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企業併購後資訊系統整合成功與否之檢驗

An Examination of the Success of Post-merger IT Integration

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摘要

就一個併購案而言,資訊科技的整合是最重要且複雜的任務之一。過去許多併購的研究著重於技術和組織的議題而忽略了如何去衡量資訊系統整合成功與否,然而現今的研究依舊鮮少著墨於併購後資訊系統整合的績效評估。不同的利害關係人對於併購後資訊系統的成功有所不同,衡量的標準從流程的強化到顧客的滿意度也有所差異。因此,本論文將利害關係人區分為執行長、資訊長、業務經理和顧客四種角色來探討。本研究的目標是欲從策略面和經營面檢驗資訊系統整合的成敗並以一個較廣的衡量方式追蹤資訊系統整合的成效。本研究使用兩階段的實證研究,第一階段以目前相關的文獻和研究發展出初步的衡量指標和研究發現;第二階段藉著訪談多名業界人士進行多個案分析,檢驗第一階段所提出的指標,接著發展出一完整且具備多利害關係人衡量指標的表格,此表格可清楚表現此四利害關係人衡量指標的優先順序。本研究發現,對執行長來說,達到企業綜效和提升市佔率是他的前二衡量指標;對資訊長來說,維持營運的持續性和統整所有資訊科技是他的前二衡量指標;對業務經理來說,維持營運的持續性和整合後資訊系統的彈性是他的前二衡量指標;對於顧客而言,則是營運的持續性和顧客自身資料的正確性。本研究亦發現於設計和規劃資訊系統的整合時,必須特別考量資訊系統的彈性和使用者介面,以提高整體資訊系統整合所帶來的效益。同時,對於企業來說,此時亦是個好契機做企業流程的再造和強化企業自身的競爭力,可以更積極的方式來實現資訊系統整合帶來的價值。希望本研究所提出的衡量指標能提供企業有效且一致的基準去評估併購後資訊系統整合成功與否。

關鍵字:併購後,資訊科技整合,合併與收購,衡量指標

ABSTRACT

IT integration is one of the most critical and complex tasks in a merger-and-acquisition (M&A) project. Many studies on M&A have focused on the technological and organizational issues of information technologies (IT) integration but have left out the important base of what to measure for in the success of the integration. Existing research remains sparse in explaining the performance assessment of a post-merger IT integration. The success of post-merger IT integration can be viewed differently by different stakeholders—the CEOs, the CIOs, the business managers, and the customers of the merged companies—and thus standards used vary from process enhancement to customer satisfaction. The objective of this research is to examine the success of post-merger IT integration from both strategic and operational viewpoints and track the integration performance using a wide range of business measures. This study uses a two-phase empirical study. The first phase involves building preliminary indicators and findings by the related literatures and research. In the second phase, we use a multi-case method by interviewing the practitioners to develop a detailed table of stakeholders' measurements. Finally, the table reveals that the top two measurements for CEOs are achieving synergies and increasing market share; for the CIOs, the top measurements are operational continuity and technology consolidation, for business managers the measurements are operational continuity and the flexibility of an integrated system, while for the customer the measurements are operational continuity and the accuracy of customer information. Moreover, this study also finds the importance of taking flexibility and user interface into consideration while planning and designing IT integration. For an enterprise, IT integration is also a good opportunity to reengineer business processes to enhance competitiveness. It is hoped that the resultant measurements can provide a consistent and useful benchmark for evaluating IT integration success after a business investment in an M&A project.

Keywords：Post-merger, IT integration, M&A, Measurement

ACKNOWLEDGEMENT

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CHAPTER 1 INTRODUCTION

1.1 Objective of M&As

Since the early 1990s, companies have increasingly used mergers and acquisitions (M&As) to change the scope or competitive environment of their businesses (Gadiesh, Buchanan, Daniell, & Ormiston, 2002). This has long been a popular form of business investment in the corporate world and the main objective is to channel corporate assets toward their best possible use (Song, Kueh, Rahman, & Chu, 2010). The reasons most often cited by merging companies as the goals for their merger are to improve operational efficiencies, obtain access to new markets and products, and increase market share (Harrell & Higgins, 2002). Other motives for M&As might be potential synergies (Cullinan, Roux, & Weddigen, 2004), learning (Hakanson, 1995), or access to competences (Bresman, Birkinshaw, & Nobel, 1999). Briefly speaking, the strategies associated with M&A projects are mainly planned with the vision of gaining market share (market dominance) and gaining a competitive advantage (reduction of competition) (Habibbeigi, 2009). But in today's world of rapid technological advances, mergers occur not only for these types of organizational reasons but also for technological reasons (Harrell & Higgins, 2002). For achieving these purposes, M&As may either be related to the core business or in new business areas (Bruner, 2004).

1.2 The Worldwide Growth of M&As

Studies have shown that companies grow more through M&As (external growth) than through expansion of their productive capacity (internal growth) (Giacomazzi, Panella, Pernici, & Sansoni, 1997). In the past 20 to 30 years, a growing number of companies have used M&As as their primary method of growth and competition. M&As have become a main strategy in the business world and many companies have announced M&A deals, even during difficult economic times (Bien, 2009). In 2005, the number of M&As exceeded even the records of the merger wave of the 1980s (Alaranta, 2005). As the world economy showed signs of recovery in 2010, M&A activity rebounded as well. The global deal count increased by 15.7%, from 25,705 to 29,742 transactions, and the total dollar value of M&As increased from $1.6 trillion in 2009 to $2.16 trillion in 2010, an increase of 35%. Global M&A activity increased in 2010 and continued to increase in 2011. Most world regions had significant M&A growth as well (McMahon, McDonagh, & Lanser, 2011). According to two (KPMG, 2011a, 2011b) surveys of banking and global manufacturing executives, the outlook for

2012 is positive. Almost 70% of top banking executives expect to be involved in M&A activities in 2012, with a focus on new geographic markets and technologies. Global manufacturing executives intend to drive growth via innovation and product diversification, using M&As, joint ventures (JVs), or strategic alliances. Deals in the healthcare, technology, energy, and biotech sectors are predicted to be among the top contributors to M&A activity in 2012.

1.3 The Importance of IT in M&As

Today, while organizations depend increasingly on information systems (IS) that coordinate transactions, manage operations, and aid in the pursuit of new market opportunities, the role of technology in mergers has become more critical (Sarrazin & West, 2011). As deals are becoming more complex and technology and the people supporting it are key drivers of M&A processes, the planning of information and communication technologies in the early stages of the integration process is vital to the realization of the benefits of those processes (Larsen, 2005). Therefore, if carefully planned and properly managed, the M&A and resulting integration process can become an opportunity to strengthen the capabilities of the combined organization and place it in a better competitive position (Robbins & Stylianou, 1999). Not least, integrating technology may also help a business to avoid costly errors and reduce the M&A failure rate. More positively, it may help acquirers to better realize value from the technological assets they acquire (James, Georghiou, & Metcalfe, 1998). Moreover, evidence has suggested that one of the main reasons for poor post-acquisition performance in the merger wave of the late 1980s was the failure of organizations to fully consider the implications of merging the harder IS and information technologies (IT) (McKiernan & Merali, 1995). So even when companies merge for reasons other than acquiring IS technical talent, IS integration is a vital component of business mergers (Harrell & Higgins, 2002). An important point to remember is that if the IS integration is not effective, the business will not be effective in its operations; and if the IS integration fails, the business will most likely fail as well (Schmid, Sánchez, & Goldberg, 2012).

1.4 Challenges of IT Integration in M&As

Unfortunately, statistics concerning the success rate of M&A projects show a sobering result: in most cases, such projects do not fulfill the expectations of the managers who advocated and initiated the option of acquiring another company (Meckl, 2004). It is estimated by various researchers that 75% or more of all M&A deals fail to meet the expectations of the acquirer, the acquiree, or investment

bankers (Sagner, 2012). Problems with post-acquisition performance still remain for many organizations choosing this strategy as their means for growth (McKiernan & Merali, 1995). Even though most M&As are carefully designed, they still face major challenges (Bertoncelj & Kovač, 2007). Some of the failures can be attributed to pre-merger discussions, which tend to focus on the financial components of the deal while ignoring problems associated with integrating the technical architecture and organizational infrastructure of the two separate entities (M. P. Johnson, 1989; McCartney & Kelly, 1984). Often, the greatest challenge for the buyers is the post-closing integration of the two companies. The integration of human resources, the corporate cultures, the operating and management-information systems, the accounting methods and financial practices, and related matters are often the most difficult part of completing a merger or acquisition (Sherman, 2006). Much research has been conducted that focuses extensively on the questions of strategic, cultural, and organizational fit surrounding the marriage of two organizations. It has been asserted that organizations are generally poor at amalgamating such human concerns (McKiernan & Merali, 1995). However, the anecdotal evidence from executives and management consultants suggests that there are other, more significant causes. Turner (2000) cites a PricewaterhouseCoopers survey that concluded that IS integration is the most difficult aspect of the post-merger phases, and that nearly three out of four of the companies surveyed had reported such problems. Similarly, a survey of 500 North American and European CIOs revealed that less than one-third regarded their last IS integration in relation to a cross-border M&A as a success (CIO-magazine, 2006). The respondents related this to the definition of the new corporate IS, infrastructure requirements, the high cost of integration and development of IT, and a reluctance to define both IS and IT in the ex-ante stage (McKiernan & Merali, 1995). Of the many challenges that companies face during a merger or acquisition, the most critical is the integration of their IS (Harrell & Higgins, 2002).   There are three challenges related to IS integration in M&A. The first challenge is to learn and improve the capability of IS integration in M&A from one time to the next. The second challenge is to foresee whether IS integration is likely to be a complex or cumbersome part of the integration prior to the M&A being settled. The third challenge is to choose an appropriate integration architecture, given the objectives of the M&A (Carlsson, Henningsson, Hrastinski, & Keller, 2011). In addition, according to an Accenture survey, the way in which senior IT executives and senior business managers define success in a merger transaction has changed. With so much at stake in any merger, the different attitudes held by these two important management constituencies are noteworthy. When

it comes to M&A execution, these differences point to what might be called an "alignment gap" (Curtis & Chanmugam, 2005).

1.5 Lack of Understanding of How to Measure the Success of Post-merger IT Integration

Much literature has been devoted to analyzing the causes and effects that M&As have on the property of companies involved in the operation and on the economic value to various categories of shareholders (Weber & Pliskin, 1996). Moreover, recent studies have found multiple factors that contribute to the selection of a particular merger strategy, the financial impact of the M&A, and the reaction of the employees to these events (Reinicke, 2007). In contrast, less attention has been dedicated to the role of IS in companies engaging in M&As (Weber & Pliskin, 1996). Parvinen (2003) found that the literature covering post-merger IT integration is rare after reviewing 567 M&A-related articles published in 65 core journals in the 1990s. The literature on post-merger IS integration is sparse (McKiernan & Merali, 1995; Mehta & Hirschheim, 2004; Merali & McKiernan, 1993; Stylianou, Jeffries, & Robbins, 1996; Wijnhoven, Spil, Stegwee, & Fa, 2006), and further, studies on measuring the success of post-merger IT integration is even sparser (Alaranta, 2005). The motivation for the current proposed study is to help fill this gap. While M&A events have been well studied in other areas, this has not been the case with IS integration.

1.6 Research Objective

Identifying ways to increase the success of M&As is a major objective of academia and industry (Jaspers & van den Ende, 2006; Palmatier, Miao, & Fang, 2007). However, IS success is an ambiguous, multi-faceted phenomenon that can be addressed with various measures (Alaranta, 2005). As van Grembergen and de Haes (2005) have suggested, organizations need to find a good balance of measures between output and performance that is comprised of both technical measures and business measures. Technical measures evaluate technical-related issues such as IT downtime and access failure (an internal perspective) while business measures evaluate business-related issues such as customer satisfaction (an external perspective). Apparently, these measures vary from proactive enhancements to passive customer feedbacks. If organizations want to justify the use of IT, it is important for them to particularly track performance. The findings show that this sub-dimension received less-than-adequate attention by all case organizations. One reason is that there is a lack of consensus within organizations about what to measure in a given performance, which is viewed from different perspectives (Ko & Fink, 2010). Thus, examining the success of M&A by different

viewpoints of stakeholders is important. We categorize the stakeholders into CEOs, CIOs, business managers, and customers. The above research has thoroughly explained the importance of IT in M&A, which is still scarce in the field of IT performance evaluation. Hence, the research questions are shown as follows.

