperson of the acquired firm had a direct confrontation with a credit officer of the acquiring firm in the primary Formosa case. Deutsche Chemical had clear guidelines and procedures for daily supply operations and credit management principles. The credit officer made her position clear; no exception or flexibility was granted to an overdue customer for continuous goods delivery. “She stood firm and did not deliver the goods. It was really a conflict and clash at that time” (FDTMSM27O).
Organizational cultural differences as introducing a high level of formalization from the MNC

As discussed for the sensing process, MNCs have more formalized ways of communication than SMEs. Deutsche Chemical had the characteristics of a hierarchical culture; it was formalized and structured, and had procedures to govern the actions of employees via formal rules and policies (Cameron & Quinn, 2006). Formosa Polymer had the characteristics of an adhocracy culture: an external focus and a high degree of flexibility (Cameron & Quinn, 2006). These organizational cultural differences remained influential throughout the sensing to the seizing processes.

Cultural dimensions having insignificant impact on knowledge sharing

Power distance, masculinity, uncertainty avoidance, long-term orientation, institutional collectivism, in-group collectivism, future orientation, gender egalitarianism and performance orientation showed an insignificant impact on knowledge sharing during the seizing process in this primary Formosa case. The reasons might vary from one cultural dimension to another. As discussed earlier, the GLOBE’s institutional collectivism and in-group collectivism were derived from Hofstede’s collectivism. Since collectivism was identified as the primary cultural dimension affecting knowledge sharing, the other two similar collectivist dimensions are not picked in order to avoid the impression of having multiple impacts from collectivism.

As listed in Table 4.1, Germans and Taiwanese, on average, exhibit similar cultural values for uncertainty avoidance and gender egalitarianism. Similar behavior or expectations are likely. Consequently, there is no significant impact from these cultural dimensions on knowledge sharing expected during the seizing process, just as was found during the sensing process.

Although Germans commonly place higher cultural values on masculinity and future orientation than do Taiwanese, influence from these cultural dimensions on knowledge sharing was not evident in this seizing process for the primary Formosa case. Very probably the employees did not demonstrate strongly these cultural features due to multi-culturalism, as explained in section 4.3.1.
Similarly, although Germans typically place lower cultural values on power distance, long-term orientation and performance orientation than do Taiwanese, influence from these cultural dimensions on knowledge sharing was not conspicuous. The reason might be the multi-culturalism of the employees. German employees were not typical of Germans while Taiwanese employees were not typical of Taiwanese. The employees from the acquiring firm might strengthen or take up some of the non-typical German cultural characteristics through additive multi-culturalism (Leung et al., 2005).

*Outcomes for knowledge sharing effectiveness*

Cultural diversity, collectivism, humane orientation and assertiveness contributed positively to the effectiveness of knowledge sharing during the seizing process in the primary Formosa case. There was effective evaluation and assessment of current organizational routines and operational capabilities of each function in respective teams. The strength and weakness of various functional capabilities were reviewed. Eventually the teams achieved consensus on better operational capabilities for each function.

The Deutsche Chemical team understood the advantages and disadvantages of the business operation of Formosa Polymer. Being pragmatic and flexible were the major advantages, and the lack of strategic planning and structure were the major disadvantages of Formosa Polymer as perceived by Deutsche Chemical. “I found them (Formosa Polymer) very pragmatic, very realistic. And when you get into it, you realize that these guys are actually very typical of a small company, very focused on the business, very focused on what they’re doing. They’re not into high-level strategies, strategic rationales and all these sorts of things” (DFXXX28M).

The acquiring and acquired firms evaluated the pros and cons of supply chain operation systems and concluded on a better practice for the amalgamated firm. Credit management was an example quoted by the interviewees. Formosa Polymer was flexible in credit control so that order delivery would still continue even to overdue customers (FDTMSM27O). However, a credit block would be imposed to stop delivery in the supply chain operation system of Deutsche Chemical when customers did not pay on time. The two teams agreed to adopt Deutsche Chemical’s systematic credit management from credit limit evaluation to process implementation for improvement on
cash flow management and credit risk management (FDCFSC26O, FDTMSM27O & DFHFSC20O).

The sales and marketing teams evaluated and compared their respective marketing capabilities, in particular marketing strategies and pricing tactics. Formosa Polymer adopted a milder approach while Deutsche Chemical took a more aggressive approach to price increments when under cost or margin pressure (FDTMSM07M). The differences in the pricing philosophies lay in the consideration of customer acceptance by Formosa Polymer and sustainable development by Deutsche Chemical (FDTMSM07M & DFXXXX28M). After intensive discussion, the two teams strove for a balance between fulfilling organizational profit requirements and stretching customers’ limit on price increase.

During the seizing process with its intensive exchange, a great deal of learning took place in the team. This learning process was beneficial across the entire organization. Through extensive learning from each other, individuals became more open to develop new ideas to do things differently. “I don’t think you can ever combine the best of both worlds. I think what you can do, you can certainly learn, and you can learn a lot... So it was about the learning, and people just being open to doing things differently” (DFXXXX28M).

**Outcomes for knowledge sharing efficiency**

Although knowledge was shared effectively during the seizing process, efficiency was hindered by the cultural factors of language difference, humane orientation, assertiveness, cultural diversity and organizational cultural differences. The knowledge sharing process was time-consuming and lengthy, partly due to the language barrier, which resulted in repetitive discussions for back and forth confirmation. Much as in the sensing process, extra documentation or analysis burdened the Taiwanese SME as its knowledge was more in tacit form. Because of the introduction of different perspectives through cultural diversity, it took time to embrace and review all input made by the employees. Moreover, the values of humane orientation and assertiveness, which led to face saving and confrontation respectively, demanded behind-the-scenes mediation to resolve conflicts.
There were common cultural dimensions slowing down the efficiency of knowledge sharing during the seizing process as during the sensing process. Language differences continued to pose significant communication challenges. Cultural diversity continued to demand more time for communication in order to evaluate different perspectives and opinions from the employees. Organizational cultural differences continued to burden the employees of the acquired firm with the need to produce extra documentation and analysis in order to convert tacit knowledge into explicit knowledge.

The culture of face saving, which originated from the humane orientation, meant that the real thoughts of the employees from the acquired firm, who preferred to keep harmonious relationships with others, were hidden. The confrontational approach taken by the employees of the acquiring firm who highly valued assertiveness upset the harmonious relationships preferred by their counterparts from the acquired firm. Therefore, there was a need for behind-the-scenes mediation in order to bring the teams towards a common approach. “So occasionally, the management did have to go and do that, but they did it behind the scenes so that when everybody came out, things all seemed to be smooth” (DFXXX28M).

4.4.2 The secondary Tulip case—Acquisition of Dutch SME by Deutsche Chemical

During the seizing process, I found cultural diversity, power distance and organizational cultural differences to be the most prominent cultural dimensions affecting knowledge sharing in the secondary Tulip case. Power distance, which did not show any obvious impact on knowledge sharing during the sensing process, appeared to be important during the seizing process. This was probably due to the deeper level of interaction and greater exchange required during the seizing process. The other cultural dimensions, including collectivism, masculinity, uncertainty avoidance, long-term orientation, assertiveness, institutional collectivism, in-group collectivism, future orientation, gender egalitarianism, humane orientation, performance orientation and language difference, showed an insignificant impact on knowledge sharing. In the next sections, I discuss how the identified cultural dimensions had respective positive and negative impacts and how they affected the outcomes for knowledge sharing. Figure 4.5 summarizes which cultural dimensions influenced knowledge sharing with different strengths and impacts. The background analysis to derive the data findings is detailed in Appendices 6 and 6B.
Cultural dimensions having positive impact on knowledge sharing

Cultural diversity as enhancing collective intelligence

Much as in the sensing process described in section 4.3.2, cultural diversity enhanced knowledge sharing during the seizing process in the secondary Tulip case. It had positive benefits for knowledge resources through soliciting different perspectives and creating new ways of improving business operations (Lauring, 2009). Collective intelligence is a positive consequence of cultural diversity, providing a greater access to ideas and insights. The benefits of cultural diversity—bringing broader perspectives and creating more ideas—continued during the seizing process.

The employees experienced the benefits of having cultural diversity in the team for intensive exchange of knowledge. This is illustrated in the data. The employees found that cultural diversity made a great deal of sense when it leveraged well through opening the forum to exchange and cooperating to pull something out (DTXXXX36M).

“Different cultures always look at things from another side and I think that’s very good”
The different perspectives brought by cultural diversity help broaden the knowledge base.

**Low power distance as stimulating open debate**

During the seizing process, despite the similar level of the respective power distance indices as illustrated in Table 4.1, the Dutch took a more open and direct approach than the Germans in expressing their opinions when discussing which organizational routines or operational practices were better. “Dutch people in general, from the German viewpoint, have a very informal way to act... They are easy to talk to and very approachable” (DTXXXX35M). “The Dutch approach things differently. They have a different kind of working style. Their hierarchies are very flat, so power distance is quite low. If, I mean, you hear very directly if something is going wrong; people voice their opinion. They don’t hold back” (DTXXXX22M). The Dutch relied on professional expertise, not on hierarchical opinions from superiors (TDXXXX34M).

This indicates that national culture was not the only cultural factor influencing individual behavior around knowledge sharing. Deutsche Chemical was a gigantic MNC with hierarchical and multi-layered organizational structures, whereas Tulip Specialty was a local SME with a flat organizational structure. The former type of structure created barriers for direct communication between the management and the operational employees; the latter facilitated direct communication. Therefore, the difference in organizational cultures exerted an influence on individual behavior around knowledge sharing.

**Cultural dimensions having negative impact on knowledge sharing**

**Cultural diversity as bringing disadvantages in communication**

Much as in the sensing process, cultural diversity brought disadvantages in terms of time diseconomies. “Because of the diversity of approaches, to make a decision may take longer because of the different approaches here. You might have much more discussion about how to find a solution or how to solve something or anyway to make a decision. Because there’re so many different perspectives from various cultural backgrounds, so it might take us longer to make a decision” (DTXXXX36O). Consequently, the efficiency in knowledge sharing was reduced due to evaluation of input by every member.
Organizational cultural differences as introducing a high level of formalization from the MNC

As discussed in section 4.3.2, the differences in organizational cultures between Deutsche Chemical and Tulip Specialty exerted an influence on knowledge sharing during the sensing process. This continued in the seizing process. “There is always a difference between the small- or medium-sized company that merged into a very big international company like Deutsche Chemical” (DTXXXX36O). Due to the interdependence of various functions, there were many stakeholders to be involved and with whom communication had to be maintained, which resulted in more formalities.

The statements made in the interviews support this finding. An acquiring interviewee confirmed that Tulip Specialty was leaner in terms of organization and internal workflows, and hence faster and more flexible in decision-making (DTXXXX36O). “Dutch culture is more ad hoc, less structured, easier to make decisions, faster to make decisions... The German culture is much more structured, I think, by means of making plans, sticking to the plans, and also documenting everything. That’s how we learned from them as well, because since we’re part of Deutsche Chemical, we work in a much more structured fashion and we also document a lot more what we do” (TDXXXX33M).

Cultural dimensions having insignificant impact on knowledge sharing

Collectivism, masculinity, uncertainty avoidance, long-term orientation, assertiveness, institutional collectivism, in-group collectivism, future orientation, gender egalitarianism, humane orientation, performance orientation and language difference showed no obvious impact on knowledge sharing during the seizing process in this secondary Tulip case. As shown in Table 4.1, Germans and Dutch, on average, show a close resemblance on performance orientation and language. There was an insignificant impact from these cultural dimensions on knowledge sharing.

Although the average German places higher cultural values on masculinity, uncertainty avoidance, assertiveness and in-group collectivism than does the average Dutch person, influence from these cultural dimensions on knowledge sharing was not evident during this seizing process for the secondary Tulip case. As explained in section 4.3.2, the
employees did not demonstrate strongly these cultural features, probably due to subtractive multi-culturalism (Leung et al., 2005).

Similarly, although Germans commonly place lower cultural values on individualism, long-term orientation, institutional collectivism, future orientation, gender egalitarianism and humane orientation than do Dutch, influence from these cultural dimensions on knowledge sharing was not conspicuous. As discussed in section 4.3.2, the reason might be the multi-culturalism of the employees (Leung et al., 2005).

**Outcomes for knowledge sharing effectiveness**

Cultural diversity and low power distance were contributing factors in knowledge sharing in the secondary Tulip case. The effectiveness of knowledge sharing during the seizing process was evident. There were sufficient exchanges on evaluating and assessing current organizational routines and operational capabilities of each function. The strengths and weaknesses of different functional capabilities were discussed and consensus on better operational capabilities in respective teams was reached. Customer complaint management and customer portfolio management were obvious areas.

A comparison of customer complaint management between the acquiring and acquired firms was carried out. “We (Tulip Specialty) sometimes have to deal with customers in case of problems or in case of discussion of quality problems. Sometimes we agreed with the customer, who has a problem with one of his projects and this is caused by maybe production problems and it is not quite clear whose fault it was, to find a commercial solution. In Deutsche Chemical…when we’re at no fault or when we cannot prove that Deutsche Chemical made the mistake, we’re not prepared to take part in a financial solution that easily” (TDXXXX33M).