● What are the criteria for stakeholders to evaluate a post-merger IT integration?

The purpose of this study is to develop a measurement with a multi-stakeholder perspective to assess the success of integrating IT in M&As. In Chapter 2, we define the post-merger IT integration and reviewed the literature of each stakeholder's measurement. In Chapter 3, the preliminary table derived from the former literature, the research approach, and our research data are introduced. In Chapter 4, we show the cases we selected with interview results and the development process of the validated indicators. In Chapter 5, five findings from the previous interviews and validated measurements are presented. Finally, we summarize the whole study and indicate our contribution and future research.
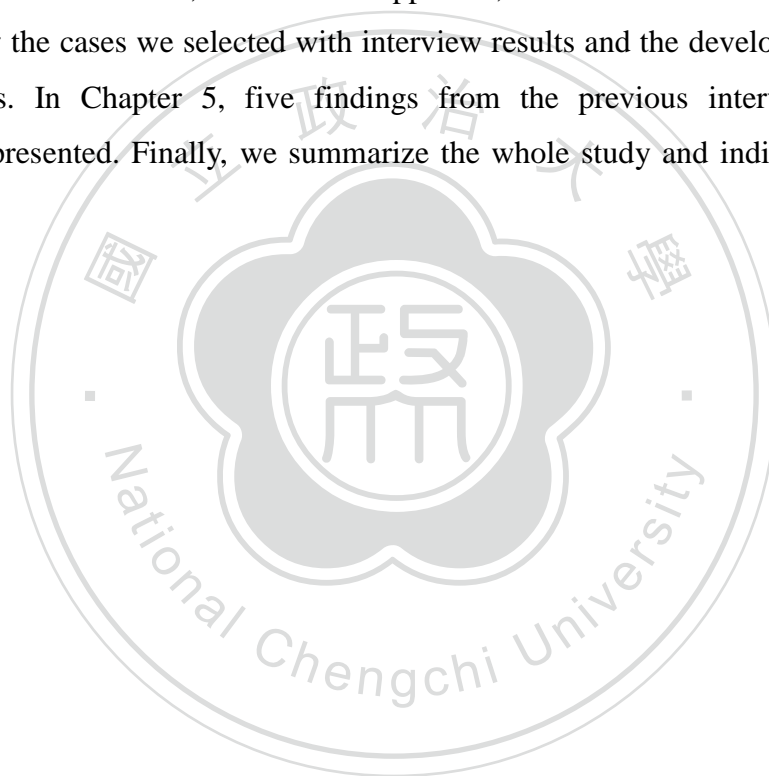
CHAPTER 2 LITERATURE REVIEW

2.1 Post-merger IT Integration

The process of integrating IT involves complex issues such as deciding whether to merge the IT or not or to merge parts of it. IT is perceived here as a broad term that incorporates (1) information system (databases and processing functionalities), (2) IT infrastructure (e.g., data networks, operating systems, hardware, and IT skills), and (3) IT policies (procedures for users and IT managers and IT management, IT coordination, education, and support) (Bharadwaj, 2000; Broadbent & Weill, 1997). IS integration means changes in IS strategy, IS structure, and the systems supporting the combined IS and business units that allow them to function as a whole (Mehta & Hirschheim, 2007). There are three IT integration objectives, which we understand as three different IT integration-ambition levels: (1) complete integration, (2) partial integration, and (3) marginal integration (co-existence). Certain IT integration objectives will be most appropriate for specific post-merger organizational structures. In the meantime, IT integration objectives will correspond with merger objectives (Wijnhoven et al., 2006). Finally, there are four methods to realize complete IT integration: (1) abolishing all IT of both merger partners and replacing it with completely new IT (renewal), (2) closing down all of the IT of one of the partners and using the IT of the other as the IT for both firms (takeover), (3) combining the best parts of both ITs as the new standard for the new organization (standardization), and (4) co-existence, which keeps everything as it was, though introducing some (periodic) synchronization of the redundant systems of both merger partners (Harrell & Higgins, 2002; Johnston & Yetton, 1996). The logic behind investing in post-merger IS integration is, according to these types of IT investments, as follows: investment in transactional IT aimed at cutting costs and investment in strategic IT to gain a competitive advantage. IS integration, particularly in the areas of inventory control, order processing, and other data processing including financial systems, is usually pursued to increase synergy and thus reduce both fixed and variable costs of the merger firm (Weber & Pliskin, 1996).

As with all business initiatives, it is essential that a company identify its M&A strategy first and then align it's IS integration strategy to support its M&A activities (Harrell & Higgins, 2002). IT governance is concerned with the strategic alignment of IT to the business. An effective exchange of ideas and a shared understanding of business and IT objectives allow the organizational strategies to

adapt harmoniously (A. M. Johnson & Lederer, 2005 ; Luftman, Papp, & Brier, 1999). Accenture has long maintained that this alignment of the business and information technology functions within a company is critical to the effectiveness of any strategic initiative. Given the fact that IT enables 60% of post-merger transactions, this alignment is particularly crucial in the realm of M&A (Curtis & Chanmugam, 2005). However, IT governance requires significant input from stakeholders on both strategic business needs and technological capabilities so that organizations can build a clear and comprehensive picture of the connection between business and IT (Zee, 2002) and devise IT solutions that transcend functional boundaries (Peterson, O'Callaghan, & Ribbers, 2000).

The high failure rates have a variety of causes as M&A projects are considered highly complex in terms of the number of deliverables and the amount of communication among a wide range of stakeholders (Meckl, 2004; Shrivastava, 1986). Explicit analysis of the interests and impacts of intervention on different stakeholders (including the poor and less powerful) can help ensure that costs are borne and benefits realized for those intended (Grimble & Wellard, 1997). In complex decision-making situations with conflicting interests, the problem may be addressed from the perspective of different stakeholders using a multiple-stakeholder approach. The goal of this variation is not to find a single, best solution (as, say, in linear programming), nor to find an equilibrium (as in game theory), but to clarify the values and opinions of the stakeholders, to pinpoint the sources of disagreement, and to develop compromise solutions (von Winterfeldt, 1992). In practice, there are nearly as many measures as there are studies. IS success has often been defined as a favorable result or outcome. However, early definition of how this outcome should be characterized, or for whom the result should be favorable, is ambiguous (Alaranta, 2005). Evaluation studies may take many forms and have different functions but commonly assume consensus on evaluation criteria. Reasoning from a theory of value pluralism, it is more likely that stakeholders will have different, and sometimes conflicting, views on an evaluated program (Abma, 2000). In order to acknowledge this plurality, Guba and Lincoln (1989) proposed taking different stakeholder constructions as a departure point for a negotiation process towards consensus or a heightened personal and mutual understanding. The explicit consideration of potential trade-offs between different policy objectives and conflicts between stakeholders' interests helps avoid the unexpected, facilitates good design, improves the likelihood of successful implementation, and assists the assessment of outcomes (Grimble & Wellard, 1997). In conclusion, it's vital to clearly distinguish stakeholders and define the success of IT integration by different stakeholders. Also, a good

alignment among stakeholders will lead to a successful post-merger IT integration and project management.

2.2 CEOs' Concerns

Sixty-six percent of CEOs plan to use M&As as part of their global integration strategies. They described M&A as a key way to rapidly expand global reach—integrating new capabilities, realizing synergy, obtaining knowledge and assets, and gaining access to new customers (IBM, 2008). CEOs seek to increase revenue, decrease cost, improve market share and strengthen competitive positioning through M&A activity (Sharma, 2007). Here are some CEOs' statements toward M&A. Dennis Kozlowski, the former CEO of Tyco, commented that "The key thing I've learned is that acquisitions work best when the main rationale is cost reductions. You can nearly always achieve them because you can see up front what they are. You can define, measure, and capture them" (Carey, 2000). John Browne, chief executive of BP, explained the logic and vision behind the mergers and acquisitions. "Our goal is to be a global player—with the capacity and the reach to capture the real economies of scale that exist in this business. We want big fields, and giant fields, that we can develop at low cost" (Sikora, 2005). Most of the CEOs eager to achieve cost synergies by M&A. Rolf Borjesson, CEO of the U.K. packaging company Rexam, has overseen both scale- and revenue-driven mergers in pursuit of his goal—to transform Rexam into a leading international package player (Gadiesh et al., 2002). Jan Leschly, the former CEO of SmithKline Beecham, said "We do focus on revenues because our production costs, once we've developed a drug, are minimal. Also, in terms of improving growth, though, I'd have to say that we have been much more successful at acquiring products and technologies than at acquiring companies" (Carey, 2000). CEO of Skrill, Siegfried Heimgaertner said "We are very happy to have come to an agreement to acquire Paysafecard. This acquisition will add significant scale to the Skrill Group in terms of payment volume, customers and merchants and will increase our overall market share" (Skrill, 2012). David Bohnett, the former CEO of Merrill Lynch, said "M&A is certainly the fastest way to expand and solidify our businesses. It was a fast way to build competitive mass and expand our user base" (Carey, 2000). Besides, acquiring new technologies is the CEOs' measurement as well. Roche's CEO, Severin Schwan, outlined Roche's acquisition strategy, highlighting an appetite for new drugs and diagnostic technologies. Roche is a global leader in the field and an active buyer of new technologies (Gale & Flinn, 2012). Hyoung Won-joon, CEO of SAP Korea, indicated "SAP's acquisitions are not for the purpose of increasing its global market share, but mainly in line with efforts to seek untapped technologies to provide

better solutions to its worldwide clients" (Hyong-ki, 2012). Based on the above survey and the CEOs' opinions, we propose the following indicators: (1) achieve cost synergies, (2) achieve revenue synergies, (3) increase market share, and (4) acquire new technology.

2.3 CIOs' Concerns

In the post-merger scenario, The CIO must ensure that the establishment of connectivity and consolidation of key infrastructural aspects are given the utmost priority (S. Agrawal, 2010). This involves all activities that have to be completed immediately after the deal is closed, as well as all critical infrastructure-related activities such as common network setup, e-mail, the Internet, and help desk setup. (S. Agrawal, 2010). Many IT executives define "post-merger integration success" in terms of "IT integration," using, for example, connectivity or operational-continuity metrics: "Did we get the help desk up and running quickly?" or "How quickly was e-mail consolidated?" (Curtis & Chanmugam, 2005). Similarly, Manansingh (2010) proposed two key points of view for CIOs to be successful when integrating an acquired firm into the business. The first task is to drive technology consolidation, such as consolidating data centers, rationalizing vendor contracts, and renegotiating software licenses. These are quick wins that will provide immediate cost savings. Cost savings also need to be balanced against risks and the impact on operational stability. Second, processes are the key to acting like a single organization. Processes such as a service desk, procurement, security policies, and software development must be stabilized and standardized to achieve organizational stability. Process consistency is a major element of the firm's perception of IT. A service gap is neither acceptable for in-house functional departments nor for external customers (Albayrak & Gadatsch, 2009). In short, IT executives focus on two things: (1) achieving cost reductions in the IT organization by eliminating redundant processes and systems, and (2) integrating the remaining systems to streamline the processes of the combined company (Zelinger, 2011). One of the biggest determinants of successful IT integration is how quickly you can get the systems working together, so there's a lot of pressure for IT managers to be overly optimistic about the cost and speed of the project (Shearer, 2004). As a result, most of CIOs are requested to achieve M&A integration within the desired costs (Agrawal 2010; Alvarez et al. 2007; Harrell et al. 2002; Honore et al. 2003; Pratt 2011; Zelinger 2011) and a time frame (Agrawal 2010; Honore et al. 2003; Pratt 2011). Thus, here we indicate that the CIOs' measurements toward IT integration in post-merger integration are as follows: (1) achieve technology consolidation, (2) achieve operational continuity, (3) achieve cost savings, and (4) integrate IT within a desired time frame.

2.4 Business Managers' Concerns

Many authors have argued that a key element in truly achieving the expected benefits from the integration of two organizations lies in the successful delivery of the post-merger integration phase, where synergies and economies of scale are key objectives of top management (Epstein, 2005) in a successful M&A deal (Fubini, Price, & Zollo, 2007; King, Dalton, Daily, & Covin, 2004; Marks & Mirvis, 2000; Picot, 2002; Quah & Young, 2005; Shrivastava, 1986). As individual managers weigh the uncertainty of due-diligence estimates against their own performance risk, they often translate synergy estimates into even more conservative and easily achievable — cost and revenue targets (A. Agrawal, Ferrer, & West, 2011). However, Only half of the senior executives polled in a 2006 Accenture/Economist Intelligence Unit survey believed that their companies had achieved the revenue synergies they had expected from their M&A activities, and just 45% affirmed that expected cost synergies had been captured (Kristin, Tom, & Bill, 2007). Also, executives from the companies with prominent competitive exposure were significantly more bullish on the value-creation potential of acquisitions and somewhat less focused on cost efficiencies as the primary driver (Hendrickson, 2003). Business executives define post-merger integration success in terms of the business integration and synergies that IT has enabled, such as technical support of a merged sales forces and an integrated view of the customer (Curtis & Chanmugam, 2005). Based on the literature regarding what benefits business executives expect in M&A and IT integration, we propose two indicators: (1) achieve cost synergies, and (2) achieve revenue synergies.

2.5 Customers' Concerns

Companies naturally expect M&A deals to result in significant benefits, from the growth of market share to new economies of scale. But these companies run the risk of falling short in their efforts if they fail to keep a close eye on a key factor—the customer (Mangan, 2006). In fact, customers wish to obtain "sweetheart deals" from suppliers and avoid adjustment costs associated with changes in merger-firm operations (Chang, Curtis, & Jenk, 2002; Fee & Thomas, 2004) while they also worry about potential disruption in service (Gadiesh et al., 2002) or providing less service (Bekier & Shelton, 2002). As customer often become nervous when the announcement of the merger/acquisition hits the news. They need to be reassured that their needs will continue to be met (Thach & Nyman, 2001). In an eye-opening 50% of the deals, consumers give the company lower marks either in company's prices, quality, or ability to meet expectations. Customers thought they get better service or prices from only 29% of mergers (Thornton, Arndt, & Weber, 2004). Besides, an Accenture survey indicated that 51% of respondents fingered mergers as a cause of higher prices and

38% blamed them for declining customer service (Sikora, 2005). Indeed, a 2004 *Business Week* study found that 50% of consumers reported they were less satisfied with the company service, even two years after the merger (Mangan, 2006). Thus, staying on top of customers' needs and satisfaction can safeguard market performance during the merger process. It is vital that the newly merged company communicates and responds to customer concerns in a timely manner (Homburg & Bucerius, 2005). Based on the perspective of the customer, we propose the following indicators: (1) service continuity, and (2) obtain better deals.

CHAPTER 3 METHODOLOGY

3.1 Research Approach

The research objective is to offer a measurement of a multi-stakeholder perspective to assess post-merger IT integration. Based on the literature review, we summarize success indicators for each stakeholder (shown in Table 1).

Table 1 Stakeholders' Measurements about Post-Merger IT Integration

Stakeholder	Measurement	Indicative references
CEO	Achieve cost synergies	(Carey, 2000 ; Gadiesh et al., 2002; Gale & Flinn, 2012; IBM, 2008; Sharma, 2007; Sikora, 2005)
	Achieve revenue synergies	(Carey, 2000 ; Gadiesh et al., 2002; Gale & Flinn, 2012; IBM, 2008; Sharma, 2007)
	Increase market share	(Carey, 2000 ; Sharma, 2007; Skrill, 2012)
	Acquire new technology	(Carey, 2000 ; Gale & Flinn, 2012; Hyong-ki, 2012)
CIO	Achieve technology consolidation	(S. Agrawal, 2010; Curtis & Chanmugam, 2005; Harrell & Higgins, 2002; Manansingh, 2010)
	Achieve operational continuity	(S. Agrawal, 2010; Albayrak & Gadatsch, 2009; Curtis & Chanmugam, 2005; Honore & Maheia, 2003; Manansingh, 2010; Zelinger, 2011)
	Achieve cost savings	(S. Agrawal, 2010; Alvarez, Dawson, & Sen, 2007; Harrell & Higgins, 2002; Honore & Maheia, 2003; Pratt, 2011; Shearer, 2004; Zelinger, 2011)
	Integrate IT within a desired time frame	(S. Agrawal, 2010; Honore & Maheia, 2003; Pratt, 2011; Shearer, 2004)
Business manager	Achieve cost synergies	(S. Agrawal, 2010; Curtis & Chanmugam, 2005; Epstein, 2005;

		Kristin et al., 2007)
	Achieve revenue synergies	(S. Agrawal, 2010; Curtis & Chanmugam, 2005; Epstein, 2005; Kristin et al., 2007)
Customer	Service continuity	(Bekier & Shelton, 2002; Gadiesh et al., 2002; Sikora, 2005; Thach & Nyman, 2001)
	Obtain better deals	(Chang et al., 2002; Fee & Thomas, 2004; Sikora, 2005; Thornton et al., 2004)

By analyzing Table 1, we derive the following preliminary findings:

1. We can clearly see that CEOs and business managers focus on the strategic indicators. In contrast, CIOs and customers are prone to care more about operational indicators.

2. The CIO is the stakeholder who is under more pressure regarding cost and time.

3. The CIO is the only one dealing with IT-related issues in both aspect of business processes and IT.

4. To some extent, the CIO and the customer have a common consensus about successful IT integration because the CIO has to achieve operational continuity to provide consistent service for the customers.

Finding the stakeholders' opinions toward successful post-merger IT integration requires broad and in-depth data collection and analysis. A broad range of data collection builds a generalized foundation, while the in-depth formulation of stakeholder concerns brings out insights with regard to the post-merger IT integration. To accomplish the goal of collecting data broadly and deeply, this study adopted a cross-case study with second-hand data analysis and in-depth interviews with experienced field experts to attain the best synergy on the studied topic and then reliably and thoroughly verified Table 1.

3.2 Case Selection

We examined the merger cases in the banking industry in Taiwan because this industry has numerous significant merger cases and related investigations and comments. Furthermore, information technology plays an important role in its daily operation and has a direct impact on competitiveness.

Due to the fierce competition in the Taiwan banking industry, M&As are taken as a major means for banks to improve operation performance and result in prosperity. From 2002 to 2007, there were 16 merger cases in the banking industry. Undoubtedly, the numbers of bank merger cases will only increase rather than decline, and investigation and study toward the influencing factors is practical and feasible. In conclusion, the banking industry is suitable as the research target of our study. The four studied banks that have experienced M&A in the past five years are as follows:

Bank A

Bank A is one of the largest commercial banks in Taiwan with a capital value of TW$52 billion and 162 home branches, 6 overseas branches, and 5 representative offices abroad. The former bank of Bank A was founded in 1975. In 2003, Bank A merged with another bank's wholly owned subsidiary by the same financial holding company for the sake of better utility of financial resources. To expand the business scope and market share, it also acquired another bank in 2007. Currently, it is the second credit-card issuing bank in Taiwan.

Bank B

Bank B came into being as a result of the merger of a state-owned bank and a non-state-owned bank on August 21, 2006. The goal was to enlarge the business scale and increase the market share. The non-state owned bank has become a top-notch bank in Taiwan due to its specialization in the foreign exchange, worldwide network of outlets and correspondence banks, superb bank assets, and excellent business performance. For years, the state-owned bank has made significant contributions to the improvement of the industrial structure and has promoted the industry's upgrading by assisting in the development of strategic and vital industries in line with the government's economic policy and development plan. Both banks have been proud of their longtime histories of outstanding track records in our country. Owing to the consolidation, Bank B now has 108 branches at home,20 branches overseas, and 4 representative offices abroad. It has manpower of 5,100 strong and an aggregate paid-in capital of NT$68 billion. It is one of the leading banks in Taiwan.

Bank C

Bank C is an M&A-experienced bank, founded in 1992. It merged with a local bank founded in 1991 and established a financial holding company through a swap/share exchange in Feb. 2002. Until 2010, for the sake of increasing the credit-card market share, Bank C merged the credit-card

department of another consumer finance-driven local bank, which resulted in an increase of 690,000 newly issued cards. As a result, Bank C became the third credit card-issuing bank with 6500 employees, 97 branches, and paid-in capital of NT$49 billion.

Bank D

Bank D is a subsidiary of a well-known, global bank, which is the leading global financial services company. This bank has approximately 200 million customer accounts and does business in more than 140 countries. To expand its presence and correspond to the relevant financial regulations in Taiwan, Bank D acquired Taiwan's first non-state owned bank, which was founded in 1961. The acquisition created a combined business with 65 branches and over 5,000 employees. Bank D's long-term commitment to innovative products and services, new industry-practice induction, and financial talents development have been recognized by the Ministry of Economic Affairs as a Best Investment Partner in 2006 and 2008. Bank D's paid-in capital is NT$66 billion. Currently, it is the fourth credit card-issuing bank in Taiwan.

Table 2 Profile of Studied Banks in Taiwan's Banking Industry

Bank	Bank A	Bank B	Bank C	Bank D
The first integration time	2003	2006	2002	2007
Number of domestic branches	162	108	97	65
Number of M&A experiences	2	1	2	1
Main business service	Corporate banking and commercial banking	Corporate banking	Commercial banking	Corporate banking and commercial banking

3.3 Data Collection

The empirical evidence was collected by interviewing business representatives in the banking field. Several interviews were conducted to provide an in-depth understanding of each representative's opinion. All interviews were tape recorded and all sessions were transcribed before the data were

analyzed. In addition, all interviewees were selected due to their direct involvement in the M&A project. Each interviewee had participated in one to three M&A projects. Our interview questions mainly focused on discovering the representative's objective opinions and feelings about their post-merger IT integration. Finally, we interviewed 4 IT managers, 3 business managers, and 30 customers. Regretfully, CEOs and CIOs were too busy to attend our interview, so instead of face-to-face interviews, we collected their personal opinions that were revealed in public as well as the company's statements as CEOs' opinions. Fortunately, we were able to interview IT managers. The IT managers' profiles are shown in Table 3 and the business managers' profiles are shown in Table 4. Thirty customers were chosen randomly.

Table 3 Profile of IT Managers

Bank	Department	Job Title
A	Information Management Department	IT Manager
B	Data Processing & Information Department	Senior Vice President
C	Core Systems Division of the Information Services Department	IT Manager
D	Tech Infrastructure Department	Vice President

Table 4 Profile of Business Managers

Bank	Department	Job Title
A	Department of Accounting	Performance Management Manager
B	Junior Manager Office	Junior Manager
C	Credit Card Division of Credit Risk Management Department	General Manager

CHAPTER 4 CASE STUDIES

In this section, we present the empirical findings derived from cross-case analysis of the four merger cases.

4.1 Data Analysis－CEOs' Measurements

We collected the secondary data from news, annual reports, and official announcements that represented the opinion of each CEO toward the M&A as Table 5 shows. From this, we can clearly see that Bank A wishes to improve synergies from the merge while the others aim at increasing market share and scaling up. These measurements coincide with those shown in Table 1.

Table 5 CEOs' measurements derived from the Internet and public announcements

Bank	CEOs' opinions
A	Integrate the resource of two banks, improve operation performance, and achieve better synergies
B	Enlarge the business scale and increase the market share
C	Increase the market share of credit cards
D	Expand service points and contact with more customers.