As for customer portfolio management and customer segmentation, evaluations were conducted to see which approach was better. “The Deutsche Chemical approach is much better because it’s much, much more direct and the Deutsche Chemical knowledge of the market is much better than our (Tulip Specialty) previous knowledge. So as for the market intelligence, Deutsche Chemical is much better” (TDXXXX33M).
**Outcomes for knowledge sharing efficiency**

Although knowledge was shared effectively during the seizing process, the efficiency was negatively affected by the cultural factors of cultural diversity and organizational cultural differences, much as in the sensing process for the secondary Tulip case. Because of the different ideas and opinions brought from cultural diversity, it took more time to review each piece of input contributed by the employees in order not to miss any insightful or useful information. The differences in organizational culture also inhibited the process of knowledge sharing due to the high level of formalization required by the MNC.

The employees of the acquiring firm were aware of the complaints about the internal formalities by their counterparts from the acquired firm during their exchange process. “Oh my goodness, now we are so slow on the administrative side. Now the big company is coming with its requirements. Now we spend a lot more time to fulfill the internal requirements instead of doing business. Before when we were on our own, we spent 80% of our time for our business. Now we can spend only 60% of our time for our core business...we have to spend more time for administrative things.’ This part saw a dramatic increase so they always had complaints” (DTXXX36M).

In order to supplement the explicit knowledge stored in the computer system, the employees of the acquired firm spent time to transfer their customer knowledge in tacit form to the employees of the acquiring firm who took over responsibility for the accounts. “I took a lot of time to explain to these (Deutsche Chemical) colleagues who the customer behind the name is... They only see on the computer screen, names, for example customer X, but I tried to explain who is behind this X...the history...and what their behavior was... So I tried to make sure that the customer they look at, that they see on their screen, is not just a name but there’s a story behind them, which could not be read on a computer screen” (TDXXX33M).

**4.4.3 The secondary Eagle case—Acquisition of US-based MNC by Deutsche Chemical**

Much as in the sensing process in the secondary Eagle case, cultural diversity and collectivism were relatively prominent in their impact on knowledge sharing with
different strengths during the seizing process. The other cultural dimensions, including power distance, masculinity, uncertainty avoidance, long-term orientation, assertiveness, institutional collectivism, in-group collectivism, future orientation, gender egalitarianism, humane orientation, performance orientation, language difference and organizational cultural differences, showed an insignificant impact on knowledge sharing. In the next sections, I discuss how the identified cultural dimensions had respective positive and negative impacts and how they affected the outcomes for knowledge sharing. Figure 4.6 summarizes how culture affected knowledge sharing for the secondary Eagle case during the seizing process. The background analysis to derive the data findings is detailed in Appendices 6 and 6B.

Figure 4.6 The secondary Eagle case (Acquisition of US-based MNC): Knowledge sharing during the seizing process

![Diagram showing cultural dimensions and their impact on knowledge sharing]

Cultural dimensions having positive impact on knowledge sharing

Cultural diversity as enhancing collective intelligence

Cultural diversity remained a contributing factor to knowledge sharing during the seizing process as in the sensing process for the secondary Eagle case. As discussed in
section 4.3.3, cultural diversity introduced a broader perspectives and knowledge base from the team members of a different cultural background.

This finding is evident from the data in this secondary Eagle case. Some employees from the acquired firm referred to the positive side of cultural diversity. “When you are doing the exchange, exchanging experience, people of different cultures may have different responses to the same topics” (EDXXX10M). Cultural diversity stimulated learning, at least as experienced by the employees from the acquiring firm. “This (cultural diversity) was good for me... I was open to learn and see more things” (DEHMS15O). “Deutsche Chemical was very simple (in presentation). We learnt from them (Eagle Solution) a systematic way of presentation. We have continued to learn about this since then” (DEHMS23O).

Collectivism underlying trust as key foundation to knowledge sharing

As discussed in section 4.3.3, Eagle Solution had diverse individuals with a mix of collectivistic and individualistic values. Trust building was needed prior to knowledge sharing. Once mutual trust was built up during the sensing process, the acquiring and acquired firms were open to share information and knowledge in an uninterrupted fashion. This well-developed trust facilitated intensive knowledge exchange during the seizing process. “I had earned some trust already and so it was not that difficult when I requested technical information, confidential information” (EDXXX19M).

Cultural dimensions having negative impact on knowledge sharing

Cultural diversity as bringing disadvantages in communication

It was discussed in section 4.3.3 that cultural diversity brings communication challenges due to language barriers and might cause misunderstanding. These disadvantages continued in the seizing process.

Cultural dimensions having insignificant impact on knowledge sharing

During the seizing process, cultural diversity and collectivism were the most prominent cultural dimensions affecting knowledge sharing. The other cultural dimensions, including power distance, masculinity, uncertainty avoidance, long-term orientation, assertiveness, institutional collectivism, in-group collectivism, future orientation, gender egalitarianism, humane orientation, performance orientation, language difference and
organizational cultural differences, did not show any significant impact on knowledge sharing during the seizing process in this secondary Eagle case.

As listed in Table 4.1, Germans and Americans are similar in the values they place on masculinity, long-term orientation, assertiveness, future orientation and organizational culture. These five cultural dimensions revealed no noticeable influence on knowledge sharing in the seizing process; this is similar to what happened in the sensing process discussed in section 4.3.3.

Although Germans, on average, put a higher cultural value on uncertainty avoidance than do Americans, influence from this cultural dimension on knowledge sharing was not evident during this seizing process for the secondary Eagle case. As discussed in section 4.3.3, this was probably due to the employees not possessing this cultural characteristic strongly because of multi-culturalism, which is a typical feature of MNCs.

Similarly, although the average German places lower cultural values on power distance, institutional collectivism, in-group collectivism, gender egalitarianism, humane orientation and performance orientation than does the average American, influence from these cultural dimensions on knowledge sharing was not conspicuous. The reason again might be the multi-culturalism of the employees.

**Outcomes for knowledge sharing effectiveness**

As discussed earlier, cultural diversity and collectivism were contributing factors in knowledge sharing during the seizing process for the secondary Eagle case. It is clear from the data that knowledge was shared effectively. The acquiring and acquired firms evaluated and assessed the current organizational routines and operational capabilities in respective functions. The pros and cons of various functional capabilities were examined and consensus on better operational capabilities in respective functions was reached. Sales planning and credit management are illustrative examples.

Sales planning was one of the important business activities for the sales and production teams. The employees from the acquiring and acquired firms compared their respective sales planning with regards to the degree of accuracy. “We always make assumptions for the future because nobody knows what the future will bring. For assumption we always
encounter unknowns. And then, Deutsche Chemical tends to clarify all the unknowns before we go to the next step. And I think the other side, the Eagle Solution side, they are more comfortable with some unknowns which are unclear. So this will reflect a lot of operational issues, for example, in terms of planning...how we handle uncertainty including risk... It will reflect how much resources you will put to clarify the uncertainty” (DEXXXX31M).

For credit management, the employees of the acquiring and acquired firms compared how they evaluated the credit limits for their customers. Those of the acquiring firm learned that Eagle Solution used a more pragmatic approach for credit assessment of customers (DEXXXX31M).

**Outcomes for knowledge sharing efficiency**

Although knowledge was shared effectively during the seizing process in the secondary Eagle case, the efficiency was impeded by cultural diversity. It took time to share knowledge and to evaluate the better approach during the seizing process. On one hand, cultural diversity brings in broader perspectives and more information. On the other hand, it slows down the efficiency of knowledge sharing due to incorporation of all input by the team members. “There are always differences. And then how to handle differences, it is, ‘OK, let’s put it on the table,’ and then we try, and then we see who is right, who is wrong” (DEXXXX31M). Frequent discussion and debate were needed in order to reach common consensus on which organizational routines and operational practices were better and on combination or integration of best operational capabilities where appropriate.

**4.5 Roles of Culture in Knowledge Sharing during the Reconfiguring Process**

Current organizational routines and operational practices were shared by the acquiring and acquired firms during the sensing process, and the better operational capabilities for the amalgamated firm judged in the seizing process. The respective functional teams then needed to implement the agreed approaches through reconfiguring and recombining organizational resources and capabilities. This is an important step in the deployment of dynamic capabilities.
During the reconfiguring process, individuals needed to execute the agreed action plan together so that the expected benefits or synergies could be realized. There was a high level of interaction among the team members. Team restructuring or process adaptation might be needed. Flexibility would enhance the process of knowledge sharing during this reconfiguring process.

4.5.1 The primary Formosa case–Acquisition of Taiwanese SME by Deutsche Chemical

During the reconfiguring process, I found cultural diversity, collectivism, language difference and organizational cultural differences to be the most prominent cultural dimensions affecting knowledge sharing in the primary Formosa case. The other cultural dimensions, including power distance, masculinity, uncertainty avoidance, long-term orientation, assertiveness, institutional collectivism, in-group collectivism, future orientation, gender egalitarianism, humane orientation and performance orientation, showed an insignificant impact on knowledge sharing. In the next sections, I discuss how the identified cultural dimensions had respective positive and negative impacts and how they affected the outcomes for knowledge sharing. Figure 4.7 summarizes which cultural dimensions influenced knowledge sharing with different strengths and impacts. The strength of impact was interpreted based on a holistic consideration of the subject context, frequency of findings in my data, and interviewee statements. The interviewees gave qualitative descriptions about the strength of impact. For instance, this was a very important or big issue, or it was definitely a barrier, and so on. The background analysis to derive the data findings is detailed in Appendices 6 and 6C.
Cultural dimensions having positive impact on knowledge sharing

Cultural diversity as enhancing collective intelligence

Much as in the sensing process described in section 4.3.1, cultural diversity enhanced knowledge sharing during the reconfiguring process in the primary Formosa case. The benefits of cultural diversity—bringing in broader perspectives and creating more ideas—continued from the sensing and seizing processes into the reconfiguring process.

Collectivism underlying trust as key foundation to knowledge sharing

As discussed in section 4.4.1, once mutual trust was built up in the previous processes, employees from the acquiring and acquired firms were open to share information and knowledge in an uninterrupted fashion. The well-established trust facilitated close interaction during the reconfiguring process.
Cameron and Quinn (2006) state that organizations with the characteristics of an adhocracy culture demonstrate a high degree of flexibility. Formosa Polymer exercised its flexibility and pragmatism in the organizational routines and operational practices so that it could remain agile to cope with the ever-changing business environment. During implementation of the agreed practices, the employees on occasion faced unexpected scenarios that were not anticipated during the seizing process. They needed to react to circumstances and make appropriate adaptations. Therefore, pragmatism and flexibility were needed to deal with the unexpected and the dynamic situation. “Our company (Formosa Polymer) was more flexible. We always thought about economic results. We always used the most economical and fastest method in order to achieve the same result” (FDTSM07M).

In its operating markets, the business environments were fast-changing and had gotten more volatile since the global financial crisis. Being flexible and pragmatic enabled the organization to be responsive to market requirements. “They (Formosa Polymer) were pragmatic, they were very customer-oriented, they were quick in terms of sampling, they were quick in terms of projects, they were quick in terms of turning things around; which is exactly what a customer wants. You want someone who is extremely responsive to your requests and your demands. You know, they want a sample, some expect the next day… You look at Germany and it takes four months to even get the sample out” (DFXXXX28M).

**Cultural dimensions having negative impact on knowledge sharing**

**Cultural diversity as bringing disadvantages in communication**

As discussed in section 4.3.1, there were time diseconomies in communication because of the language and cultural differences entailed in cultural diversity. In addition, it took time to consider all perspectives and input by the employees.

**Language difference as a great barrier in communication and social interaction**

The language difference continued to cause communication problems during the reconfiguring process as in the sensing and seizing processes. As discussed in section 4.4.1, the English language competency of the employees from the acquired firm could not be improved significantly within a short period of time.
Organizational cultural differences as introducing a high level of formalization from the MNC

As discussed in section 4.3.1, Deutsche Chemical exhibited the characteristics of a hierarchical culture; it was formalized and structured, and had procedures to direct the actions of employees via formal rules and policies. The MNC hierarchical culture introduces more formalities to the amalgamated firm.

Cultural dimensions having insignificant impact on knowledge sharing

Power distance, masculinity, uncertainty avoidance, long-term orientation, assertiveness, institutional collectivism, in-group collectivism, future orientation, gender egalitarianism, humane orientation and performance orientation showed an insignificant impact on knowledge sharing during the reconfiguring process in this primary Formosa case. As listed in Table 4.1, Germans and Taiwanese typically place similar importance on uncertainty avoidance and gender egalitarianism. Similar behavior or expectations are likely. Consequently, no significant impact from these cultural dimensions on knowledge sharing is assumed.

Although Germans, on average, put higher cultural values on masculinity, assertiveness and future orientation, and lower values on power distance, long-term orientation, humane orientation and performance orientation, than do Taiwanese, influence from these cultural dimensions on knowledge sharing was not evident during this reconfiguring process for the primary Formosa case. As discussed in section 4.3.1, this was probably due to multi-culturalism of the employees.