4.2 Data Analysis－CIOs' Measurements

To validate the factors we proposed, we interviewed four IT managers from Bank A, Bank B, Bank C, and Bank D. The interview questions are shown in Appendix 1. The transcribed interview contents are shown in Appendix 3, Appendix 4, Appendix 5, and Appendix 6 in respective of Bank A, Bank B, Bank C, and Bank D. From the literature review, we concluded four factors that CIOs take for evaluating the success of post-merger IT integration: achieving operational continuity, achieving technology consolidation, achieving cost savings, and integrating IT within a limited, desired time frame. However, after the interviews with IT managers, we learned that they had the same opinions in regards to these factors. Moreover, they prioritized the factors by significance and pointed out that there are other, additional issues that concern them. The findings from the interviews are as follows:

First, all the managers indicated that achieving operational continuity was of utmost importance and the top priority regarding IT integration. Moreover, they are under pressure to work on this. Bank A's IT Manager said:

"To achieve operation consistency undoubtedly is the first priority. It's the most important thing for our company. It's incorrect that the system can't run smoothly due to the integration. The system should not influence customer service."

The Senior Vice President of Bank B said:

"For me, as long as the business operation won't be interrupted, it means success."

The IT Manager of Bank C stated that:

"It's important that all the customer data be correct. Furthermore, the integrated system shouldn't influence the original merger's data and operations. In the banking industry, the information service part is really critical. Even if the integrated system is not ready, the integrating deadline and related policy will be postponed to ensure the continuity of the whole business operation."

The Vice President of Bank D explained:

"Without doubt, achieving operation continuity is a necessary condition. In the banking industry, it's impossible to stop service for IT integration. The operation definitely can't be interrupted."

Second, they all stated that achieving technology consolidation was the next priority. When adopting IT integration strategy, it is especially important to consolidate all system and information technology such as the data center, network, server, application systems, surrounding equipment, protocol, etc. This consolidation also influences the operational process. For example, if two different systems have not been integrated, users have to use both while offering services to the customer. The front-end user's loading will increase, which will result in a more complex business process and directly impact the service quality and customer satisfaction.

The IT Manager of Bank A said:

"Regarding technology consolidation, it's the secondary concern while I evaluate IT integration. Besides the business aspect, information technology must integrate together in an M&A. In this way, the business process can be supported and run smoothly."

The Senior Vice President of Bank B said:

"I agree that technology consolidation is important. Even though some equipment consolidation seems less significant such as the mail server, the license authority, and contract renegotiations, it's vital for the business operation. To some extent, information technology consolidation is related to the operational continuity."

The IT manager of Bank C stated that:

"Of course, this point is critical. All the credit card-related systems and surrounding systems of the acquired bank are transferred to Bank C. In addition, the related licenses are not only transferred to Bank C but also rearranged. All the IT needs to integrate smoothly to maximize the utility of the IT resources."

The Vice President of Bank D said:

"If the information technology is not consolidated, that means we haven't finished all the integration work. Thus, achieving technology consolidation is a necessary condition. It's definitely a measurement for us to evaluate if the integration is a successful one or not."

Third, integrating IT within a desired time frame ranked number three. The IT manager of Bank A said:

"According to our evaluation, it's more appropriate that the accomplished IT integration date is postponed a month later than the business integration date. Even though in our case the system-integration date is not as same as the business- integration date, it would be better to accomplish the whole IT integration concurrently."

The Senior Vice President of Bank B said:

"I think our integration was really successful. There were no problems during integration and we accomplished it even quicker than we expected. Due to the administrative affairs that were not completed, the predicted D-date was postponed. Thus, we had more time to do testing and training in IT integration."

The IT Manager of Bank C said

"In our case, it was important to integrate within a desired time. Due to taking over the new branches from the merged bank, we had to announce to our customers that we increased branch coverage and that the two banks would be integrated, since all of this related information was associated with customer's right. Once the information was announced, we were not allowed to postpone or change it. If we wanted to modify the announced information, we had to complete supplementary measures."

The Vice President of Bank D said:

"Of course, we had to integrate IT in time. Basically, we manipulated the merging date while we integrated all the systems. When we were quite sure about the completeness of system integration, then the merging date was announced and approved by Financial Supervisory Commission."

Fourth, neither manager thought that cost savings is the criteria as they evaluated the success of the post-merger IT integration. The IT Manager of Bank A said:

"In the merging moment, relative to the other concerns, saving costs is much less significant."

The Senior Vice President of Bank B indicated:

"In our case, no personnel were laid off and the cost of facility didn't be reduced because of the merger. It's not obvious that IT integration brought a cost-savings benefit. Basically, the whole IT integration would be executed within budget. Sometimes the costs would exceed the budget and general managers were usually willing to add more resources in a merge situation. In conclusion, saving costs is the least of our concerns."

The IT Manager of Bank C said:

"Due to due diligence, we already know the value of the merged bank. Plus, all of the costs, including human resources, time, and facilities will be taken into account in the budget. Generally, it's not a good way to achieve a cost down by system integration. A bank merger usually aims to expand market share rather than reduce IT costs."

The Vice President of Bank D said:

"In my opinion, a merger is for expanding our business or acquiring another bank's technique. In these circumstances, we seldom talk about saving costs. It's better to control all the IT expenses in

the budget. However, if the cost exceeds the budget, it's ok to apply additional resources. There is no way back. We have to finish the integration."

Fifth, in addition to the above concerns, two managers proposed that it was important that the integrated system has enough flexibility to cater to the new business requests. The Vice President of Bank D said:

"After post-merger integration, the integrated information system has to support the company's IT needs, including capacity and performance. For example, the capacity of the system must be able to provide for the two company's customer data. In the meantime, it must also be able to support the new business and services resulting from the merger. Moreover, as the number of branches range from 10 to 60, the coverage of the information system must increase."

Also, the Senior Vice President of Bank B said:

"It's critical to provide a total solution for our customers, including not only enterprises but also consumers. For retail banking, we have to provide online transferring and online ATM services. For institutional banking, we have to coordinate with the projects that Ministry of Economic Affairs practiced. After the merge, our total solutions must get more thorough. It's important for the information system to support all the new business of both customer needs and business department requests."

Sixth, the Senior Vice President of Bank B had a unique concern that was different from the others. He indicated that we also use a customer-satisfaction index to evaluate the information system. He said:

"In my opinion, it is very critical whether the customer satisfaction increases or not. Customer satisfaction is one of the key factors when we want to evaluate the success of our information system. Hence, we use phone call complaints and internal request sheets as our evaluation criteria. Through service desks, we better communicate with our business unit that can solve a customer's problems quickly. On the other hand, the request sheet is for internal troubleshooting and problem resolving. In light of these two criteria, both external and internal customer satisfaction did not decline."

According to the six points above, we list each manager's measurements about evaluating integrated IT and sort the measurements by importance in Table 6.

Table 6 Interview Results of IT Managers' Measurements

Bank	Interview result
A	Achieve operational continuity
	Achieve technology consolidation
	Integrate IT within a desired time frame
B	Achieve operational continuity
	Achieve technology consolidation
	Integrate IT within a desired time frame
	The flexibility of the integrated system for new business
	Customer-satisfaction index
C	Achieve operational continuity
	Achieve technology consolidation
	Integrate IT within a desired time frame
D	Achieve operational continuity
	Achieve technology consolidation
	Integrate IT within a desired time frame
	The flexibility of the integrated system for new business

4.3 Data Analysis－Business Managers' Measurements

To validate the business manager measurements from Table 1, we interviewed three business managers from Bank A, Bank B, and Bank C. The interview questions are shown in Appendix 2. The transcribed interview contents are shown in Appendix 7, Appendix 8, and Appendix 9 in respective of Bank A, Bank B, and Bank C. Following are some findings from the interviews.

First, what the managers are most concerned about is not mentioned in Table 1. All of them indicated that the most important measurement is operational continuity. Because all of the bank's daily operation is inseparable from information technology, any mistake of IT may lead to significant loss and dissatisfaction of customer.

Performance Management Manager of Bank A said:

"In my opinion, if there are no problems with the business process and customer service, I'll consider that it a successful IT integration. Business operations should be smooth and our service shouldn't be interrupted by any mistakes caused by IT. I'll concern this question from the process point of view."

The Junior Manager of Bank B said:

"All we care about is customer complaints, which means our operation can't be interrupted and have any problems caused by the integrated information systems."

Similarly, the General Manager of Bank C said:

"As a sales unit, we evaluate information systems just like our customers. What we mostly care about is whether the business can run smoothly and can be connected without any problems. We take it for granted that the integrated system should provide complete and correct information."

Second, not all of them agree with the measurement of "achieving cost synergies" listed in Table 1. Performance Management Manager of Bank A said:

"From the user's perspective, I do not take cost synergy into concern. I don't think cost synergy can be achieved by IT integration or business integration. It doesn't work. It's not what I take into account."

The General Manager of Bank B said:

"Due to merging with another bank, total costs will rise, such as personnel costs, equipment costs, education costs, and so on. I don't evaluate IT integration in this way. "

The General Manager of Bank C said:

"Regarding the cost synergy, it's mainly evaluated by information department. All we have to do is to satisfy the user's need. Basically, it's hard for the business department to achieve cost synergy by IT integration."

Third, regarding revenue synergy, two interviewees indicated that it is the second measurement while evaluating system integration. The Performance Management Manager of Bank A said:

"Revenue synergy is our more likely measurement. If the integrated system helps in simplifying the process, shortening working time, or providing more precise customer information, it would be really great. In other words, we can take further action into the customer-relationship management. Compared to cost synergy, revenue synergy is what we care more about."

Similarly, the General Manager of Bank C said:

"From the business perspective, revenue is our major measurement. It's apparent that the revenue will be influenced by any problems caused by integrating the information systems. We focus on what the integrated system can improve in the customer-service aspect. We are more likely to use this to evaluate the success of information system integration."

However, the General Manager of Bank B has an opposite opinion toward revenue synergies. She does not agree that business synergy will occur as a result of an integrated information system. She said:

"I don't think the revenue synergy will occur due to IT integration. The revenue synergy is just the outcome of combining two bank's business. So I do not evaluate system integration by this; moreover, I don't believe that the merger generates revenue synergy."

Fourth, the Performance Management Manager of Bank A and the General Manager of Bank C both point out that there is yet another factor they take into concern that the reference literature does not mention. They indicate that it is important that the integrated system should have flexibility for new business needs. The Performance Management Manager of Bank A said:

"From the user's perspective, it's critical that the information system adjust to our business, including releasing new products and tracking the following performance. The most terrible thing is the proposed product or service can't be achieved by information system. If the IT department can take the flexibility of business needs into consideration during the integrating period, that will be great."

The General Manager of Bank C said:

"In addition to the stability of IT and cost synergy, I also care about whether the integrated system has flexibility to the business needs, which means supporting business requests and providing related information instantly."

According to the above results, we summarize business managers' measurements and sort them by importance in Table 7.

Table 7 Interview Results of Business Managers' Measurements

Bank	Interview result
A	Achieving operational continuity
	Achieve revenue synergies
	The flexibility of integrated systems for new business
B	Achieving operational continuity
C	Achieving operational continuity
	Achieve revenue synergies
	The flexibility of integrated systems for new business

4.4 Data Analysis－Customers' Measurements

To validate the customer measurements from Table 1, we interviewed 30 random people. As the customer could not clearly explain their measurements toward IT integration, we mainly questioned their measurements and expectations toward the merger of two banks, and subsequently inferred their opinions of information technology. The interview questions are shown in Appendix 3. The following is the summary of interview results.

From the customer's point of view, the continuity of service is a fundamental request which directly influences the customer's accessibility of banking service. Second, they care that their personal information such as accounts, loans, credit cards, etc. are not affected. Third, the withholding beneficial rights such as premium, bonus point and so on shouldn't be encroached due to merger. If the merger worsens their rights, the customer will be unpleased and even move to other bank. Finally, most customers indicated that they hope that the user interface and operations steps will not be changed after the merger. Due to the popularity of smart phones and Internet banking, the usage amount of online banking services has rapidly increased. As a result, if the user interface or operation steps changed due to the merger, it would be inconvenient for customers.

The summary of the examination of our case studies is provided in Table 8.

Table 8 Stakeholders' Measurements about Post-Merger IT Integration (Interview Results and Secondary Data)

Stakeholder	Measurement
CEO	Achieving synergies
	Increasing market share
CIO	Achieving operational continuity
	Achieving technology consolidation
	Integrating IT within a desired time frame
	The flexibility of the integrated system for new business
	Customer-satisfaction index
Business manager	Achieving operational continuity
	The flexibility of the integrated system for new business
	Achieving revenue synergies
Customer	Achieving operational continuity
	The accuracy of customer information
	No right encroachment
	Consistency of operation steps and user interface

CHAPTER 5 DISCUSSION

According to the previous chapter, five findings on the overall analysis are presented below.

Finding 1: Meet business needs－IT flexibility

IT managers and business managers have similar measurements toward post-merger IT integration. With the fierce competition in Taiwan's banking industry, the speed of releasing new financial products and services is very important. Hence, not only business units but also IT units must pay attention to the flexibility of post-merger information systems. This highlights the importance of a bank's IT system, as there are so many services and financial products that rely upon it. For example, customers use online ATM or mobile banking. In these cases, business opportunities arise from IT technology development. As a result, losing market share, which means losing considerable competitiveness, might occur due to lack of IT support and effectiveness, which is it why it plays such a key role in the current banking industry. This measurement has not been enthusiastically emphasized in the past literature discussion, although it seems quite critical for an IT manager who is planning an integration. Flexibility must be taken into consideration in response to the rapid innovations within the competitive business-opportunity environment. To some extent, IT capability can influence how quickly a company can react to a newly initiated challenge from a competitor.

Finding 2: Improvement in value beyond cost savings on a post-merger IT integration

It is clear that IT managers are not particularly concerned with saving costs. This is highly correlated to the attributes of the banking industry. As we mentioned in previous chapters, the banking industry is a very competitive and volatile environment. Each bank wants to project an image of professionalism by delivering high-quality services to their customers. IT support, in this respect, takes on a very important role. This can be seen more clearly if we talk about the necessity and importance of business continuity. Furthermore, as banking operations must rely on mass, rapid, and sometimes complex calculations, the IT service provided to both internal and external customers is expected to be accurate, instead of being economical. This explains why IT managers placed their emphasis on other aspects rather than costs. Doing things correctly is much more important than doing things in an inexpensive way.

Finding 3: Carefully design the user interface and operation steps

Currently, with the advance of web-banking technology, there are more and more customers using electronic financial services. From the interview results, customers showed a measurement about the possible change of a bank's user interfaces, which is direct media interaction. This kind of human-computer interaction problem is hard to track and fix until a customer addresses the service desk. If the interface is unfriendly or the operation steps changed due to the integration, customers may become unhappy or frustrated, customer satisfaction declines, and the bank may lose market share. It seems that a habitual website and a user-friendly user interface have to take into concern for maintaining customers' satisfaction while dealing with IT integration.

Finding 4: A chance for change

From the study, we can surmise that IT system-integration capability is still viewed as a passive concept. What we mean by "passive" is that most of the stakeholders, even the CIOs, believe that "nothing is a good thing." Let's take user interface as an example. Both the service provider and consumers expect that no conversion effort would be considered a success. In fact, in an aggressive view, the synergy of the integration process of a merger case could possibly be revealed in many aspects. For example, with a larger scale of IT resources, including software and hardware, an improved allocation might lead to a better utilization of the existing resources. Furthermore, it is also possible to take advantage of this good timing to restructure the internal process of the company, which is expected to be continuously competitive. As a result, gaining the aggressive benefits of system integration might change people's opinion toward the IT field, and even empower it while dealing with business strategy.

Finding 5: The interrelationship of measurement between stakeholders

To clearly clarify the interrelated measurements among stakeholders, the stakeholders are classified into three levels as Figure 1. The top level is CEO. The middle level is user including business manager and customer. The bottom level is CIO. From Figure 1, we discover some of the measurements are interrelated level by level. For example, the user level measurement such as "operational continuity" and "the flexibility of the integrated system for new business" also shown in CIO's measurement. These CIO measurements are driven by user level because information system plays as a supporting role to meet the user's need. So does the measurement "achieving synergies" shown in both CIO's and business manager's measurement. The business measurement is driven by the CEO's measurement. Moreover, we discover that the user measurement may influence the CIO's

IT integration strategy from the interviews and Figure 1.To meet the customer's measurement "consistency of operation steps and user interface", most of the CIOs take the information system with bigger user base rather than the advanced information system as their remain information system so that they can maintain the most user's benefits in our four cases. This strategy makes the most of users pay less efforts to adapt to new system so that the operational errors and user resistance may decrease to the minimum. Last, the measurement of customer, "no right encroachment", is a complementary effort which the non-IT department must take into concern and reference. To fulfill this customer requirement, it's not merely the business of IT department but more heavily relies on the business unit to carefully maintain and arrange the customer right after a merger.

CEO

Achieving synergies
Increasing market share

Business manager

Achieving operational continuity
The flexibility of the integrated
system for new business
Achieving revenue synergies

Customer

Achieving operational continuity
The accuracy of customer information
No right encroachment
Consistency of operation steps and user
interface

CIO

Achieving operational continuity
Achieving technology consolidation
Integrating IT within a desired time
frame
The flexibility of the integrated system
for new business
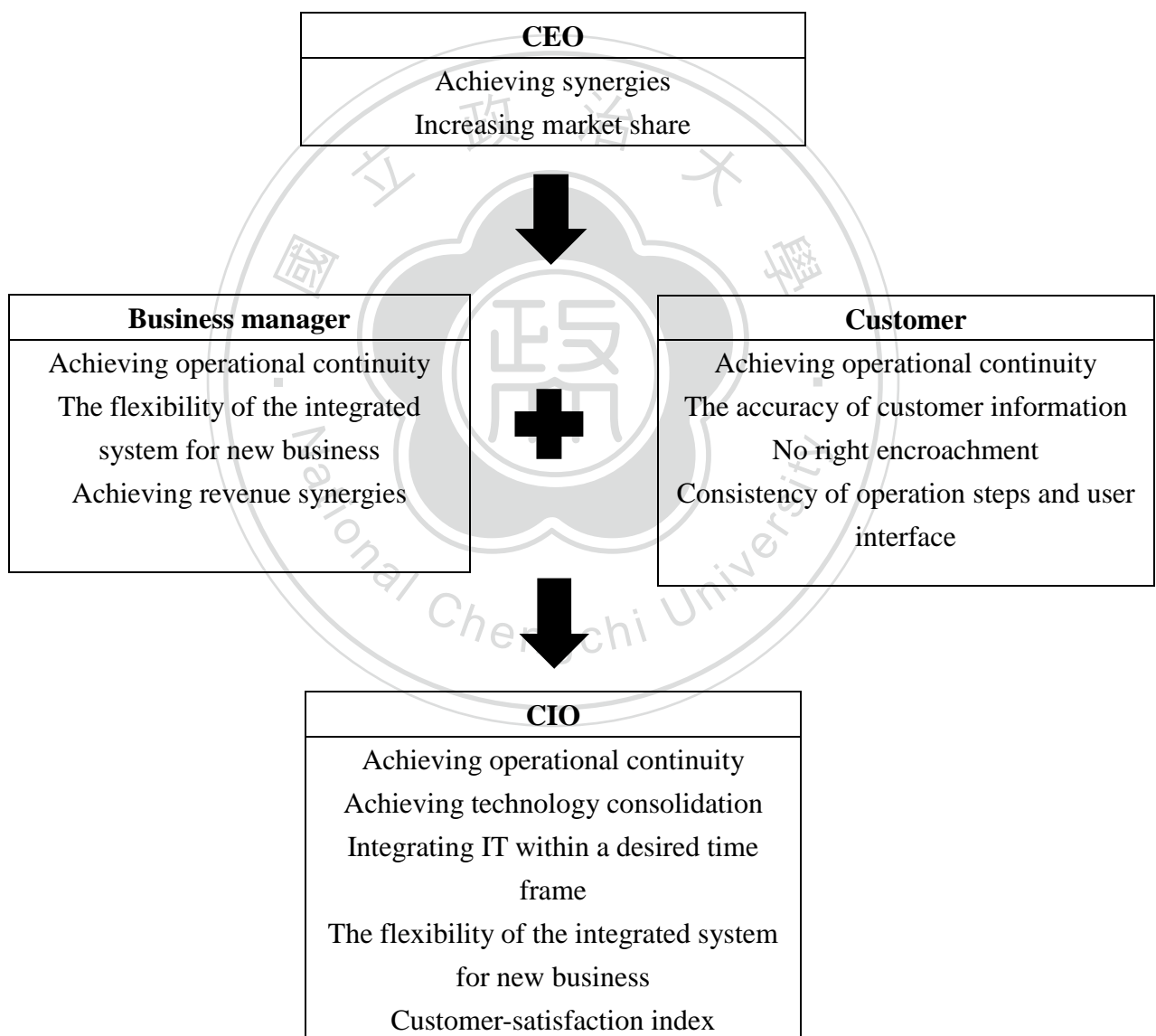Customer-satisfaction index

Figure 1 Interrelation of measurement between different stakeholders

CHAPTER 6 CONCLUSION

6.1 Summary

The objective of this study is to build a complete understanding of stakeholders' views on the success of IT post-merger integration. Instead of providing a single IT perspective, we propose a broad, and hopefully more objective, criteria for evaluating success. The stakeholders include: CEOs, CIOs, business managers, and the customers. There are two phases in this research. First, we develop a preliminary table of stakeholder's measurements from the literature. Then, we used a multi-case study with in-depth interviews and secondary data to validate and enhance the data. Finally, by consolidating the literature and practitioners' view of the success of IT integration post-merger, the study develops findings about the measurement of the success of integrating IT in M&As with a multi-stakeholder perspective.

The results show that the CIOs' measurements about IT integration after a merger are business synergy and the increase of market share. These measurements rely highly on a smooth transition of the information systems for operational continuity. The IT managers' measurements are operational continuity, technology consolidation, integrating IT within a desired time frame, the flexibility of an integrated system for new business, and customer satisfaction. The business managers' measurements are operational continuity, revenue synergies, and the flexibility of the integrated system for new business. The customers' measurements are operational continuity, the accuracy of customer information, rights encroachment, and consistency of operation steps and user interface.

Considering the heavy use of IT in the current banking industry, both the IT and business managers agreed upon the importance of information-technology flexibility. Moreover, the IT integration directly influences the front-end service point—that the IT managers, business managers, and customers take as one of their top measurements—which is operational continuity. Five findings were derived from the in-depth data collection. The first finding is the importance of IT flexibility in dealing with the new business and competitive environment. The second finding explains that IT managers are less focused on saving costs than integrating IT for the sake of better performance. The third finding is that the increased usage of electronic and mobile ATM illustrates the importance of the user-interface design and the operational process of Internet service. The fourth finding shows that IT plays a passive role in the merger of two enterprises today. The last finding reveals some of

the measurements are interrelated level by level due to the relationship between stakeholders. The user's measurement may influence the other stakeholder's measurement.

This study provides a basis for developing a useful benchmark of post-merger IT integration for managerial use and explores a foundation in the field of evaluation of IT integration for future research.

6.2 Contribution

In regards to academic contribution, Table 6, which shows stakeholders' measurements, establishes a base for future research and fills the gap in the field of post-merger, IT-performance evaluation. Moreover, from the discussion, the first finding supports Lee et al. (2003), who proposed the importance of IS flexibility to rapid-response, new business opportunities and that a successful IT department embraces the concept of flexibility, and adopts temporary work-around when they make business sense (Sarrazin & West, 2011). However, our finding 2 differs from past studies. Under the pressure of good IT performance, the interviewee indicated that cost savings is less of a measurement. This opposite opinion toward the measurements of post-merger IT integration is needed for future researchers to reexamine and verify. Finding 3 supports the customer's opinion on the relationship between user interface and customer satisfaction as past literature has demonstrated (Ribbink, Riel, Liljander, & Streukens, 2004; Zviran, Glezer, & Avni, 2006). Finding 4 shows that current enterprises view post-merger IT integration in a conservative way. Hence, this provides motivation for researchers to examine if the performance of IT integration is different when an enterprise views IT integration in an aggressive way. Finding 5 support the past literature which indicated that the performance measurement is hierarchical and cascading to different organizational level (Neely, 2002).