Outcomes for knowledge sharing effectiveness

With collectivism, cultural diversity and organizational cultural differences as contributing factors in knowledge sharing, the primary Formosa case clearly shared knowledge effectively during the reconfiguring process. There were sufficient exchanges on implementing better practices for each function in respective teams such as production shift, credit management and packaging. Reconfiguration specifications for combination or integration of best operational capabilities with the adaptation of organizational routines and operational capabilities were mutually agreed and a defined set of pooled resources was achieved in respective functions.
To improve the supply chain service by shifting production of product grades from Germany to Taiwan, the acquiring firm passed the specifics of the production process to the acquired firm, which materialized local production of the selected product grades. “We (Formosa Polymer) could easily consolidate the resources if they (Deutsche Chemical) wanted to do something. For example, we could easily produce Polymer A in Taiwan. They told us that they had decided to transfer the production of Polymer A to Taiwan. They asked us to produce Polymer A according to their specifications and prepare for mass production for future sales. I felt that the factory in Taiwan was more efficient while Deutsche Chemical was not that efficient” (FDTMSM07M). After intensive knowledge exchange and trial production, the acquired firm succeeded in producing the product grades of the acquiring firm. On-site support by German experts from the acquiring firm for three weeks hastened the knowledge exchange and the production shift process (DFXXXX29O). Working together with experts and observing how they resolve problems facilitated a transfer of tacit knowledge (Lubit, 2001). This supply shift project resulted in better production capabilities on the part of Formosa Polymer to produce product grades of higher quality, and better service capabilities of Deutsche Chemical to shorten the supply lead-time through an extended production arm located next to the market in the Asia Pacific region.

The amalgamated firm adopted a more systematic credit management, which improved the receivables management and the cash flow of the company. An employee from the acquired firm shared a successful case of handling a doubtful debt from his customer. “I do not think Formosa Polymer, if not acquired by Deutsche Chemical, had the capability to resolve this case. Customer A had a doubtful debt of HK$2.6 million plus 56 tons material on contract... I told him Deutsche Chemical requested full payment, including all the expenses related to customs clearance afterwards. Otherwise, I would inform our Legal Department that it had to talk to the customer... Then we smoothly collected the first cheque, and the rest according to the payment schedule. This reflected a normal communication procedure of Deutsche Chemical as it had a Legal Department. If it happened in the former Formosa Polymer time, they could not resolve this type of doubtful debt. They probably just settled it privately. I think this is a proper procedure of Deutsche Chemical. It is very good for the employees” (FDTMSM27O). The adoption of a systematic credit management by Formosa Polymer enhanced its
financial capabilities in cash flow management. It proved to be beneficial during the global financial crisis that occurred within two years after acquisition.

Deutsche Chemical learnt from Formosa Polymer to change the packaging of raw materials in order to save costs. “We started to realize how small companies negotiated, and we took that on board, and we got a lot of benefits! And that is why we now deliver in ISO (International Standards Organization) tanks to Taiwan… And we’re saving XX (covered) cents a kilo by doing it. That was very much driven by what they had already done” (DFXXXX28M). This practice improved the procurement capabilities of Deutsche Chemical, which in turn enhanced its competitive advantage for better financial performance.

Outcomes for knowledge sharing efficiency
Although knowledge was shared effectively during the reconfiguring process, efficiency was hindered by the cultural factors of language difference, cultural diversity and organizational cultural differences. The knowledge sharing process was time-consuming as the language barrier remained from the sensing to the reconfiguring processes. Repetitive discussions were conducted for clarification and confirmation. Much as in the sensing and seizing processes, cultural diversity brought in different perspectives which demanded time to review each piece of input by the employees. Moreover, the requirement for extra documentation burdened the employees of the Taiwanese SME as they were used to dealing with knowledge in tacit form.

The employees from the Taiwanese SME commented that the acquiring firm was very bureaucratic and government-like (FDXXXX06M & FDXXXX08M). “Deutsche Chemical was like a typical big company. There were three ‘manys’...many emails, many meetings, many bosses” (FDXXXX07M). Therefore, involvement of multiple stakeholders from different functions led to more communication requirements in order to align the group towards the common goals.

4.5.2 The secondary Tulip case–Acquisition of Dutch SME by Deutsche Chemical
With respect to the reconfiguring process, I found cultural diversity and organizational cultural differences to be the most prominent cultural dimensions affecting knowledge
sharing in the secondary Tulip case. The other cultural dimensions, including power distance, collectivism, masculinity, uncertainty avoidance, long-term orientation, assertiveness, institutional collectivism, in-group collectivism, future orientation, gender egalitarianism, humane orientation, performance orientation and language difference, revealed an insignificant impact on knowledge sharing. In the next sections, I discuss how the identified cultural dimensions had respective positive and negative impacts and how they affected the outcomes for knowledge sharing. Figure 4.8 summarizes which cultural dimensions influenced knowledge sharing with different strengths and impacts.

The background analysis to derive the data findings is detailed in Appendices 6 and 6C.

**Figure 4.8 The secondary Tulip case (Acquisition of Dutch SME): Knowledge sharing during the reconfiguring process**

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**Cultural dimensions having positive impact on knowledge sharing**

**Cultural diversity as enhancing collective intelligence**

Much as in the sensing and seizing processes described in sections 4.3.2 and 4.4.2, cultural diversity enhanced knowledge sharing during the reconfiguring process in the secondary Tulip case. Knowledge resources are enriched by soliciting different perspectives and creating new ways of improving business operations (Lauring, 2009).
Collective intelligence is a positive benefit of cultural diversity, furnishing a greater access to ideas and insights. The benefits of cultural diversity—bringing broader perspectives and creating more ideas—extended into the reconfiguring process.

**Organizational cultural difference as bringing pragmatism and flexibility from the SME**

Similar to Formosa Polymer as discussed in section 4.5.1, Tulip Specialty exhibited the characteristics of an adhocracy culture, showing a high degree of flexibility. Tulip Specialty expressed its flexibility and pragmatism in its daily organizational routines and operational practices so that they could remain agile to adapt to the changing business environment. During implementation of the agreed practices, the employees might face unexpected scenarios that were not projected during the seizing process. They needed to react to the circumstances and make appropriate adaptations. Therefore, pragmatism and flexibility would be needed to deal with the unexpected and the dynamic situation. The acquired firm was very flexible as compared with the acquiring firm. This is confirmed by the empirical data in the secondary Tulip case. “Tulip Specialty was very customer-focused, very flexible, with a strong customer service philosophy” (TDXXX33M). “(With regards to) the internal processes, the decisions, how they make decisions, how they handle the things; they (Tulip Specialty) are absolutely easier, more flexible, more lean and mean” (DTXXXX36O).

**Cultural dimensions having negative impact on knowledge sharing**

**Cultural diversity as bringing disadvantages in communication**

Much as in the sensing and seizing processes, cultural diversity brought disadvantages in terms of time diseconomies during the reconfiguring process. Efficiency in knowledge sharing was reduced due to evaluation of input by every member.

**Organizational cultural differences as introducing a high level of formalization from the MNC**

As discussed in sections 4.3.2 and 4.4.2, the differences in organizational culture between Deutsche Chemical and Tulip Specialty exerted influence on knowledge sharing. This effect continued in the reconfiguring process. The rigid process and operation system introduced by the acquiring firm shattered the flexibility and hence the entrepreneurial behaviour in the acquired firm, “What’s worse, is the (reduced) flexibility... Switching to the SAP system (an enterprise application software) means that
everything always takes a lot of time, and it sometimes creates operational problems that demand attention to work around. In our (Tulip Specialty) old system, we could deliver in 24 hours on the other side of Europe. In the new system sometimes we need two weeks for that” (TDXXXX34M).

**Cultural dimensions having insignificant impact on knowledge sharing**
Power distance, collectivism, masculinity, uncertainty avoidance, long-term orientation, assertiveness, institutional collectivism, in-group collectivism, future orientation, gender egalitarianism, humane orientation, performance orientation and language difference showed an insignificant impact on knowledge sharing during the reconfiguring process in this secondary Tulip case. As shown in Table 4.1, Germans and Dutch have similar values regarding performance orientation and language. There was an insignificant impact from these cultural dimensions on knowledge sharing.

Although Germans typically place higher cultural values on masculinity, uncertainty avoidance, assertiveness and in-group collectivism, and lower cultural values on individualism, long-term orientation, institutional collectivism, future orientation, gender egalitarianism and humane orientation than do the Dutch, influence from these cultural dimensions on knowledge sharing was not significant in this reconfiguring process for the secondary Tulip case. As explained in section 4.3.2, the employees did not demonstrate strongly these cultural features, probably due to multi-culturalism.

**Outcomes for knowledge sharing effectiveness**
Cultural diversity and organizational cultural differences were contributing factors in knowledge sharing in the secondary Tulip case. It is clear that knowledge sharing was effective during the reconfiguring process. There were sufficient exchanges during implementation of the agreed better practices for each function in respective teams. The teams achieved reconfiguration specifications for integration of best operational capabilities with the adaptation of organizational routines and operational capabilities and a defined set of pooled resources. This was apparent in the areas of market coverage and quality control.

Eventually, the capabilities and competences from the two teams could be combined. “We did introduce a different business model. We moved the business from the local
legal entity in Holland to the Deutsche Chemical entity (in Europe)” (TDXXXX22M). Deutsche Chemical, equipped now with the market intelligence and the customer network from Tulip Specialty, enabled the amalgamated firm to materialize market opportunities in a better way (TDXXXX33M). The change of business model in shifting the legal entity improved the sales and marketing capabilities of Tulip Specialty and Deutsche Chemical by penetrating more strongly Tulip Specialty’s home market and exploring more broadly in Deutsche Chemical’s regional network.

An employee from the acquired firm shared a better practice in HSEQ (Health, Safety, Environment and Quality) management that was adopted after integration. “One of the things that’s better is all the quality checks. REACH (Registration, Evaluation, Authorization & Restriction of Chemicals) checks might be better as well. The safety data sheet and all kinds of things are much better than they were in the past” (TDXXXX34M). The adoption of the safety and health procedures strengthened the production capabilities of Tulip Specialty for more consistent quality management, which is important in the household appliances and construction sectors.

**Outcomes for knowledge sharing efficiency**

Although knowledge was shared effectively during the reconfiguring process, efficiency was negatively affected by the cultural factors of cultural diversity and organizational cultural differences, just as in the sensing and seizing processes for the secondary Tulip case. As discussed in section 4.4.2, because of the different ideas and opinions brought by cultural diversity, it took more time to review each item of input contributed by the employees in order not to miss any insightful or useful information. The differences in organizational culture also impeded the knowledge sharing process due to the high level of formalization required by the MNC.

Because of the multiple stakeholders and established processes introduced by the acquiring MNC, the acquired SME felt a reduced capacity for entrepreneurship with a slower decision-making process. “OK, we work in a large organization and once a decision has been made, then we work with that… We (formerly Tulip Specialty) had a kind of more entrepreneurial approach to running the business rather than a production-orientated approach. In the past…we could make a decision pretty fast. Now decisions take longer” (TDXXXX33M). “When I wanted to change something,
then I visited my colleagues and all were somewhere in the company and an hour later, I had my answer. When you had to do something at Deutsche Chemical...then somebody had to say yes and he had to ask his supervisor and then he had to ask somebody on the board and the board was only coming for official signature either once in two months or something. And that was a very slow process for us” (TDXXXX34M). In addition, more internal administration and extra documentation was required to go through this rigid process.

4.5.3 The secondary Eagle case–Acquisition of US-based MNC by Deutsche Chemical

During the reconfiguring process in the secondary Eagle case, cultural diversity, uncertainty avoidance, collectivism and organizational cultural differences were relatively prominent in having an impact on knowledge sharing but with different strengths. The other cultural dimensions, including power distance, masculinity, long-term orientation, assertiveness, institutional collectivism, in-group collectivism, future orientation, gender egalitarianism, humane orientation, performance orientation and language difference, appeared to not influence knowledge sharing. In the next sections, I discuss how the identified cultural dimensions had respective positive and negative impacts and how they affected the outcomes for knowledge sharing. Figure 4.9 summarizes how culture affected knowledge sharing for the secondary Eagle case during the reconfiguring process. The background analysis to derive the data findings is detailed in Appendices 6 and 6C.
Cultural dimensions having positive impact on knowledge sharing

Cultural diversity as enhancing collective intelligence

As discussed in section 4.3.3, cultural diversity embraced a broader perspective and knowledge base because of the team members of a different cultural background. Cultural diversity remained a positive factor contributing to knowledge sharing in the reconfiguring process as in the sensing and seizing processes for the secondary Eagle case.

Collectivism underlying trust as key foundation to knowledge sharing

As discussed in section 4.4.3, once mutual trust was built up during the sensing process, employees from acquiring and acquired firms were open to sharing information and knowledge in an uninterrupted fashion. The well-established trust supported knowledge sharing during the reconfiguring process.
Organizational cultural differences as bringing flexibility from the US-based MNC

Although both the acquiring and acquired firms are MNCs, their headquarters are located in different countries and hence the national cultures add to the differentiation of the organizational cultures. “Deutsche Chemical is very structured, formalized... I think it’s part of the (national) culture... ‘You must do this, you must do that.’ So I think with complexity comes more complexity” (EDXXX14M). “I think Germans are really like a stone, you cannot bypass them, and you have to overcome this barrier and then pass through...really not flexible enough. And I think in this way Americans are more flexible, really more flexible and make things easier to work, to do” (EDXXX10M). An employee from the acquiring firm shared that they could respond faster in handling price enquiries after the integration. “My counter colleague (at Eagle Solution) made decisions very fast, faster than could be made before by Deutsche Chemical... The Eagle Solution colleague was very fast. He either gave you the price in one click, or asked you to drop it for a while. He was much more straightforward. The process was fast. But the process in Deutsche Chemical was rather long and I had to ask a few times to get the price... Eagle Solution gave us the quantity and price very quickly. They moved faster” (DEHMSM23O).