For practical use, this study provides an applicable tool for IT managers who are responsible for post-merger IT integration planning and management. It's obvious that an enterprise will meet stakeholder's expectation when doing a post-merger IT integration, and this table provides a check list and reference for better project management and integration optimization. Simultaneously, with combined opinions from each stakeholder, this integrated system would bring more benefits to companies. On the other hand, this study offers some findings to remind the IT manager to pay attention and provides some direction through which to view the role of IT integration in M&A. First, the IT manager has to keep the importance of flexibility and user interface in mind while planning

information system integration. These factors influence the business's development in the future and the satisfaction of customers. Second, IT integration may be viewed in different ways. If IT integration is viewed as an opportunity to restructure the business process or even increase revenue, it will bring the enterprise more benefits and competitive advantages. The post-merger IT integration is not merely for achieving operational requests but for a business strategy.

6.3 Limitation and Future Research

Although this study offers many insights into post-merger IT integration, numerous limitations still need to be mentioned and clarified. First, the CEOs' measurements in Table 6 are derived from website data and the company's public announcements. These second-hand data is perhaps less complete in describing the exact measurements of CEOs. Besides, this study takes IT managers in place of CIOs as our interview target. Hence, the proposed CIO's measurement here is also perhaps less complete in describing the exact CIOs' measurement. Last, because this study focuses on the banking industry in Taiwan, the proposed measurements here may differ while applying in other industries such as the service or high-tech industry.

This paper provides an elementary understanding about stakeholders' measurements toward post-merger IT integration. Most of the measurements proposed here are qualitative indicators. If quantitative indicators could be derived from qualitative indicators in this review, it would provide enterprise stakeholder with a better measurement to more easily track and evaluate their post-merger IT integration performance. With quantitative indicators, this would be a more useful tool.

REFERENCE

Abma, T. A. (2000). Stakeholder conflict: a case study. *Evaluation and Program Planning, 23*(2), 199-210.

Agrawal, A., Ferrer, C., & West, A. (2011). When big acquisitions pay off. *McKinsey Quarterly*(3), 103-108.

Agrawal, S. (2010). CIOs Role in a M&A. Retrieved from http://dqindia.ciol.com/content/top_stories/2010/1010111801.asp

Alaranta, M. (2005). Evaluating Success in Post-Merger IS Integration: A Case Study. *Electronic Journal of Information Systems Evaluation, 8*(3), 143-150.

Albayrak, C. A., & Gadatsch, A. (2009). Managing Mergers and Acquisitions or Post-Merger Cookbook for CIOs and IT Management. *Proceedings of the European Conference on Information Management & Evaluation*, 1-9.

Alvarez, E., Dawson, D., & Sen, S. (2007). UTILITY M&A: BETTING ON THE CIO. *Public Utilities Fortnightly, 145*(3), 33-34.

Bekier, M. M., & Shelton, M. J. (2002). Keeping your sales force after the merger. *The McKinsey Quarterly, 4*, 106-115.

Bertoncelj, A., & Kovač, D. (2007). An integrated approach for a higher success rate in mergers and acquisitions. *Journal of Economics and Business, 25*(1), 167-188.

Bharadwaj, A. S. (2000). A Resource-Based Perspective on Information Technology Capability and Firm Performance: An Empirical Investigation. *MIS Quarterly, 24*(1), 169-196.

Bien, M.-L. (2009). *INFORMATION TECHNOLOGY MERGER AND ACQUISITION.* Master of Computing and Information Systems, Youngstown State University, Youngstown, Ohio.

Bresman, H., Birkinshaw, J., & Nobel, R. (1999). Knowledge Transfer in International Acquisitions. *Journal of International Business Studies, 30*(3), 439-462.

Broadbent, M., & Weill, P. (1997). Management by Maxim: How Business and IT Managers Can Create IT Infrastructures. *Sloan Management Review*, 77-92.

Bruner, R. F. (2004). *Applied Mergers & Acquisitions*. NJ: John Wiley & Sons.

Carey, D. (2000). Lessons from Master Acquirers: A CEO Roundtable on Making Mergers Succeed. *Harvard Business Review, 3*, 145-154. Retrieved from http://hbr.org/2000/05/a-ceo-roundtable-on-making-mergers-succeed/ar/1

Carlsson, S., Henningsson, S., Hrastinski, S., & Keller, C. (2011). Socio-technical IS design science research: developing design theory for IS integration management. *Information Systems and E-Business Management, 9*(1), 109-131.

Chang, R. A., Curtis, G. A., & Jenk, J. (2002). Keys to the Kingdom: How an Integrated IT Capability

Can Increase Your Odds of M&A Success. *Accenture*, 2-29.

CIO-magazine. (2006). The State of the CIO 2006: Your Agenda[Electronic Version]. *CIO Magazine*.

Cullinan, G., Roux, J.-M. L., & Weddigen, R.-M. (2004). When to walk away from a deal. *Harvard Business Review, 82*(4), 96-104.

Curtis, G. A., & Chanmugam, R. (2005). Reconcilable differences: IT and post-merger integration. *Outlook*(2), 81-85.

Epstein, M. J. (2005). The determinants and evaluation of merger success. *Business Horizons, 48*(1), 37-46.

Fee, C. E., & Thomas, S. (2004). Sources of gains in horizontal mergers: evidence from customer, supplier, and rival firms. *Journal of Financial Economics, 74*(3), 423-460.

Fubini, D., Price, C., & Zollo, M. (2007). *Mergers: Leadership, Performance and Corporate Health*. London: Palgrave Macmillan.

Gadiesh, O., Buchanan, R., Daniell, M., & Ormiston, C. (2002). A CEO's guide to the new challenge of M&A leadership. *Strategy & Leadership 30*(3), 11-18.

Gale, J., & Flinn, R. (2012). Roche Makes $5.7 Billion Offer for Illumina in Hostile Bid. *Bloomberg Businessweek*, from http://www.businessweek.com/news/2012-01-25/roche-makes-5-7-billion-offer-for-illumina-in-hostile-bid.html

Giacomazzi, F., Panella, C., Pernici, B., & Sansoni, M. (1997). Information systems integration in mergers and acquisitions: A normative model. *Information & Management, 32*(6), 289-302.

Grimble, R., & Wellard, K. (1997). Stakeholder methodologies in natural resource management: a review of principles, contexts, experiences and opportunities. *Agricultural Systems, 55*(2), 173-193.

Guba, E. G., & Lincoln, Y. S. (1989). *Fourth generation evaluation*. Newbury Park, CA: Sage Publications.

Habibbeigi, P. (2009). *A Project Management Approach to M&A Deals and their Post-Integration Projects*. Unpublished master's thesis. Umea School of Business.

Haes, S. D., & Grembergen, W. V. (2005). *IT Governance Structures, Processes and Relational Mechanisms: Achieving IT/Business Alignment in a Major Belgian Financial Group.* Paper presented at the Proceedings of the 38th Hawaii International Conference on System Sciences (HICSS), Big Island, Hawaii

Hakanson, L. (1995). Learning through acquisitions: Management and integration of foreign R&D laboratories. *International Studies of Management and Organization, 25*(1-2), 121-157.

Harrell, H. W., & Higgins, L. (2002). IS integration: Your most critical M&A challenge? *Journal of Corporate Accounting & Finance, 13*(2), 23-31.

Hendrickson, J. (2003). Mergers and Acquisitions as a Vehicle to Create Value in Uncertain Times. *The Electricity Journal, 16*(6), 66-75.

Homburg, C., & Bucerius, M. (2005). A Marketing Perspective on Mergers and Acquisitions: How Marketing Integration Affects Postmerger Performance. *Journal of Marketing, 69*(1), 95-113.

Honore, R. A., & Maheia, M. W. (2003). The secret to a successful RIM merger or acquisition. *Information Management Journal, 37*(5), 57-63.

Hyong-ki, P. (2012). SAP to eye M&A opportunity, promote B2B software firms: CEO Hyoung, from http://view.koreaherald.com/kh/view.php?ud=20120508001151

IBM. (2008). The Enterprise of the Future: Global CEO Study. Retrieved from ftp://public.dhe.ibm.com/common/ssi/pm/xb/n/gbe03035usen/GBE03035USEN.PDF

James, A. D., Georghiou, L., & Metcalfe, J. S. (1998). Integrating technology into merger and acquisition decision making. *Technovation, 18*(8–9), 563-591.

Jaspers, F., & van den Ende, J. (2006). The organizational form of vertical relationships: Dimensions of integration. *Industrial Marketing Management, 35*(7), 819-828.

Johnson, A. M., & Lederer, A. L. (2005). The Effect of Communication Frequency and Channel Richness on the Convergence Between Chief Executive and Chief Information Officers. *Journal of Management Information Systems, 22*(2), 227 - 252

Johnson, M. P. (1989). Compatible information systems a key to merger success. *Healthcare Financial Management, 43*(6), 56-61.

Johnston, K. D., & Yetton, P. W. (1996). Integrating information technology divisions in a bank merger Fit, compatibility and models of change. *The Journal of Strategic Information Systems, 5*(3), 189-211.

King, D. R., Dalton, D. R., Daily, C. M., & Covin, J. G. (2004). Meta-analyses of post-acquisition performance: indications of unidentified moderators. *Strategic Management Journal, 25*(2), 187-200.

Ko, D., & Fink, D. (2010). Information technology governance: an evaluation of the theory-practice gap. *Corporate Governance, 10*(5), 662 - 674.

KPMG, I. (2011a). Banking executive survey: Executives optimistic on recovery, from http://www.kpmginstitutes.com/insights/2011/pdf/banking-business-pulse-report-2011.pdf

KPMG, I. (2011b). Global manufacturing outlook: Growth while managing volatility, from http://www.kpmg.com/LU/en/IssuesAndInsights/Articlespublications/Documents/growth-while-managing-volatility-survey.pdf

Kristin, F., Tom, H., & Bill, P. (2007). Where has all the synergy gone? The M&A puzzle. *Journal of Business Strategy, 28*(5), 29-35.

Larsen, M. H. (2005). ICT Integration in an M&A Process. *PACIS 2005 Proceedings, 20*(Brown), 1146-1159.

Lee, J., Siau, K., & Hong, S. (2003). Enterprise integration with ERP and EAI. *Communications of the ACM 46*(2), 54-60.

Luftman, J., Papp, R., & Brier, T. (1999). Enablers and inhibitors of business-IT alignment.

Communications of the AIS, 1(3es), 1-33.

Manansingh, A. (2010). M&A For the CIO.   Retrieved from
http://arunmanansingh.wordpress.com/2010/02/15/ma-for-the-cio/

Mangan, T. (2006). Avoiding the M&A Customer Satisfaction Trap. Retrieved from Destination CRM website:
http://www.destinationcrm.com/Articles/Web-Exclusives/Viewpoints/Avoiding-the-M%26A-Customer-Satisfaction-Trap-47726.aspx

Marks, M. L., & Mirvis, P. H. (2000). Managing mergers, acquisitions, and alliances: Creating an effective transition structure. *Organizational Dynamics, 28*(3), 35-47.

McCartney, L., & Kelly, J. (1984). Getting away with merger: What looks to investment bankers like a heavenly marriage can be hell in the computer room. *Datamation, 30*(20), 24.

McKiernan, P., & Merali, Y. (1995). Integrating information systems after a merger. *Long Range Planning, 28*(4), 4-62.

McMahon, C. C., McDonagh, B. P., & Lanser, H. P. (2011). 2011 middle-market M&A outlook. Retrieved from
http://www.rwbaird.com/bolimages/Media/PDF/Insights/2011-Middle-Market-MA-Outlook.pdf

Meckl, R. (2004). Organising and leading M&A projects. *International Journal of Project Management, 22*(6), 455-462.

Mehta, M., & Hirschheim, R. (2004). *A Framework for Assessing IT Integration Decision-Making in Mergers and Acquisitions.* Paper presented at the Proceedings of the 37th Hawaii International Conference on System Sciences, Big Island, Hawaii.

Mehta, M., & Hirschheim, R. (2007). Strategic Alignment In Mergers And Acquisitions: Theorizing IS Integration Decision making. *Journal of the Association for Information Systems, 8*(3), 143-174.

Merali, Y., & McKiernan, P. (1993). The strategic positioning of information systems in post-acquisition management. *The Journal of Strategic Information Systems, 2*(2), 105-124.

Neely, A. (2002). *Business Performance Measurement:Theory and Practice*. Cambridge: Cambridge University Press.

Palmatier, R. W., Miao, C. F., & Fang, E. (2007). Sales channel integration after mergers and acquisitions: A methodological approach for avoiding common pitfalls. *Industrial Marketing Management, 36*(5), 589-603.

Parvinen, P. M. T. (2003). *Towards a Governance Perspective to Mergers and Acquisitions*. Unpublished doctoral thesis. Helsinki University of Technology. Helsinki. Retrieved from http://lib.tkk.fi/Diss/2003/isbn9512263815/

Peterson, R. R., O'Callaghan, R., & Ribbers, P. M. A. (2000). *Information technology governance by design: investigating hybrid configurations and integration mechanisms.* Paper presented at

the Proceedings of the twenty first international conference on Information systems Atlanta.

Picot, G. (2002). *Handbook of international mergers and acquisitions preparation, implementation and integration*. London: Palgrave.

Pratt, M. K. (2011). Get Into the M&A Game. *Computerworld, 45*(10), 16-20.

Quah, P., & Young, S. (2005). Post-acquisition Management: A Phases Approach for Cross-border M&As. *European Management Journal, 23*(1), 65-75.

Reinicke, B. A. (2007). *Building a systems level theory of IS integration in mergers and acquisitions*. Unpublished doctoral dissertation. Indiana University   Indiana.

Ribbink, D., Riel, A. C. R. V., Liljander, V., & Streukens, S. (2004). Comfort your online customer: quality, trust and loyalty on the internet. *Managing Service Quality 14*(6), 446-456.

Robbins, S. S., & Stylianou, A. C. (1999). Post-merger systems integration: the impact on IS capabilities. *Information & Management, 36*(4), 205-212.

Sagner, J. S. (2012). M&A failures: Receivables and inventory may be key. *Journal of Corporate Accounting & Finance, 23*(2), 21-25.

Sarrazin, H., & West, A. (2011). Understanding the Strategic Value of IT in M&A. *McKinsey Quarterly, 12*(1), 1-6.

Schmid, A. S., Sánchez, C. M., & Goldberg, S. R. (2012). M&A today: Great challenges, but great opportunities. *Journal of Corporate Accounting & Finance, 23*(2), 3-8.

Sharma, U. (2007). Post Merger Integration through Business Process Management and Lean Six Sigma. *A BPTrends Column*. Retrieved from http://www.bptrends.com/publicationfiles/-06-07-COL-BPMandPostMajorIntegration-SharmaSilverstein-fnal.pdf

Shearer, B. (2004). Avoiding the IT Integration Blues. . *Mergers & Acquisitions: The Dealermaker's Journal, 39*(11), 10-15.

Sherman, A. J. (2006). Preventing post-M&A problems. *Journal of Corporate Accounting & Finance, 17*(2), 19-25.

Shrivastava, P. (1986). Postmerger Integration. *Journal of Business Strategy 7*(1), 65-76.

Sikora, M. (2005). Consumers Are a Hot Issue For Merging Businesses. *Mergers and Acquisitions, 40*(7), 16-18.

Skrill. (2012). Skrill agrees to buy paysafecard.com Wertkarten AG. *Skrill*, from http://corporate.skrill.com/2012/06/skrill-agrees-to-buy-paysafecard-com-wertkarten-ag/57477/

Song, S. I., Kueh, C. C., Rahman, R. A., & Chu, E. Y. (2010). Performance of Cross-border Mergers and Acquisitions in Five East Asian Countries. *Journal of Economics and Management 4*(1), 61-80.

Stylianou, A. C., Jeffries, C. J., & Robbins, S. S. (1996). Corporate mergers and the problems of IS integration. *Information & Management, 31*(4), 203-213.

Thach, L., & Nyman, M. (2001). Leading in limbo land: The role of a leader during merger and

acquisition transition. *Leadership & Organization Development Journal, 22*(4), 146-150.

Thornton, E., Arndt, M., & Weber, J. (2004). WHY CONSUMERS HATE MERGERS. *Business Week,* 58-63.

Turner, F. (2000). Reasons why mergers and acquisitions can fail. Retrieved from Jacksonville Business Journal website:
http://www.bizjournals.com/jacksonville/stories/2000/08/28/smallb2.html

von Winterfeldt, D. (1992). *Expert knowledge and public values in risk management: The role of decision analysis*. Westport, CT: Praeger Paperback.

Weber, Y., & Pliskin, N. (1996). The effects of information systems integration and organizational culture on a firm's effectiveness. *Information & Management, 30*(2), 81-90.

Wijnhoven, F., Spil, T., Stegwee, R., & Fa, R. T. A. (2006). Post-merger IT integration strategies: An IT alignment perspective. *The Journal of Strategic Information Systems, 15*(1), 5-28.

Zee, H. v. d. (2002). *Measuring the value of information technology*. Hershey, PA: Idea Publishing.

Zelinger, S. (2011). Addressing The Lack Of Transparency In Subsidiary Operations. Retrieved from Manufacturing Business Technology website:
http://www.mbtmag.com/articles/2011/04/addressing-lack-transparency-subsidiary-operations

Zviran, M., Glezer, C., & Avni, I. (2006). User satisfaction from commercial web sites: The effect of design and use. *Information & Management, 43*(2), 157-178.
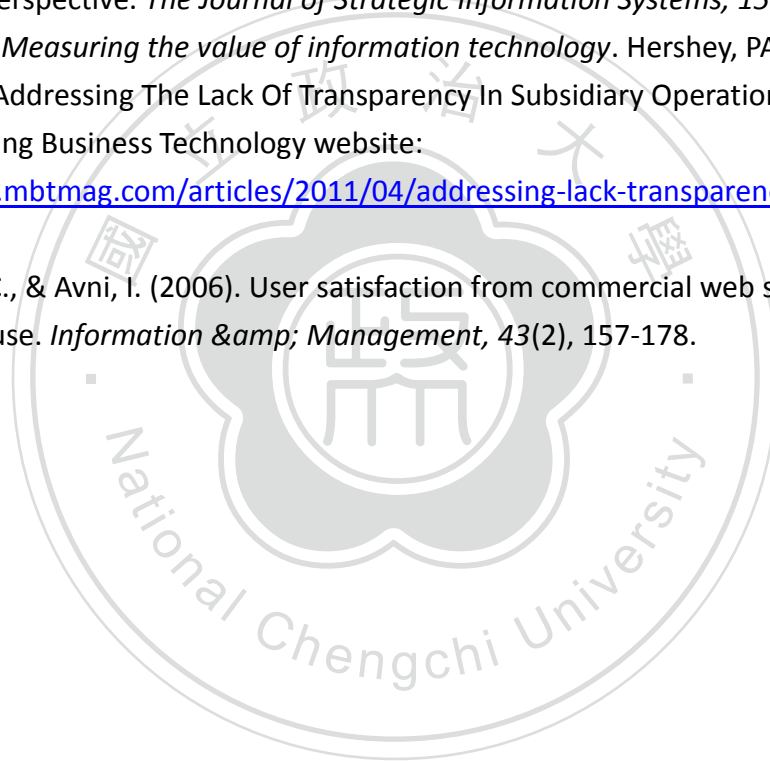
APPENDIX

Appendix 1: Interview Question for IT Manager (Chinese)

企業購併後資訊系統整合評估訪談問題-資訊經理

您好:

以下為企業購併後資訊系統整合評估的訪談內容,由於訪談問題非常主觀,因此於訪問時依自身經驗和個人看法回答即可,感謝您的指教和建議。

此訪談內容僅供研究用途,為保護您的隱私,您的名字和所服務的銀行將以匿名的方式呈現於論文內容。感謝您撥冗接受訪談,在此獻上最高的謝意。

1. 請問貴銀行在購併後資訊系統整合的策略為何?
   重建(兩方系統接直接放棄,重新導入一全新系統)
   整體接收(放棄某一方系統,使用另一方的系統)
   標準化(結合兩系統的優點為一新系統)
   共存(兩方系統皆保留,定期同與更新)

2. 請問您認為此次資訊系統的整併是否成功?而您又是如何評估的?

3. 請問以下幾點是否為您評估併購後資訊系統整合成功的考量?

● 統整所有資訊系統(Technology consolidation)
   舉例來說 : Email 的整合、Data center 的整合、重新洽談軟體的授權、重簽軟硬體供應商的合約。

● 維持公司營運(Operational continuity)
   舉例來說: Service desk 是否提供正常服務、維持其他部門運作順利、資安政策的重新規定、公司的營運流程不受中斷。

● 節省成本(Cost Savings)
   舉例來說:在規定的預算內達到資訊系統整合、藉由資訊系統整和達到公司成本的降低。

● 在預定的時間內完成資訊系統整合(Integrate IT within desired time frame)

4. 請問您是否還有使用其他因素來評估購併後資訊系統整合成功與否?

感謝您耐心的指教

敬祝您身體健康、萬事如意

政治大學資訊管理研究所碩士班　　林孟賢　敬上

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Appendix 2: Interview Question for Business Manager (Chinese)

企業購併後資訊系統整合評估訪談問題-業務經理

您好:

　　以下為企業購併後資訊系統整合評估的訪談內容,由於訪談問題非常主觀,因此於訪問時依自身經驗和個人看法回答即可,感謝您的指教和建議。

　　此訪談內容僅供研究用途,為保護您的隱私,您的名字和所服務的銀行將以匿名的方式呈現於論文內容。感謝您撥冗接受訪談,在此獻上最高的謝意。

1.　請問貴銀行在購併後資訊系統整合的策略為何?

　　重建(兩方系統接直接放棄,重新導入一全新系統)

　　整體接收(放棄某一方系統,使用另一方的系統)

　　標準化(結合兩系統的優點為一新系統)

　　共存(兩方系統皆保留,定期同與更新)

2.　請問您認為此次資訊系統的整併是否成功?而您又是如何評估的?

3.　請問以下幾點是否為您評估併購後資訊系統整合成功的考量?

●　達到成本的綜效(Achieving cost synergies)

　　例如:以資訊系統達到成本的降低、資訊系統的整合耗費過多成本與否。

●　達到收入的綜效(Achieving revenue synergies)

　　例如:資訊系統可以幫助業務的執行達業務量和收益的增加、增加顧客關係的管理。

4.　請問您是否還有使用其他因素來評估購併後資訊系統整合成功與否?(例如:資訊系統穩定與否、業務流程變得更為複雜與否...等)

感謝您耐心的指教

敬祝您身體健康、萬事如意

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Appendix 3: Interview Question for Customer (Chinese)

企業購併後資訊系統整合評估訪談問題-顧客

對於顧客的訪談有兩種情境，依情境不同問題的內容也不同。

於訪談前先詢問受訪者所使用之銀行。

A. 若此銀行曾經歷過併購案，而且受訪者當時也為其客戶，即詢問以下問題。
    1. 請問你認為其銀行合併成功嗎?
    2. 你是否滿意其銀行合併後的表現?有何滿意之處?有何不滿意之處?
    3. 請問您是否期待其銀行合併後帶來以下兩點好處?
    ● 產品或服務可以和合併前一樣或更好
    ● 獲得更便宜的價格
    4. 請問您是否還有其他的期待?為何?

B. 若此銀行並未經歷過併購案或其銀行經歷併購但受訪者當時非其客戶時，即要求使用者虛擬其使用銀行與另一間銀行發生併購後，接著詢問以下幾點問題。
    1. 請問您是否期待其銀行合併後帶來以下兩點好處?
    ● 產品或服務可以和合併前一樣或更好(Obtain consistent service)
    ● 獲得更便宜的價格(Obtain better deals)
    2. 請問您是否還有其他的期待?為何?