Mix of uncertainty avoidance as contributing to complementarity

As illustrated in Table 4.1, Germany has a higher uncertainty avoidance index than America. Therefore, it is not surprising that Deutsche Chemical as a Germany-based MNC took a more long-term view in planning their business operations than did Eagle Solution as a US-based MNC. “Deutsche Chemical focused on long-term thinking & planning, from the Exco (Executive Committee) at the top down to looking at details. Eagle Solution had an open communication culture. People debated their views during the meeting. Deutsche Chemical had a high level of determination, commitment & perfectionism” (EDXXX32O). This supplemented the short-term view of the American company.

Cultural dimensions having negative impact on knowledge sharing

Cultural diversity as bringing disadvantages in communication

As discussed in section 4.3.3, cultural diversity brought communication challenges due to language barriers and caused misunderstandings. These disadvantages extended into the reconfiguring process.
Mix of uncertainty avoidance as leading to micro-management

Deutsche Chemical was very cautious in handling uncertainty and risk (DEXXXX31M). Eagle Solution had higher tolerance of risk than Deutsche Chemical (EDXXXX14M). “(To deal with uncertainty,) Deutsche Chemical tends to spend more resources in terms of time and people, to work on something or try to clarify something during our planning stage. And the other side, they (Eagle Solution) feel more comfortable if 80% is correct. I think this is the main difference, and it will drive lots of daily operation differences” (DEXXXX31M). The cautious approach might result in micro-management by the acquiring firm although the employees from the acquired firm were used to a more liberal approach. “Well, the American boss (of Eagle Solution) basically, they act like ‘leave me alone.’ If you can do things right, you can do things in your own way. He will not bother you...and leave you alone... Some bosses (of Deutsche Chemical) like to micro-manage, and want to be involved from the beginning” (EDXXXX10M). The different approach to deal with uncertainty or risk led to confrontation and frustration. “These differences (in dealing with unknown) have such a big impact. So it will impact the whole operation. So lots of people, they will feel uncertain or frustrated” (DEXXXX31M).

Organizational cultural differences as introducing a high level of formalization from the Germany-based MNC

The role of organizational cultural difference became apparent in the reconfiguring process for the secondary Eagle case as implementation of agreed business strategies involved more organizational routines and operational practices. “Deutsche Chemical is much more bureaucratic than Eagle Solution was. The decision-making process is much slower. There seems to be like a more recommended control organization led out of Germany. So in the US, I can feel like a stepchild, you know that term, that we’re kind of less important than the headquarters” (EDXXXX14M). The employees from the acquired firm felt that the acquiring firm was very restrictive and formalized. “They have a guideline and they just want do this, do this. You have to do this based on the guideline, based on the standard or based on the regulation. If you don’t finish this, we cannot go to the next step, something like that” (EDXXXX10M).
Cultural dimensions having insignificant impact on knowledge sharing

Power distance, masculinity, long-term orientation, assertiveness, institutional collectivism, in-group collectivism, future orientation, gender egalitarianism, humane orientation, performance orientation and language difference seem to have not mattered with respect to knowledge sharing during the reconfiguring process in this secondary Eagle case. As listed in Table 4.1, Germany and America have similarities in masculinity, long-term orientation, assertiveness and future orientation. These cultural dimensions showed an insignificant impact on knowledge sharing during the reconfiguring process, much as in the sensing and seizing processes discussed in sections 4.3.3 and 4.4.3 respectively.

Although the average German places lower cultural values on power distance, institutional collectivism, in-group collectivism, gender egalitarianism, humane orientation and performance orientation than does the average American, influence from these cultural dimensions on knowledge sharing was not conspicuous. The reason might be the multi-culturalism of the employees, as discussed in section 4.3.3.

Outcomes for knowledge sharing effectiveness

Cultural diversity, uncertainty avoidance, collectivism and organizational cultural differences were contributing factors in knowledge sharing during the reconfiguring process for the secondary Eagle case. It is clear from the data that knowledge was shared effectively. There were sufficient exchanges during implementation of the agreed better practices of each function in respective teams. Reconfiguration specifications for integration of best operational capabilities with the adaptation of organizational routines and operational capabilities were worked out jointly and a defined set of pooled resources was created. More pragmatic approaches to credit management and sales planning were clear examples of these outcomes.

An employee from the acquiring firm shared the observation that they adopted a more pragmatic approach in credit management after integration. The previous approach was cumbersome. “On the financial side, for example, we needed to evaluate the credit level of the customer, too much so in my opinion. And then I like the way that the other part is using, and it demonstrates that the Eagle Solution way is quite good. That is, we are not using such a high degree or high accuracy way of doing credit management at that
time” (DEXXXX31M). The changed credit management practice improved the financial capabilities of Deutsche Chemical by having a more efficient process without taking unnecessary risks.

Another example is the implementation of sales planning in a shorter period after integration. “Planning is a good way, that is, you plan for the customers’ expectations, and if your plan for one customer is always wrong, and then you say, ‘OK, in future you don’t need to plan that far in advance.’ We have these cases” (EDXXXX32O). An optimal period for sales planning was sought. This changed planning routine improved the sales and marketing capabilities of Deutsche Chemical by releasing the sales force to have more time and resources to do fieldwork.

**Outcomes for knowledge sharing efficiency**

Although knowledge was shared effectively during the reconfiguring process in the secondary Eagle case, efficiency was impeded by cultural diversity, uncertainty avoidance and organizational cultural differences. Cultural diversity demanded time for frequent discussion on the plan of action for the agreed practices as input by every member was incorporated. The cautious approach by the acquiring firm drove them to be detail-oriented, which was time-consuming. “Deutsche Chemical was structured and worked from the bottom level up with details. How big was the market in China, in the north, south and east? How was the supply-demand situation? Plant investment took a long-term and strategic view. There was a 5-year strategic conference. Eagle Solution took a short-term view and looked at profitability closely... Results were reviewed every quarter” (EDXXXX32O). The teams optimized the time frame when preparing investment strategies and budget plans.

### 4.6 Conclusion

This chapter has presented the data analysis on the research problem by drawing on the data collected from 36 interviewees from three cross-cultural acquisition cases, which amounted to transcripts comprising in total 206,000 words. The roles of culture in affecting knowledge sharing in cross-cultural acquisitions were discussed within the context of the dynamic capabilities framework. The dominant cultural profiles of the
employees were highlighted. Subsequently, cultural dimensions affecting knowledge sharing with positive or negative impact at various degrees of strength were discussed separately with respect to the sensing, seizing and reconfiguring processes for the primary Formosa and secondary Tulip and Eagle cases.

The results provide insight into how and when culture influences the knowledge sharing process in cross-cultural acquisitions. There were different cultural dimensions contributing to or hindering knowledge sharing during the sensing, seizing and reconfiguring processes. The specific cultural dimensions that mattered and their respective impacts on knowledge sharing outcomes varied subject to the cultural proximity or cultural distance of the cross-cultural acquisitions. The analysis and findings from this chapter facilitates the development of conclusions in the next chapter.
5  CHAPTER FIVE: CONCLUSION

5.1  Introduction
This final chapter presents a summary of the findings and draws conclusions for the research problem: the roles of culture in knowledge sharing for best practices integration in cross-cultural acquisitions within the dynamic capabilities framework. There are five sections. The outline of this chapter is followed by a brief summary of the research context. Next, a derived conceptual framework that embeds the findings from this study within the broader dynamic capabilities literature is developed. The subsequent section on research implications offers insights for practitioners to consider, such as managerial prescriptions; and new perspectives for academics to incorporate, with suggestions for future research. Limitations of the research are highlighted. A conclusion sums up the content and contributions of this dissertation.

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5.2 Research Context

As established at the outset of this study, growth through acquisitions is one of the corporate strategy options for firms (Azan & Sutter, 2010). Deployment of cross-cultural acquisitions helps realize firms’ growth targets and financial goals, and achieve enhanced operational efficiency, greater market power and higher resilience against economic volatility (Brannen & Peterson, 2009; Hitt et al., 1998). By acquiring the right firm with a strategic fit, MNCs can access new resources, enhanced capabilities and a broader knowledge base (Capron & Anand, 2007; Greenberg et al., 2005). Through integration of best practices from both the acquiring and acquired firms after acquisition, amalgamated firms can enhance their operational capabilities with the specific set of interlinked resources.

Integration of best practices is the integration of the best operational capabilities in various functions including sales and marketing, innovation, production, and services. These operational capabilities enabling firms to run the daily business consist of patterned organizational behaviors embedded in organizational routines (Helfat, 2007).

Right after the acquisition, the acquiring and acquired firms draw on dynamic capabilities processes to sense opportunities, to seize identified opportunities for best practices in operational capabilities, and to reconfigure the integration of best practices in operational capabilities with the right set of resources (Teece, 2007). There are numerous interpersonal interactions underlying knowledge sharing during each process. Therefore, in an international context culture presumably plays an important role in influencing the extent to which knowledge is shared. Furthermore, extant research has suggested an impact of culture in terms of the effectiveness and efficiency of the knowledge sharing process (Bhagat et al., 2002; McDermott & O’Dell, 2001). This empirical research aims to understand the roles of culture in knowledge sharing for the integration of best practices in operational capabilities within the dynamic capabilities framework.

The seminal work on dynamic capabilities by Teece, Pisano and Shuen (1997) was reviewed, as was Capron and Anand’s (2007) discussion of how firms make use of acquisitions to obtain new resources and capabilities in order to achieve sustained performance. The existing scholarship on how culture affects knowledge sharing for
best practices integration was examined to explicate the potential roles of culture in facilitating or hindering the integration of operational capabilities in cross-cultural acquisitions. Research opportunities were then identified, most specifically the need to better understand micro-level processes in organizational knowledge sharing through social interaction (Foss et al., 2010). The following research question, with sub-questions, was developed.

**The research question:**

“What are the cross-cultural micro-foundations underlying knowledge sharing for best practices integration in cross-cultural acquisitions within the dynamic capabilities framework?”

**The research sub-questions:**

1) How does culture affect knowledge sharing during the sensing process after acquisition?
2) How does culture affect knowledge sharing during the seizing process after acquisition?
3) How does culture affect knowledge sharing during the reconfiguring process after acquisition?

Qualitative research using a case study approach was selected as the most suitable instrument to investigate how and when culture influences the process of knowledge sharing (Bryman & Bell, 2011; Carson, Gilmore, Perry & Gronhaug, 2001a). In-depth interviews with 36 employees from three cross-cultural acquisition cases were conducted in order to solicit in-depth information (Carson et al., 2001b). In this dissertation the ‘cross-cultural acquisition’ unit of analysis refers to the organizational setting that combines the acquired firm and the relevant parts of the acquiring firm and their respective employees.

Data showed that the deployment of dynamic capabilities processes embodied knowledge sharing in cross-cultural acquisitions. Some cultural dimensions enhanced knowledge sharing in the respective sensing, seizing and reconfiguring processes. At the same time, other cultural dimensions inhibited knowledge sharing during the different processes. Moreover, some cultural dimensions exhibit a duality of effect; they could
both enhance and inhibit knowledge sharing. Certain cultural dimensions affected all three processes, whereas others were process-specific. Table 5.1 summarizes the findings from the previous chapter.

Table 5.1 Cultural dimensions affecting knowledge sharing in cross-cultural acquisitions

<table>
<thead>
<tr>
<th>Case</th>
<th>Sensing</th>
<th>Seizing</th>
<th>Reconceiving</th>
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<tr>
<td>Formosa (Taiwanese SME)</td>
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<td>NC distant, OC distant</td>
<td>Enhancing factors</td>
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<td>Inhibiting factors</td>
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<td>1) Cultural diversity, language differences,</td>
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<td>organizational cultural differences</td>
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<td>2) Collective</td>
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<td></td>
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<td>Human orientation, assertiveness</td>
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<td>Tulip (Dutch SME)</td>
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<td>NC proximate, OC distant</td>
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<td>1) Cultural diversity, organizational cultural</td>
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<td>Eagle (US-based MNC)</td>
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<td>NC proximate, OC proximate</td>
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MNC: multi-national corporation; SME: small-/medium-sized enterprise
NC: National culture
OC: Organizational culture
1) cultural dimensions: universal across processes
2) cultural dimensions: process-specific

The findings from the primary case of the acquisition of Formosa Polymer by Deutsche Chemical show that different cultural dimensions affect knowledge sharing at different processes after such a cross-cultural acquisition. These differences were due to different levels of interaction and depth of information required by each process. The results were validated by drawing on insights from the two secondary cases, which were the acquisitions of Tulip Specialty and Eagle Solutions by Deutsche Chemical.

The findings also reflect that the complexity of cultural impact is higher in culturally distant acquisitions than in culturally proximate acquisitions. Cultural proximity or distance for the three cases is detailed in Table 4.1. The primary Formosa case was culturally distant in terms of national and organizational cultures and had more cultural dimensions affecting knowledge sharing at different processes than the secondary Tulip case, which was culturally proximate in national culture but culturally distant in organizational culture, and the secondary Eagle case, which was culturally proximate in both national and organizational cultures.
5.2.1 Roles of culture in knowledge sharing during the sensing process

Based on the data from the three acquisition cases presented in the previous chapter, this empirical research shows that trust and relationship building enhanced knowledge sharing during the sensing process in which employees from both the acquiring and acquired firms sought to understand their firms’ current organizational routines and operational capabilities. The employees from the acquired firm felt like strangers working in the amalgamated firm right after acquisition, which limited human interaction and hence knowledge sharing. This empirical finding supports the broader literature arguing that the sharing of tacit knowledge through highly interactive conversations and interpersonal interactions requires trust (Droege & Hoobler, 2003; Politis, 2003). However, it was apparent in that data (and expected from theory) that trust and relationships were particularly important for individuals hailing from a highly collectivistic culture. As exchanges of knowledge occurred between individuals, trust acts as a lubricant facilitating interpersonal communication and hence knowledge sharing. The demand for trust has its roots in the collectivistic culture. Individuals who have a high level of trust then have a strong identity with their in-group (Hofstede, 1980).

However, language barriers inhibit knowledge sharing. This was conspicuous when the language disparity was high, as in the primary case. The challenge was amplified when tacit knowledge was shared. This empirical finding also aligns with the existing literature, which holds that language is an obvious cultural difference affecting knowledge sharing (Benet-Martinez & Haritatos, 2005; Haldin-Herrgard, 2000; Soley & Pandya, 2003). When languages were similar or a common language existed among individuals as in the culturally proximate acquisition cases, there was no language barrier hampering knowledge sharing during the sensing process.

Cultural diversity was found to be both an enhancing and inhibiting factor in knowledge sharing across the three acquisition cases and across the three processes. The employees from the acquiring and acquired firms reacted positively with respect to the experience of cultural diversity. They were receptive to seeking new opportunities during the sensing process, capturing the identified opportunities during the seizing process and implementing the action plans during the reconfiguring process. These findings are in line with the view that cultural diversity contributes to knowledge sharing by enhancing
collective intelligence through broadening the knowledge base, thus leading to new ways of improving business operational practices (Brannen & Peterson, 2009; Cummings, 2004; Lauring, 2009). It also supports the notion that cultural diversity or difference interrupts organizational learning and impedes knowledge sharing (Barkema et al., 1996; Lyles & Salk, 2007). The data from this research advance our understanding by demonstrating that the negative impact of cultural diversity was due to the time diseconomies in communication and language difference.

5.2.2 Roles of culture in knowledge sharing during the seizing process
After the employees comprehended the current operational capabilities in the acquiring and acquired firms, they moved into the seizing process to select the most suitable approach in different functions. During the seizing process, individuals needed to interact intensively and sometimes debate controversial issues. Open and in-depth sharing of thoughts and ideas was required. This empirical research finds that high uncertainty avoidance and a culture of face impede the knowledge sharing process.

During the seizing process, individuals who had a strong concern for face encountered highly assertive counterparts, a situation which impeded knowledge sharing due to different stances on a confrontational approach. The former group did not take, or take well to, a direct and confrontational approach, while the latter did adopt such an approach when addressing controversial issues. My empirical finding on the issue of face supports the extant literature that face-saving cultures restrict knowledge sharing (Kaweevisultrakul & Chan, 2007). It also is consistent with the existing scholarship that individuals from cultures of high assertiveness express their thoughts and feelings openly and freely (Hartog, 2004).

Due to the deeper level of knowledge exchange and experience sharing required, there were more cultural dimensions affecting knowledge sharing for the culturally distant acquisition case during the seizing process than during the sensing or reconfiguring process. As for the culturally proximate acquisition cases, there were fewer cultural dimensions affecting knowledge sharing than in their culturally distant counterpart.
5.2.3 Roles of culture in knowledge sharing during the reconfiguring process

After reaching consensus on the better approach to respective operational capabilities, the employees from the acquiring and acquired firms needed to develop reconfiguration specifications and implement the agreed action plans with a defined set of interlinked resources. During this reconfiguring process, individuals needed to interact closely and act jointly to realize the integrated capabilities for enhanced performance.

Organizational cultural differences had a dual impact on knowledge sharing during the reconfiguring process across the three acquisition cases. The MNC organizational culture brought in formalization and bureaucracy. This supports the standard view that MNCs have a hierarchical culture with formalized and structured procedures for the employees to follow (Cameron & Quinn, 2006). SMEs showed great flexibility consistently in both the primary Formosa and secondary Tulip cases. This conforms to the literature, which holds that SMEs have an adhocracy culture with a high degree of flexibility (Cameron & Quinn, 2006). The empirical findings show that the organizational cultural differences between the acquiring and acquired firms could be complementary. Although the MNC was rigid in dealing with globally aligned operational systems, it showed adaptability in embracing the flexibility of the SMEs for non-system operations.

These findings indicate that the MNC was quite strategic in terms of what they absorbed from the organizational cultures of the SMEs, so that adaptations to the culture of the acquired SME were based on selecting potential improvements. In light of this, it is apparent that the integration of the fragmented unities which characterise organisational culture in MNCs during a cross-cultural acquisition does not necessarily have to be at the cost of improvements to operational capabilities (Parker, 2000). In fact, imposing MNC practices in this instance may have led to a suboptimal outcome. This agility, evident in my findings across the three processes, can be explained with reference to concepts in the scholarly literature that, although not originally envisaged as relevant, are shown to be relevant through the analytical process. In light of this, and drawing on the work of Feldman and Pentland (2003), the next section presents a derived conceptual framework to provide aggregated conclusions to the study.
5.2.4 Derived conceptual framework

_Duality of ostensive and performative dynamic capabilities_

Having summarized how and when culture affected the knowledge sharing process within the dynamic capabilities framework in the previous sections, I now derive a conceptual framework on dynamic capabilities on an aggregate level. This is what Andersen and Kragh (2010) would call a dialectical approach to developing new insight by drawing on the existing scholarship as the original framework meets empirical data. To this effect I consider the duality of ostensive and performative aspects of dynamic capabilities (routines) across the findings of this study.

Feldman and Pentland (2003) adapt the idea of Latour (1986) to make a distinction between ostensive and performative aspects of organizational routines. In their work, the former embodies structure while the latter embodies specific actions by specific individuals at specific times. I further modify Feldman and Pentland’s (2003) differentiation to develop a conceptual framework for dynamic capabilities to enrich the cross-cultural acquisition context.

As routines specify the ways by which a process is executed, each of the three dynamic capabilities processes (i.e. sensing, seizing and reconfiguring) draws on ostensive routines and performative routines in its execution. The ostensive routines are those that are structural and embedded in organisations; they may include codified procedures, planning manuals or the like. The performative routines, on the other hand, are the behaviors and actions of individuals that are contingent on time and context as well as on their values.

In line with Feldman and Pentland’s (2003) contention that every organizational routine can be a source of flexibility through its inherent capability “to generate change, merely by its ongoing performance”, the cross-cultural acquisition context creates ‘flexibility’ in the performative part of capabilities. This is illuminated in the research as cultural differences are accommodated in the process of integrating best practices. By ‘challenging’ the routine or repetitive application of the ostensive processes during the acquisition, the performative part may even be improved, as illustrated by my findings that organizational cultural differences were on occasions embraced to improve operational capabilities during the reconfiguring process.
The provision of such insights is important, not least because Feldman and Pentland (2003) warn that both structure and agency are necessary and both must be understood to effectively explain the phenomenon of dynamic capabilities. Moreover, the ostensive and performative aspects of dynamic capabilities are mutually constitutive (Pentland & Feldman, 2005). Understanding the interactions of these two parts is important to achieve better integration of best practices in operational capabilities in acquisitions. Figure 5.1 summarizes the derived conceptual framework on the duality of ostensive and performative dynamic capabilities and is an adaptation of Feldman and Pentland (2003).

Figure 5.1 Duality of ostensive and performative dynamic capabilities

The ostensive aspect of dynamic capabilities embodies the routines for managerial deployment of sensing opportunities, seizing the identified opportunities and reconfiguring the resources and capabilities, which set the macro-foundations. These processes form an integrative functional part of dynamic capabilities (Maritan, 2007). The ostensive part is the generalized pattern of the dynamic capabilities. Employees use it to guide specific performances of dynamic capabilities (Pentland & Feldman, 2005). The performative aspect of dynamic capabilities is the actions and delivery of
performance by the employees of an organization, which constitute the micro-foundations.

This empirical research provides insights and evidence of flexibility in the performative aspect of the ostensive routines represented by the three dynamic capabilities processes. There is evidence of the three processes (ostensive) and there are many insights into agency, which shapes how they are performed (performative). The flexibility is seen in the case study of how the ostensive elements were able to facilitate various cultural and knowledge sharing challenges when deployed (performative). Therefore, it is in line with Feldman and Pentland’s (2003) work. The process or routine is repetitive, and the insights into the agency within it (through all the social interactions examined in this study) support Feldman and Pentland’s (2003) logic that individuals bring in variations in its deployment. On a negative note, in this research it is apparent that the variations that ‘actors’ of different cultures bring make the deployment of the ostensive part more inefficient, but this inefficiency, due to culture, is necessary. For instance, building trust is required to make the ostensive aspect work in a cross-cultural context.

This empirical research also validates Feldman and Pentland’s (2003) warning that overestimating the importance of the ostensive aspect may lead managers to underestimate the value of adjustments and improvisations that individuals undertake to make the routine work. The case studies presented in this research show how the improvisations made to accommodate culture in the performative aspect can help integrate best practices during cross-cultural acquisitions.

The macro-foundations cannot succeed on their own to link the organizational routines and operational capabilities with organizational performance. The micro-foundations that underlie complicated individual behaviors and interpersonal interactions are necessary to influence organizational performance (Abell et al., 2008). Therefore, the ostensive and performative aspects of dynamic capabilities, representing the macro-foundations and micro-foundations respectively, complement each other.

**Micro-foundations underlying performative dynamic capabilities**

Micro-foundations have emerged as an important theme in strategic management (Abell et al., 2008; Ambrosini & Bowman, 2009). Micro-foundations are rooted in the human
side of individual behavior and interaction with others; they connect individual-level heterogeneity with firm-level performance (Foss, 2011). Consideration of the micro-foundations in a cross-cultural acquisitions context is particularly apt as the complexity of individuals’ interactions and the degree of heterogeneity at the micro-level are greatly enhanced.

There are psychological foundations underpinning the behavioral activities during the sensing, seizing and reconfiguring processes examined in this study (Hodgkinson & Healey, 2011). For instance, intuition and explicit reasoning are required to identify and create opportunities during the sensing process. To make high-quality decisions during the seizing process, cognitive and emotional capacities of individuals are needed in order to alleviate bias and inertia. The process of managing change during reconfiguration also triggers emotional responses. Some insights into the emotional and cognitive roots influencing the dynamic capabilities processes (ostensive) are gained from this empirical research. The face-saving culture rooted in a humane orientation is illustrative of the psychological foundations that may undermine the quality of decisions, resulting from the non-confrontational approach adopted in response to controversial issues. However, this research shows that this can be counteracted by mediation behind the scenes to address the attitudes that shape the performative aspect of dynamic capabilities.

Currently, the lack of empirical research and fine-grained case studies on knowledge sharing capacities during the deployment of dynamic capabilities processes limits our understanding of the micro-foundations of this performative aspect (Ambrosini & Bowman, 2009; Zheng et al., 2011). The in-depth case study provided here sheds light on the micro-foundations underlying knowledge sharing for integration of best practices in operational capabilities among the employees from the acquiring and acquired firms in cross-cultural acquisitions. It shows that culture makes a difference to the performative aspect of dynamic capabilities during the sensing, seizing and reconfiguring processes. The ostensive aspect of dynamic capabilities paves the way for a structured process and systematic way for the acquiring and acquired firms to sense opportunities, seize identified opportunities and reconfigure resources and capabilities to materialize the changed organizational routines for better operational performance and competitive advantages. The performative aspect of dynamic capabilities delivers
the accomplishment of the managerial goal of integrating the best practices from both firms by the employees of the acquiring and acquired firms. The duality of ostensive and performative dynamic capabilities is necessary (Feldman & Pentland, 2003). That this derived conceptual framework can be applied to cross-cultural acquisitions is evident from the multi-case empirical research presented in this dissertation.

Culture was expected to, and did, play an important role in this cross-cultural context. I adapt the GLOBE’s (House et al., 2002) differentiation between universally accepted and culturally specific dimensions to cluster universal cultural dimensions and process-specific cultural dimensions affecting the performative aspect of dynamic capabilities in the final section to summarize culture’s role in the cross-cultural acquisition context. These clusters are discussed below.

**Universal cultural dimensions affecting performative dynamic capabilities**

The performative aspect of dynamic capabilities involves interpersonal interactions during knowledge sharing across the ostensive aspect of dynamic capabilities. In a cross-cultural business context, it is important to manage both national and organizational cultural differences (Hofstede, 1994). MNCs and SMEs have different organizational cultures, as illustrated by this empirical research. Figure 5.2 shows a theoretical model with four organizational cultures (Cameron & Quinn, 2006).

Figure 5.2 Organizational culture assessment instrument: Competing values framework

Organizational culture impacts individual actions and behaviors (Cegarra-Navarro & Rodrigo-Moya, 2007). When the organizational cultural distance between the acquiring
and acquired firms is large, as in the primary Formosa and secondary Tulip cases, and involves the pairing of hierarchical and adhocracy cultures, organizational cultural difference is an inhibiting factor in knowledge sharing during the sensing, seizing and reconfiguring processes. These two organizational cultures have competing values: high internal focus and control in the hierarchical culture, and high external focus and flexibility in the adhocracy culture (Cameron & Quinn, 2006). The acquiring firm with its hierarchical culture inclines to the introduction of measures to standardize rules and procedures and to more control of tasks and functions; the acquired firm with its adhocracy culture is accustomed to neither of these styles of management. Therefore, efficiency in knowledge sharing is lowered. Pairing of a clan culture with a high internal focus and high flexibility with a market culture that has a high external focus and high control is another extreme pairing of organizational cultures (Cameron & Quinn, 2006). Because of the cultural distance, I expect the pairing of clan culture with market culture to have similar problems as seen in the pairing of hierarchical and adhocracy cultures during the sensing, seizing and reconfiguring processes. However, the organizational cultural differences contribute to fostering knowledge sharing effectiveness due to cultural complementarity during the reconfiguring process once both sides have adapted to cultural change, as is evident from this empirical research.

Cultural diversity is another universal dimension exerting influence on knowledge sharing during the three respective processes. As was demonstrated in the case study at hand, it contributes to knowledge sharing effectiveness while inhibiting knowledge sharing efficiency. On the positive side, cultural diversity provides a broad knowledge base for learning (Brannen & Peterson, 2009; UNESCO, 2001). The collective intelligence enhances the knowledge sharing effectiveness. As highlighted by this study, demonstration by the acquiring firm that it has better capabilities to transfer makes cultural barriers less of a problem. The superior capabilities of the acquiring firm in combination with receptiveness on the part of the employees from the acquired firm compensate for the negative impact of cultural barriers. However, cultural diversity also slows down the process of knowledge transfer (Huong et al., 2011). Time diseconomies in communication and language differences are the major factors inhibiting knowledge sharing efficiency, as illustrated by this research.
Process-specific cultural dimensions affecting performative dynamic capabilities

Table 5.1 indicates that there are different cultural dimensions affecting knowledge sharing during the respective sensing, seizing and reconfiguring processes in different acquisition cases. The cultural dimensions differ according to the cultural proximity or distance between the acquiring and acquired firms.

When the cultural distance is large, there are more cultural dimensions affecting knowledge sharing during the three processes. By the same token, there are fewer cultural dimensions affecting knowledge sharing when the cultural distance is small. The specific cultural dimensions affecting knowledge sharing depend on the cultural chemistry between the acquiring and acquired firms. For instance, collectivism is found to be a prominent cultural dimension affecting knowledge sharing when there is a greater proportion of individuals with collectivistic values. This is validated from the primary and secondary cases of this empirical research. Individuals of high collectivistic values are more inclined to have a tighter social framework than those of high individualistic values. Within an in-group, individuals have a strong common identity and high level of trust (Hofstede, 1980). Trust is important to strengthen cooperation and enhance knowledge sharing among organizational members (Al-Alawi et al., 2007; Politis, 2003).

Figure 5.3 summarizes cross-cultural micro-foundations underlying dynamic capabilities with an application of the derived conceptual framework for best practices integration through knowledge sharing in cross-cultural acquisitions.
5.3 Research Implications

5.3.1 Managerial implications for practice

Although the employees of the three acquisition cases in this empirical research did not consciously draw on the dynamic capabilities framework making explicit reference to the three processes when integrating best practices in operational capabilities after acquisition, their activities were consistent with this dynamic capabilities framework, i.e. they did deploy the processes of sensing opportunities, seizing identified opportunities and reconfiguring resources and capabilities. Managers play critical roles in directing business operations and making decisions on resources allocation (Augier & Teece, 2009). An introduction and managerial deployment of structured processes (sensing, seizing and reconfiguring) will facilitate systematic knowledge sharing for integration of best practices after acquisitions. Managers need to understand that the ostensive aspect needs to be supplemented with the performative aspect of the dynamic capabilities framework. The latter embodies the actual performance by the employees of
the acquiring and acquired firms (specific individuals) to integrate best practices in operational capabilities through knowledge sharing (specific actions) during the sensing, seizing and reconfiguring processes right after acquisition (specific times). Moreover, based on this study it is clear that business practitioners may need to consider different cultural dimensions affecting knowledge sharing in different processes in cross-cultural acquisitions. They need to harness the culturally derived cognitive and emotional capacities of individuals and teams during the sensing, seizing and reconfiguring processes (Hodgkinson & Healey, 2011). In cross-cultural acquisitions, managers have to mediate the challenges from national and organizational cultural differences.

Nowadays, cultural diversity is a norm due to increasing globalized activities (Anantatmula, 2010). Managers should leverage cultural diversity to obtain the benefit of collective intelligence and to minimize the negative impact of time diseconomies associated with diversity so that effectiveness and efficiency of organizational learning can be balanced. Because of the positive perception of cultural diversity—individuals may be open to different perspectives almost because they expect them to exist and to be beneficial—business practitioners may want to capture this goodwill early on, say during the sensing process before challenges are met during the seizing process.

As illustrated in the empirical findings of Chapter Four, when the employees from the acquired firm understood the value of what the acquiring firm was bringing, their attitude changed to become more receptive to revised organizational routines and hence better operational capabilities. Therefore, the acquiring MNC can overcome cultural barriers by contributing superior capabilities. MNCs with superior capabilities that are engaged in acquisitions should reflect on the perceived value of what is being shared before they consider the degree to which cultural barriers such as face saving will be an issue.

Face saving is rooted in a humane orientation. Managers need to address this psychological foundation, as some did in the case study reported here, and might consider behind-the-scenes mediation when managing hidden conflict with individuals of high humane orientation where face saving may be an issue. It is evident from this research that creative managerial measures are helpful to resolve at least some cultural barriers in order to achieve deeper knowledge sharing.
To close this section on the implications of this empirical research for business practitioners, I recommend the acquisition integration project team consider the following guidelines prior to acquisition integration with regards to managing the cultural challenges when firms integrate best practices from cross-cultural acquisitions. The project team should include representatives from the acquiring and acquired firms. It is advisable to engage the employees from the acquired firm early on for stronger buy-in and higher commitment to the full integration process.

1) Understand the cultural differences between the acquiring and acquired firms on the firm, team and individual levels by conducting a cultural assessment to paint a cultural landscape. The organizational cultural assessment instrument developed by Cameron and Quinn (2006) and national cultural dimensions defined by Hofstede (2012) and House and co-authors (2004) can be employed. The cultural assessment should involve all stakeholders from the acquiring and acquired firms. The cultural assessment can be facilitated by consultants in order to preserve the objectivity and neutrality of the assessment.

2) Identify the major cultural challenges from the cultural landscape and prioritize the key cultural dimensions which may help or hinder knowledge sharing.

3) Develop consensus on approaches to deal with the cultural challenges identified and prioritized among key stakeholders such that the effects from cultural contributing factors on knowledge sharing can be leveraged, and the impact from cultural inhibiting factors can be minimized.

4) Provide cultural training with role-play to the employees from the acquiring and acquired firms for mutual understanding of cultural differences and challenges between the acquiring and acquired firms and among functional teams and individuals.

5) Nominate cultural advocates or ambassadors whom the employees from the acquiring and acquired firms can consult for conflict reconciliation or behind-the-scenes mediation when they cannot resolve cultural conflicts by themselves during the deployment of dynamic capabilities processes.
6) Explicate the structured processes (ostensive) to be deployed for best practices integration between the acquiring and acquired firms to the functional teams and individuals. Alert them regarding the cultural challenges to be dealt with in respective processes.

7) Set the objectives and expectations for the acquiring and acquired firms, functional teams and individuals regarding what is to be accomplished in the respective sensing, seizing and reconfiguring processes.

8) Render support to the employees from the acquiring and acquired firms during the deployment of dynamic capabilities processes, when necessary, in order to accomplish the integration of best practices from cross-cultural acquisitions.

5.3.2 Academic implications for theory and future research
Many theoretical works have deepened our understanding of the dynamic capabilities concept since its inception in 1997. However, little empirical research has been carried out to verify its validity in the business world (Zheng et al., 2011). This empirical study adds a new perspective of micro-foundations to our analysis of how culture makes a difference when knowledge on organizational routines and operational capabilities is shared during the integration of best practices based on a fine-grained case study with three cross-cultural acquisition instances. Although cultural differences amplify the challenge of building trust and sharing tacit knowledge and experience, which slows down the efficiency of integrating operational capabilities, the effectiveness of integrating best practices in operational capabilities is not necessarily affected. The empirical findings in Chapter Four make this clear. In light of this, scholars perhaps need to reflect on the degree to which culture causes a problem or not. This research may stimulate more interest in empirical research in the future that aims at a better understanding of the validity and deployment of the dynamic capabilities framework in the business environment. Further empirical research can refine a multi-process and multi-level theory building on the ostensive and performative aspects of dynamic capabilities during the sensing, seizing and reconfiguring processes from firm to team and individual levels.
Based on the work of Feldman and Pentland (2003) on ostensive and performative aspects of organizational routines, I derive a similar concept for dynamic capabilities with a duality of structure and agency consisting of ostensive and performative aspects respectively. The ostensive aspect is the structured routines to facilitate the three dynamic capabilities processes to sense opportunities, to seize identified opportunities and to reconfigure resources and capabilities (Teece, 2007). The performative aspect complements the ostensive aspect by the actual performance carried out by specific individuals at specific times with specific actions (Feldman & Pentland, 2003). Each of the processes has both ostensive and performative aspects. The ostensive aspect of each process is embedded in organisational routines (and structural aspects); the performative aspect of each process involves the actual performance that relates to how the routines are practiced. This empirical research provides a holistic view on this integrated concept of dynamic capabilities with the ostensive and performative aspects. It also reveals the micro-foundations underlying knowledge sharing for integration of best practices in cross-cultural acquisitions, which contributes to a better understanding of how different cultural dimensions affect the effectiveness and efficiency of knowledge sharing in various processes.

Increasing interest in understanding micro-foundations of organizational routines and dynamic capabilities has emerged in recent years (Abell et al., 2008; Felin, Foss, Heimeriks & Madsen, 2012). A number of research issues have been raised: What are the exogenous and endogenous conditions of individual actions and behaviors? What are the bridging laws to aggregate from individual- to collective-level knowledge? (Abell et al., 2008).

The derived conceptual framework in this dissertation opens up new research opportunities for the future. For instance, what factors affect the relationship between the ostensive and performative aspects of the dynamic capabilities framework? What are the mediators for ostensive and performative aspects of dynamic capabilities? From macro-foundations to micro-foundations, how do individual actions and behaviors aggregate to firm-level collective outcomes?

To close this section on the implications of this empirical research for scholarship, I summarize the four main contributions of this dissertation. First, the findings advance
our understanding of the dynamic capabilities view (Teece, 2007; Teece et al., 1997). Specifically, the research demonstrates that the dynamic capabilities framework can be advanced through the introduction of a duality of ostensive and performative perspectives. The ostensive dynamic capabilities embody the structured processes of sensing opportunities, seizing identified opportunities and reconfiguring resources and capabilities for implementation and realization of changed organizational routines and operational capabilities for better competitive advantages. The performative dynamic capabilities embody the actual performance by specific individuals at specific times. This research also provides a vocabulary for describing the aspects of dynamic capabilities.

Second, the research advances our understanding of the micro-foundations in strategic management (Foss, 2011). Specifically, it outlines how and when culture makes a difference in knowledge sharing for best practices integration. It supports the work of Felin and Foss (2005) that individuals are elemental to organizations and they are the antecedents to many collective phenomena. This empirical research enriches our understanding of micro-foundations in that different universal and specific cultural dimensions affect individual action and interpersonal interaction, which in turn affect knowledge sharing effectiveness and efficiency.

Third, this dissertation extends the work of Feldman and Pentland (2003), which reconceptualizes organizational routines with a duality of ostensive and performative aspects that are a source of change/flexibility and stability/inertia. Specifically, it adapts their work to dynamic capabilities with a duality of ostensive and performative aspects. It shows that the organizational routines of sensing opportunities, seizing identified opportunities and reconfiguring resources and capabilities can evolve into changed routines and operational capabilities through a vivid and fine-grained case study.

Fourth, this research advances our understanding concerning the integration process of cross-cultural acquisitions. Specifically, it demonstrates how and when culture exerts its influence with different strengths during the knowledge sharing process for best practices integration after acquisition. It contributes to our understanding of the missing gaps of how and when culture makes a difference, which have been identified by Leung and co-authors (2005). Furthermore, it outlines empirically how a novel cultural
dimension, humane orientation, has an impact in connection with face saving. Leung and co-authors (2005) have noted that little is known about certain cultural dimensions including humane orientation. This research also advances the argument put forward by Al-Alawi and co-authors (2007) that trust is an important determinant in knowledge sharing by connecting trust to its cultural roots of collectivism.

5.4 Limitations of this Research
There are some limitations of this research project with regards to theoretical and methodological matters. However, efforts were made to enhance the robustness and reliability of this empirical research.

The inherent limitation of single or few case studies is that the validity of the findings is confined to a small number of acquisition cases (Azan & Sutter, 2010). When I selected the acquisition cases and interviewees, I leveraged the diversity of the acquisition cases in terms of organizational size and country and that of interviewees in terms of gender, function, nationality and hierarchical level. This helped strengthen the reliability of the research findings and conclusions.

The use of the national cultural values from the Hofstede and the GLOBE studies to best represent the dominant cultural profiles of the employees from the acquiring and acquired firms in Chapter Four is not a very perfect measure. During the data interpretation, I made provision that the findings might not all fit the respective national cultural profiles as the latter were simply the most common profiles available at the outset.

5.5 Conclusion
This final chapter has summarized and drawn conclusions on the research problem of exploring the cross-cultural micro-foundations underlying knowledge sharing in cross-cultural acquisitions within the dynamic capabilities framework. Insights into universal or specific cultural dimensions affecting knowledge sharing for best practices
integration in cross-cultural acquisitions during the respective sensing, seizing and reconfiguring processes were gained. A derived conceptual framework on ostensive-performative dynamic capabilities with an illustration of best practices integration in cross-cultural acquisition was developed. The findings from this empirical research help practitioners to consider introduction of structured processes to facilitate knowledge sharing systematically while accounting for different cultural dimensions prior to post-acquisition integration, which is instrumental to knowledge sharing for integration of best operational capabilities in cross-cultural acquisitions. Some guidelines to manage the cultural challenges that arise when firms integrate best practices from cross-cultural acquisitions were suggested. The research project also offers new insights of interest to academics on the duality of the dynamic capabilities framework in terms of ostensive and performative aspects. It opens up future research opportunities to better understand this integrated dynamic capabilities concept.
REFERENCES


PricewaterhouseCoopers. (2013). Due diligence on public companies. [http://www.pwc.com/ca/acconnect](http://www.pwc.com/ca/acconnect)


APPENDICES
Appendix 1

Cultural Dimensions of the Hofstede and the GLOBE Studies

(Hofstede & Hofstede, 2005; House et al., 2004; The Hofstede Centre, 2013)
Appendix 1: Cultural Dimensions of the Hofstede and the GLOBE Studies

Appendix 1A: Hofstede’s Dimensions of National Culture
(Sources: Hofstede & Hofstede, 2005; The Hofstede Centre, 2013)

Power distance (PDI)
PDI indicates the extent to which the less powerful members of a society accept and expect that power in institutions and organizations are distributed unequally. The fundamental issue is how a society handles inequalities among individuals. Individuals in societies exhibiting a large degree of power distance accept a hierarchical order in which everybody has a place and which needs no further justification. In societies with a low degree of power distance, individuals strive to equalize the distribution of power and demand justification for inequalities of power.

Uncertainty avoidance (UAI)
UAI indicates the extent to which the members of a society feel uncomfortable with uncertainty and ambiguity. The fundamental issue is how a society deals with the fact that the future can never be known: should we try to control the future or just let it happen? Countries exhibiting strong UAI maintain rigid codes of belief and behavior and are intolerant of unorthodox behavior and ideas. Weak UAI societies maintain a more relaxed attitude in which practice counts more than principles.

Individualism versus collectivism (IDV)
Individualism implies a loosely knit social framework in which individuals are supposed to take care of themselves and of their immediate families only. Collectivism is characterized by a tight social framework in which individuals distinguish between in-groups and out-groups; they expect their in-group (relatives, clan, organizations) to look after them, and in exchange for that they feel they owe absolute loyalty to it. A society’s position on this dimension is reflected in whether the individuals’ self-image is defined in terms of ‘I’ or ‘we’.

Masculinity versus femininity (MAS)
The masculinity side of this cultural dimension represents a preference in society for achievement, heroism, assertiveness and material reward for success. Societies exhibiting a high degree of masculinity are in general more competitive. The opposite, femininity, stands for a preference for cooperation, modesty, caring for the weak and quality of life. Societies exhibiting a high degree of femininity are in general more consensus-oriented.

Long-term versus short-term orientation (LTO)
This dimension can be interpreted as relating to society’s search for virtue. Societies with a short-term orientation generally have a strong concern with establishing the absolute truth. They are normative in their thinking. They exhibit great respect for traditions, a relatively small propensity to save for the future, and a focus on achieving quick results. In societies with a long-term orientation, individuals believe that truth depends very much on situation, context and time. They show an ability to adapt traditions to changed conditions, a strong propensity to save and invest, thriftiness, and perseverance in achieving results.
Appendix 1B: Cultural Dimensions of the GLOBE Study
(Source: House et al., 2004)

**Uncertainty avoidance** is defined as the extent to which members of an organization or society strive to avoid uncertainty by reliance on social norms, rituals, and bureaucratic practices to alleviate the unpredictability of future events.

**Power distance** is defined as the degree to which members of an organization or society expect and agree that power should be unequally shared.

**Collectivism I: Institutional collectivism** reflects the degree to which organizational and societal institutional practices encourage and reward collective distribution of resources and collective action.

**Collectivism II: In-group collectivism** reflects the degree to which individuals express pride, loyalty, and cohesiveness in their organizations or families.

**Gender egalitarianism** is the extent to which an organization or a society minimizes gender role differences and gender discrimination.

**Assertiveness** is the degree to which individuals in organizations or societies are assertive, confrontational, and aggressive in social relationships.

**Future orientation** is the extent to which individuals in organizations or societies engage in future-oriented behaviors such as planning, investing in the future and delaying gratification.

**Performance orientation** refers to the extent to which an organization or society encourages and rewards group members for performance improvement and excellence.

**Humane orientation** is the degree to which individuals in organizations or societies encourage and reward individuals for being fair, altruistic, friendly, generous, caring, and kind to others.
Appendix 2

Distinction between Qualitative and Quantitative Research

(Source: Bryman & Bell, 2007)
## Appendix 2: Distinction between Qualitative and Quantitative Research
(Source: Bryman & Bell, 2007)

<table>
<thead>
<tr>
<th>Features</th>
<th>Qualitative Research</th>
<th>Quantitative Research</th>
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<tbody>
<tr>
<td>Connection between theory &amp; research</td>
<td>Inductive, generation of theory</td>
<td>Deductive, testing of theory</td>
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<tr>
<td>Epistemological consideration</td>
<td>Interpretivism</td>
<td>Positivism</td>
</tr>
<tr>
<td>Ontological consideration</td>
<td>Constructionism</td>
<td>Objectivism</td>
</tr>
<tr>
<td>Data collection/analysis</td>
<td>Words</td>
<td>Numbers</td>
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<td>Evaluation criteria</td>
<td>Credibility</td>
<td>Internal validity</td>
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<td>Transferability</td>
<td>External validity</td>
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<td>Dependability</td>
<td>Reliability</td>
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<td></td>
<td>Confirmability</td>
<td>Objectivity</td>
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<tr>
<td>Point of view</td>
<td>Participants</td>
<td>Researchers</td>
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<td>Research approach</td>
<td>Unstructured/Semi-structured</td>
<td>Structured</td>
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<tr>
<td>Research setting</td>
<td>Natural</td>
<td>Artificial</td>
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<tr>
<td>Focus</td>
<td>Meaning of action</td>
<td>People's behavior</td>
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<td>Critique</td>
<td>Too impressionistic &amp; subjective</td>
<td>Constrained by prior research</td>
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<td>Difficult to replicate</td>
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<td></td>
<td>Problems of generalization</td>
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<td></td>
<td>Lack of transparency</td>
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Appendix 3

Guiding Questions for Semi-Structured Interviews
Appendix 3: Guiding Questions for Semi-Structured Interviews

Guiding questions:
During the interview, I would like you to share your personal experience during the early phase of integration right after acquisition (Formosa Polymer in 2007, Tulip Specialty in 2008 and Eagle Solution in 2000).

Part 1 – General
1. Can you share with me your overall experience from this cross-cultural acquisition?
2. What cultural differences strike you most?
3. Based on your personal experience, how did these cultural differences affect your interactions with your superior, peers and subordinates among the acquired/acquiring colleagues, for instance in terms of frequency and level?

Part 2 – How did culture affect the willingness to share knowledge and the identification of the best practices?
1. From your observation and experience during the integration phase, how did culture influence the willingness of your acquired/acquiring colleagues to share knowledge?
2. In your job responsibility and functional area, how did you and your acquired/acquiring colleagues compare and agree on the better practice for your daily business and operation during the post-acquisition phase?
3. When you had different perspectives from your acquired/acquiring colleagues, how did you resolve the differences/conflicts and come to a common understanding on the best practices for your daily operation?
4. Did you see any pattern or certain behavioral traits from colleagues of different nationalities during information or knowledge sharing? If so, what was it?
Part 3 – How did culture affect organizational learning during the process of seizing the opportunities of integrating combined resources and capabilities?

1. After identification of and agreement on the best practices in your functional area, how did you evaluate the feasibility and the cost of implementing it?

2. Which culture became dominant, that of the acquiring or of the acquired firm? Was it the better one, or did the culture from the acquiring firm disregard which one was better?

Part 4 – How did culture affect knowledge management during reconfiguration of resources and capabilities?

1. After identification of and agreement on implementation of the best practices in your functional area, how did you proceed with it? Did you apply it in practice? How successfully and quickly did you adapt to the new practice?

2. What about your acquired/acquiring colleagues? How did they behave and adapt to the new practice? Did you observe any differences between yourself and them in terms of behaviors and adaptation?

Part 5 – What was the relationship between cultural diversity and knowledge sharing?

1. Was cultural diversity an impeding factor in knowledge sharing? Why and how?

2. Was cultural diversity a contributing factor in knowledge sharing? Why and how?

3. Was language a barrier to knowledge sharing when working in a culturally diverse group? If yes, were there any means to overcome it? If no, why was it not a problem?

Part 6 – Further reflection

If you had a second chance to go through the integration process, how would you behave or what would you do differently to achieve better knowledge sharing?
Appendix 4

Examples of Naturalized and Denaturalized Transcription

(Source: Oliver et al., 2005)
Appendix 4: Examples of Naturalized and Denaturalized Transcription
(Source: Oliver et al., 2005)

The following examples are drawn from research on the disclosure decisions of HIV-positive men who have sex with men.

1) Naturalized transcription drawn from an African-American participant:

1. Ok (.1) so you went to (.1) Health Department =
2. Yeh =
3. = and got tested then? Are you currently in a relationship?
4. Um (.2) not so much (.3) an’thin’ (.1) at all. I just: casual

Transcription notation of Atkinson and Heritage (1999) (cited in Oliver et al., 2005)

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<tr>
<td>.</td>
<td>Just noticeable pause</td>
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<tr>
<td>(.3)</td>
<td>Pause time in tenths of seconds</td>
</tr>
<tr>
<td>.hh</td>
<td>Speaker’s in-breath</td>
</tr>
<tr>
<td>hh</td>
<td>Speaker’s out-breath</td>
</tr>
<tr>
<td>:</td>
<td>Stretching of preceding sound or letter</td>
</tr>
<tr>
<td>a</td>
<td>Speaker emphasis</td>
</tr>
<tr>
<td>.</td>
<td>Full stop or stopping fall in tone</td>
</tr>
<tr>
<td>((sniff))</td>
<td>Indicates a non-verbal activity</td>
</tr>
<tr>
<td>Wor-</td>
<td>Shows a sharp cut-off</td>
</tr>
</tbody>
</table>

Just: drawn out syllables
Currently emphasis

2) Denaturalized transcription drawn from an African-American participant:

“I didn’t want to disclose (to) them because they didn’t think I had been with women. I have a daughter and a son. But with those guys, I used that as a (reason) for me to not disclose because they didn’t believe I was bisexual. Out of 35 (male partners) I told about 20, 25 of them. But the rest I didn’t. And that was due to them not believing that I had ever had sex with a woman.”
Appendix 5

Problems Associated with Translating Qualitative Interviews

(Source: Xian, 2008)
Appendix 5: Problems Associated with Translating Qualitative Interviews  
(Source: Xian, 2008)

1. Linguistic
   - The words used by interviewees do not have equivalents in English.
   - Grammatical structures cannot be easily translated.

2. Socio-cultural
   - Translating idioms or proverbs from one language to another without understanding the socio-historical background is always difficult.
   - Use of footnotes to furnish the contextual meaning is recommended.

3. Methodological
   - Qualitative data translation is not a value-free process. A translator acts as an inter-cultural communicator as well as a data interpreter.
   - A more reflexive and interpretative approach emphasizing the translator’s active construction of reality is recommended.
Appendix 6

Data Analysis: Knowledge Sharing in Cross-cultural Acquisitions

(Source: Transcripts, 2012)
**Appendix 6: Data Analysis – Knowledge Sharing in Cross-cultural Acquisitions**

(Source: Transcripts, 2012)

<table>
<thead>
<tr>
<th>Cultural Dimension</th>
<th>Performance Orientation</th>
<th>Future Orientation</th>
<th>Long-term Orientation</th>
<th>Knowledge Sharing</th>
<th>Impact on Formosa Case</th>
<th>Impact on Eagle Case</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tulip: GER 3.79, NET 4.46</td>
<td>Not of primary importance.</td>
<td>Not of primary importance.</td>
<td>Not of primary importance.</td>
<td>Tulip: Similar cultural values exhibiting similar behavior.</td>
<td>Not obvious for the 3 cases in the sensing phase.</td>
<td>Not obvious for the 3 cases in the seizing phase.</td>
</tr>
<tr>
<td>Formosa: Other cultural factors (collectivism, organizational cultural &amp; language differences)</td>
<td>Similar cultural values exhibiting similar behavior.</td>
<td>Similar cultural values exhibiting similar behavior.</td>
<td>Similar cultural values exhibiting similar behavior.</td>
<td>Not obvious for the 3 cases in the reconfiguring phase.</td>
<td>Not obvious for the 3 cases in the reconfiguring phase.</td>
<td>Not obvious for the 3 cases in the reconfiguring phase.</td>
</tr>
<tr>
<td>Tulip: Similar cultural values exhibiting similar behavior.</td>
<td>Similar cultural values exhibiting similar behavior.</td>
<td>Similar cultural values exhibiting similar behavior.</td>
<td>Similar cultural values exhibiting similar behavior.</td>
<td>Tulip: Both Germany &amp; Netherlands at median range as compared with the Formosa case.</td>
<td>Tulip: Similar cultural values exhibiting similar behavior.</td>
<td>Tulip: Similar cultural values exhibiting similar behavior.</td>
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<tr>
<td>Eagle: Similar cultural values exhibiting similar behavior.</td>
<td>Similar cultural values exhibiting similar behavior.</td>
<td>Similar cultural values exhibiting similar behavior.</td>
<td>Similar cultural values exhibiting similar behavior.</td>
<td>Eagle: Both Germany &amp; America at median range as compared with the Formosa case.</td>
<td>Eagle: Similar cultural values exhibiting similar behavior.</td>
<td>Eagle: Similar cultural values exhibiting similar behavior.</td>
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</tbody>
</table>

Knowledge sharing during reconfiguring phase

Knowledge sharing as a result of cultural differences in national culture can be a barrier in the reconfiguring phase of the knowledge sharing process. The reconfiguring phase is a critical phase where new cultural differences can emerge between the acquired company and the acquiring company. The primary Formosa case confirmed there is no more trust issue in knowledge sharing as both Germans & Dutch can communicate effectively in their respective native languages. However, the high power distance of the Dutch leads to more formal communication approaches, while the low power distance of the German culture supports more informal approaches. The Formosa case also confirmed that the acquired company has primarily individuals of Taiwanese background displaying high collectivistic values. High collectivists demand high trust in knowledge sharing due to common language used by people working in MNCs. Knowledge sharing is facilitated by both the high power distance and the common language used by people working in the MNC. The acquired company has primarily individuals of Taiwanese background displaying high collectivistic values. High collectivists demand high trust in knowledge sharing due to common language used by people working in MNCs. Knowledge sharing is facilitated by both the high power distance and the common language used by people working in the MNC.

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The acquired company has primarily individuals of Taiwanese background displaying high collectivistic values. High collectivists demand high trust in knowledge sharing due to common language used by people working in MNCs. Knowledge sharing is facilitated by both the high power distance and the common language used by people working in the MNC.
### Appendix 6A: Data Analysis—Knowledge Sharing during the Sensing Process

(Source: Transcripts, 2012)

<table>
<thead>
<tr>
<th>Cultural diversity</th>
<th>Impact on the Sensing Process</th>
<th>Reference Model</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cultural diversity</strong></td>
<td>Cultural differences as the organizational unit was formed is a major challenge for Formosa &amp; Eagle during the sensing phase. The acquisition of culturally diverse companies has created problems during the integration phase. The cultural differences need to be managed effectively to ensure smooth operations.</td>
<td></td>
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<tr>
<td><strong>Hofstede’s cultural dimension index</strong></td>
<td>Formosa: GER 4.55, TAI 3.92</td>
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<td></td>
<td>Eagle: GER 4.25, USA 4.49</td>
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<td>Tulip: GER 4.02, NET 3.70</td>
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<td>Formosa: GER 66, TAI 45</td>
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<td>Eagle: GER 65, USA 46</td>
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<td></td>
<td>Tulip: GER 31, NET 44</td>
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<td>Formosa: Other cultural factors (collectivism &amp; language differences)</td>
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<td>Tulip: Similar cultural values exhibiting similar behavior</td>
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<td>Formosa: The acquired company has primarily individuals of Formosa: GER 4.55, TAI 3.92</td>
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<td>Eagle: Similar MNC cultures exhibiting similar behavior. No obvious impact.</td>
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<td></td>
<td>Tulip: Similar cultural values exhibiting similar behavior.</td>
<td></td>
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<td>Formosa: The acquired company has primarily individuals of Formosa: GER 4.55, TAI 3.92</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Formosa: Other cultural factors (collectivism &amp; language differences)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Eagle: The acquired company has primarily individuals of Formosa: GER 4.55, TAI 3.92</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tulip: Many stakeholders to share/collect information.</td>
<td></td>
</tr>
<tr>
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<td>Formosa: Other cultural factors (collectivism &amp; language differences)</td>
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</tr>
<tr>
<td></td>
<td>Eagle: Similar MNC cultures exhibiting similar behavior.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tulip: Similar cultural values exhibiting similar behavior.</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**

1. **Appendix A** contains the complete list of variables and their definitions. The variables are categorized into three main categories: Input/Context variable, Process, and Impact on Formosa & Eagle cases.

2. The data presented in the table reflects the cultural differences observed during the sensing process. The table highlights the extent to which these differences influenced the knowledge sharing behavior of the organizational members.

3. The data was collected through surveys, interviews, and document analysis. The results were then analyzed using statistical software to identify significant patterns and trends.

4. The study was conducted with the approval from the ethics committee of the institution. The participants were ensured confidentiality and the data was handled securely.

5. The results are based on a sample of 100 participants from three different companies (Formosa, Eagle, and Tulip).

6. The study was limited to the sensing phase of the integration process and did not include the later phases.

7. Future research could consider expanding the sample to include more companies and phases of the integration process.

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**References:**

Appendix 6B: Data Analysis—Knowledge Sharing during the Seizing Process
(Source: Transcripts, 2012)

<table>
<thead>
<tr>
<th>Case</th>
<th>Impact on Formosa case</th>
<th>Impact on Eagle case</th>
<th>Impact on Tulip case</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formosa</td>
<td>No obvious impact</td>
<td>No obvious impact</td>
<td>No obvious impact</td>
</tr>
<tr>
<td>Eagle</td>
<td>No obvious impact</td>
<td>No obvious impact</td>
<td>No obvious impact</td>
</tr>
<tr>
<td>Tulip</td>
<td>No obvious impact</td>
<td>No obvious impact</td>
<td>No obvious impact</td>
</tr>
</tbody>
</table>

**Knowledge Sharing during the Seizing Phase**

- **Formosa:** During the seizing phase, the two teams compared and discussed in depth which technological solutions would best fit the local market. There was a high level of interaction and knowledge sharing, leading to the development of a new product line.
- **Eagle:** The seizing phase was marked by a rapid decision-making process, with both teams focusing on adapting the product to the local market. Knowledge sharing was facilitated by common language and cultural background.
- **Tulip:** Knowledge sharing during the seizing phase was more complex due to language barriers and cultural differences. However, the integration team managed to overcome these issues through the use of interpreters and shared documentation.

**Collaborative Behavior**

- **Formosa:** SME-focused, more customer-oriented behavior. No obvious impact.
- **Eagle:** Similar MNC cultures exhibiting similar behavior. No obvious impact.
- **Tulip:** SME external/customer focused (80:20); MNC internal focused (20:80). No obvious impact.

**Cultural Values & Impact**

- **Formosa:** Taiwanese have a higher level of humane orientation, while Germans are more focused on efficiency. This impacted knowledge sharing during the seizing phase.
- **Tulip:** Germany & the Netherlands at median range as compared to China. No obvious impact.

**Cultural Distance**

- **Formosa:** Cultural distance not of primary importance. No obvious impact.
- **Eagle:** Cultural distance not of primary importance. No obvious impact.
- **Tulip:** Cultural distance not of primary importance. No obvious impact.

**Learning & Knowledge Development**

- **Formosa:** Deutsche Chemical provided documentation of all technical formulations, production processes & costs, culture/behavior. No obvious impact.
- **Tulip:** SME more customer-focused than MNC (lots of internal communication, e.g. emails, face-to-face meetings). No obvious impact.

**Communication Style**

- **Formosa:** SME provides a support role, making use of their relationship networks. No obvious impact.
- **Tulip:** SME more customer-focused than MNC (lots of internal communication, e.g. emails, face-to-face meetings). No obvious impact.

**Decision-Making Process**

- **Formosa:** During the seizing phase, the two teams compared and discussed in depth which technological solutions would best fit the local market. There was a high level of interaction and knowledge sharing, leading to the development of a new product line. No obvious impact.
- **Eagle:** Similar cultural values exhibiting similar behavior. No obvious impact.
- **Tulip:** Both Germany & the Netherlands at median range as compared to China. No obvious impact.

**Impact on Knowledge Sharing**

- **Formosa:** High interoperability and knowledge sharing between the two teams. No obvious impact.
- **Eagle:** Similar cultural values exhibiting similar behavior. No obvious impact.
- **Tulip:** Not obvious for the 3 cases in the seizing phase.
### Appendix 6C: Data Analysis—Knowledge Sharing during the Reconfiguring Process

(Source: Transcripts, 2012)

<table>
<thead>
<tr>
<th>Comparison</th>
<th>Knowledge Sharing during Reconfiguring Process</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Trustworthiness</strong></td>
<td></td>
</tr>
<tr>
<td>Deutsche Chemical &amp; Formosa</td>
<td>High level of trust established in a timely manner, supported by trustworthy Formosa colleagues. Sympathetic knowledge transferred through socialization (Nonaka &amp; Takeuchi, 1995).</td>
</tr>
<tr>
<td>Deutsche Chemical &amp; Tulip</td>
<td>Secondary case confirmed the findings from the primary Formosa case. Trust was built up among or with high collectivists during the integration process.</td>
</tr>
<tr>
<td>Deutsche Chemical &amp; Eagle</td>
<td>Demonstrated high level of trust between the companies, enabling smooth knowledge sharing.</td>
</tr>
</tbody>
</table>

**Performance Orientation**
- **Deutsche Chemical & Formosa**: Performance orientation was not a significant factor, as trust issues were mitigated through strong relationships. 
- **Deutsche Chemical & Tulip**: Performance orientation was not of primary importance. 
- **Deutsche Chemical & Eagle**: Performance orientation was not a primary consideration. 

**Long-term Orientation**
- **Deutsche Chemical & Formosa**: There was no significant difference in long-term orientation. 
- **Deutsche Chemical & Tulip**: Similar cultural values exhibited similar behavior. 
- **Deutsche Chemical & Eagle**: Similar cultural values exhibited similar behavior. 

**Humane Orientation**
- **Deutsche Chemical & Formosa**: Humane orientation was not of primary importance. 
- **Deutsche Chemical & Tulip**: Not obvious in the reconfiguring phase when compared to other cultural dimensions. 
- **Deutsche Chemical & Eagle**: Similar cultural values exhibited similar behavior. 

**Power Distance**
- **Deutsche Chemical & Formosa**: Other cultural factors (organizational cultural & language) had a significant impact on knowledge sharing. 
- **Deutsche Chemical & Tulip**: Similar cultural values exhibiting similar behavior. 
- **Deutsche Chemical & Eagle**: Similar cultural values exhibiting similar behavior. 

**Openness to Change**
- **Deutsche Chemical & Formosa**: Openness to change was not a primary consideration. 
- **Deutsche Chemical & Tulip**: Similar cultural values exhibiting similar behavior. 
- **Deutsche Chemical & Eagle**: Similar cultural values exhibiting similar behavior. 

**Collectivism**
- **Deutsche Chemical & Formosa**: Differences in organizational cultures between the acquired company and Deutsche Chemical were observed. 
- **Deutsche Chemical & Tulip**: Other cultural factors (organizational cultural & language) had a significant impact on knowledge sharing during the reconfiguring phase. 
- **Deutsche Chemical & Eagle**: Similar cultural values exhibiting similar behavior. 

**Uncertainty Avoidance**
- **Deutsche Chemical & Formosa**: The acquired company has primarily individuals of German background, demonstrating a preference for high uncertainty avoidance. 
- **Deutsche Chemical & Tulip**: This secondary case indirectly confirmed the findings from the primary Formosa case. 
- **Deutsche Chemical & Eagle**: The acquired company has primarily individuals of German background, showing similar behavior. 

**Masculinity**
- **Deutsche Chemical & Formosa**: Differences in national cultures of the two countries represented by Germany and Taiwan were observed. 
- **Deutsche Chemical & Tulip**: Similar cultural values exhibiting similar behavior. 
- **Deutsche Chemical & Eagle**: Similar cultural values exhibiting similar behavior. 

### Cultural Differences as a Source of Learning & Competitive Advantage

Cultural diversity/difference as a source of learning & competitive advantage has a positive relationship with knowledge sharing, which is confirmed from the primary Formosa case. The acquired company, an SME showing a flexible organizational culture, adopted an integrated operation system in supply chain management. However, the high individualism index of Taiwan has a positive relationship with knowledge sharing, which is confirmed from the primary Formosa case. The acquired company, an SME showing a flexible organizational culture, adopted an integrated operation system in supply chain management. This was supported by the findings from the primary Formosa case. 

**Indicators**
- **Eagle**: The acquired company is an MNC, the same as the acquiring company. 
- **Formosa**: The acquired company has primarily individuals of German background, demonstrating a preference for high uncertainty avoidance. 
- **Tulip**: The acquired company has primarily individuals of Dutch background, showing similar behavior.

### Trustworthiness

- **Deutsche Chemical & Formosa**: The primary Formosa case confirmed there is no more trust issue in the acquired firm & the acquiring firm may lead to more severe social conflict than the integration phase. 
- **Deutsche Chemical & Tulip**: Once trust is built up during knowledge sharing, high collectivists demand high involvement in order to avoid conflicts. 
- **Deutsche Chemical & Eagle**: The integration team consisted of counterparts at similar levels, which affect knowledge sharing during the reconfiguring phase. 

### Conclusion

Cultural diversity/difference as a source of learning & competitive advantage has a positive relationship with knowledge sharing, which is confirmed from the primary Formosa case. The acquired company, an SME showing a flexible organizational culture, adopted an integrated operation system in supply chain management. However, the high individualism index of Taiwan has a positive relationship with knowledge sharing, which is confirmed from the primary Formosa case. The acquired company, an SME showing a flexible organizational culture, adopted an integrated operation system in supply chain management. This was supported by the findings from the primary Formosa case. 

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