Interviewee：IT manager of Bank A
Interview date：May 31th, 2012
Interview location：Commercial building in Neihu

問：可否請您稍微簡介一下貴行當初合併的情況?
答：這合併案是屬於同一金控底下的合併,那時 92 年 11 月 24 日是系統合併,最早談的是信用卡,談了將近一年時間才做整合作業,依據是誰大併誰,併購銀行 80 幾間,被併銀行 20 幾間,併後總共 108 間,信用卡被併銀行比併購銀行多,但長官仍說程式還是使用併購銀行,信用卡合併是 92 年 10 月 27,系統合併是 92 年 11 月 24 號,就是 92 年之 10 月後已經合併了但各系統產生各系統,由人工來做合併動作。因為 92 年 10 月 27 號就是要合併完成,但那時系統還未整合成功,到 11 月 24 日就比較沒有這問題。有些業務不同,比如說被併銀行有併購銀行沒有,就由業務去解決說以後就不賣這樣產品,就要做轉換,比如說被併銀行以前有綜合存款但併購銀行沒有,這項服務是三種產品併成一塊,因為合併關係照原併購銀行的話就要開三個帳號,活存、定存、放款等這三項,原被併銀行卻只是一個產品,因合併關係要把產品拆成三個產品。被併銀行的金融卡合併後怎麼辦,不換卡不能領錢,對 user 不太方便,所以我們有 pass 措施,被併銀行的卡片會自動送到我們機器做確認身分,會丟到併購銀行的系統做新舊帳號 mapping 可以對應到新的卡片領錢,當然不是無限制,可能 30 筆後就要刷存摺要求讓他換卡,透過這種方式讓 user 來換卡,否則時間會拖比較久,持續一年時間做這樣調整。合併時原本併購銀行沒有系統就經過他們開發、轉換,有關前端式帳戶,那個系統會包好一份資料給長官,當時併購銀行沒有後來才加進去。按照你這樣講的話,比較像是整體接收這選項。對外宣布和真正資訊系統整合還有一個月時間,考量的話,以客戶為優先盡量不影響客戶,比如舊卡還可以領到錢的措施,系統能否運作,併購銀行比較大所以依併購銀行為優先考量。

問：為何未在同一時間點完成?
答：因為怕時間來不及,對我們資訊處來講,評估晚一個月會更好,業務合併是 10 月 27 號,系統合併就再晚一個月。一定是成功,大因素為導向,像有些產品比較小就不需要,因為被併銀行就用行政方式來告知 user 這產品以後不賣,比如說 60 天以前就希望請他來辦理,量很少,就請顧客來解約這樣子。我覺得是成功,最主要是客戶層面,接下來是系統層面,接下來是成本考量,多少都會注意到。

問：那我們就接到第三題,請問您以下這幾點是否為您評估資訊系統整併成功與否的標準?
答：維持公司營運一定是第一優先,這幾點都是考量因素但有先後順序,對公司來說,維持公司營運是最重要的,若整合無法營運很不對,接下來是整合所有系統,針對業務面和程式面,業務單位針對有些合約部分,不僅包括廠商也包括跟客戶,會找法務審視整個合約,比如說 60 天前要公告,必須貼一張紙在營運中心,宣布整個併購事件。成本也會有,當初不是兩套

系統並存，併購銀行 Mainframe，我們則是 As/400，我們原本架構是一大系統，分行有其他小系統，最後只要保留一台提供 user 資料查詢，其他就把它賣掉，有關其他後續合約和維護成本會再跟廠商去談。

問：請問在節省成本這點上會是您評估資訊系統整合成功與否的考量嗎？
答：其實在合併時就會談論細節部分，都會告知上面長官那些系統存那些廢，對我們來說被併方很多東西會釋放出來，當初這兩家都有跟廠商簽維護合約，會跟廠商在另簽一個主約，由於兩家都是 IBM，合約部分就會做重談的作業。

問：請問於預定時間內完成資訊系統整合是否為您評估成功與否的條件之一？
答：對外宣布是 10 月 27 號，但真正合併是 11 月 24 日，這日期都是兩邊在談業務整合時訂定，當然會有程式撰寫和多次測試，中間會有所謂併行時間，比如說這段時間讓 user 熟悉系統，若貿然從原來 AS/400 到 Mainframe 的話雖然有訓練過，但僅是測試階段，user 必然不熟，那段時間就讓他適應新系統，會請就近併購銀行的人員去協助被併銀行的員工。第一個是維持公司營運，第二個是統整所有資訊系統，第三個是預定時間，最後是節省成本，在當下不是個重要的考量，最重要是公司營運，不方便一定有但須要降到最低，若系統有問題甚麼都不用說，上面要求一個時間要盡量完成，但對我們當時來說 11 月 24 日號才比較適合，只要和上面長官報告就好，接下來才是成本對當初來說不是最重要。

問：請問您是否還有其他因素評估？
答：我會從各個角度來看這問題，業務端會做一個會談，把業務不同的地方討論出來，對我來講還有所謂後續，因為這兩系統不同，當下是為合併將它整合成一塊，多少會犧牲一些客戶，比如說綜合存款是原被併銀行很多人使用的服務，當時只是做一個暫時性合併作業，系統有其不好用的地方，因此接下來 93 年我們有做優化，使其可以比較順進行，98 年有換系統，算是整個延續下來。當時對業務推廣有一些窒礙難行，因此僅達階段性目標整合兩家資料進來而已。到 98 年期間請廠商進來溝通使用比較適合的系統。我是說他的時間點不太一樣，在當下應該長官是有考慮這樣問題，將其延續到 98 年 6 月 1 號。就是在資料整合後有繼續作一些系統優化更新，對我來說整個合併才算是結束。當時一定會做些取捨斟酌，合併進來後一定會有些客戶流失，但如何拉回客戶，合併一定就是要創造更好契機。剛開始一定會下降，先破壞再建設，合併完之後大家再去衝業績。

問：請問流失的顧客如何贏回？
答：併購銀行沒有綜和存款這服務，但他的系統要做綜合存款修改幅度較大，系統面無法做到，只好到98年新系統上線才可以克服這樣問題，換新系統之後就要求要恢復綜合存款這項業務。我覺得滿重要的是合併的話，併購銀行有優退方案，比如說工作 10 年 15 年有怎樣的措施，通常是併購單位會提出，他們有這樣的福利。合併最重要是人才，他就會有一些措施，你覺得不妥也可辦理優離或優退，有一些原併購銀行資深人員就有一些離開，合併覺得福利受損他就離

開公司。公司決定要照顧這些人就會提供一些福利，必須要考慮到一些人的因素，很多銀行合併沒做到這塊，雖然我們被併銀行薪資打 9 折但併購銀行福利較好，因此被併方的資訊人員流失上較少，不向其他公司被併公司人員流失多，因為福利減少，有點間接鼓勵大家留下，我覺得這滿重要的，如何避免人才流失是滿關鍵，考慮到人的一些因素，有一些措施出來是合併成功一個很大因素。

問：除了以上所說的評估條件，您還有其他考量嗎?
答：業務單位覺得比較好的東西，可是系統沒有提供，就會整個延續到後來導致我們整個換掉系統，原因也在這，因為原本的系統無法達到目的。後來還是有推綜合存款，但原併購銀行無法達到，因此在整併後做系統更新。若要排序的話，維持公司營運、降低系統合併對客戶影響面、接下來統合所有資訊系統、接著才是在預定時間內完成、最後是節省成本和員工福利的部分。因為整合包括業務、人員整合，人也是滿重要的，人就分客戶和員工。但對銀行來說營運不能中斷，曾經有公司換系統一個禮拜無法使用，然後登廣告希望顧客體諒，因為這種事發生不是樂意見到，如何將危機換成轉機是很重要，肯定員工的辛苦，請客戶多多包涵，那時的狀況是只能到現場提領現金，不能使用卡片，不僅 ATM 無法使用連卡片到其他銀行也無法使用，影響公司營運和客戶的權益。這是我們公司的 case，先前的業務訪談滿重要的，要將兩邊業務差異點標示出來，才知道如何影響客戶最少，若業務談的不是很仔細但對客戶影響很大，如剛說的綜合存款影響到 20 家客戶，雖少數但也是客戶源，如何降低他們不方便的地方，業務要公布一些措施去做調整。前面的業務整合很重要，有些系統做不到可以用業務去宣導調整，發函給客戶讓客戶知道他權益有影響到，業務方面配合資訊系統的調整，前端業務整合非常重要，減少對客戶影響，被併者影響最多，如何降低影響層面是很重要的，大家會針對系統面去考量但很多時候還是取決於業務面，很多業務面做些調整 IT 就可以改變很少，如果要硬改系統就會改變很大，針對合併那時間點，是這樣考量，前端作業有很大關係不僅僅是 IT 面。
(訪談結束)

Interviewee：Senior Vice president of Bank B
Interview date：May 24th, 2012
Interview location：Commercial building in Daan

問：您好，請問是否可以針對貴行的合併案做個簡單介紹？
答：基本上我們是由金控下兩子公司合併，這兩子公司都是銀行，在時間上滿充裕的，那時的合併等於是把所有人員全部合併在一起辦公，之後的老闆都各分散在各部門，跟外面併購不太一樣，醞釀期滿長大概有一年多的時間，時間充裕運轉起來也滿順利。兩系統完全不一樣，併購銀行的系統不管是規模或人員大概被併銀行的 2~3 倍，不管人員或營運規模大概一比二點五左右，那時我們在評估這些資訊作業之後，發現以併購銀行為主體來併被併銀行的資訊系統應該是吃得下，將他 migrate 成比較大的系統就可以吃進去，大概花了一年半的時間，主要是用併購銀行的系統，原本的存款、放款、外匯、會計、授信..等所有系統都是用他的，但是他沒有的部分由被併銀行這派人將被併銀行的系統移植到併購銀行系統上，因為資料轉過來要持續運轉，所以必須將併購銀行沒有的移植過來，由被併銀行派人來教他寫程式，開發好之後在整個轉換過來，那時我是被併銀行的資訊處處長，主導整個 IT 合併，算是主談者之一。

問：請問第一題您採取哪一種資訊系統整合策略？
答：策略是整體接收，併購銀行是用 IBM 的 mainframe 系統，被併銀行這邊是用 Unisys，所以評估後 base 是 1 比 2.5，評估之後這邊整個業務量資料量轉過來不會影響他運轉，所以系統 migration 後整個就移植過來，我們應該是選擇第 2，如同一開始所說他整體接收，當初有些被併銀行特許業務是併購銀行沒有，這些特許業務就由被併銀行派人過來幫他開發，開發在 IBM 主機上，到合併期時再把整個資料轉過來

問：關於第二點您們會評估整合成功不成功嗎？
答：就我觀點，我認為整合滿成功的，因為在整合前有一年半時間我們每個禮拜都開會，然後分成八個小組來談所有資訊系統的 layout 和資料型態、資料屬性的問題，到要合併前半年開始做資料轉換測試，禮拜天開起來測試看看，ok 不 ok 然後再回頭來改，改相關屬性，整合沒有出問題而且比預算時間還樂觀。

問：那我們就接下來進到第三題，針對文獻的幾點考量想先請問您會以統整所有資訊系統去衡量資訊系統整合成功與否？
答：以第一點來講，統整所有資訊系統來說是成功，您舉的例子，我想 e-mail 是比較小的東西，不影響帳務問題，e-mail 的部分就是原來兩家公司，我們設定一個新 mail address，兩家員工都轉進來，原本被併銀行的 mail 存續一年才關掉，data center 整合也算滿成功，因為 data center 放棄原被併銀行的設備，堪用的設備會拆來使用，例如 router and switch 等繼續使用，主機就

phase out 不搬過來用，由併購銀行直接從小型換中大型系統來運轉，網路的部分 data center 還算滿成功，以交易量和營業據點來看被併銀行只有 30 個併購銀行有 60 個剛好一比二，以 data center 來說搭兩套網路，合併前先搭一套網路到併購銀行，原被併銀行繼續運轉，所有設備都用原來併購銀行的規格進行，比如以 ATM 說，被併銀行已經使用 TCP/IP，併購銀行使用的是 SNA，所以被併銀行的提款機全部改成併購銀行的通訊協定，所以在 data center 來說是滿成功的。洽談軟體授權的部分，那時並無重新授權，基本上比如 office、windows…等數量問題，因為早就準備好和相關廠商做好擴充準備，而且原來被併銀行也有一些 license，所以兩者合併後 license 的影響不大。重簽軟硬體合約倒也沒有問題，還是繼續使用用舊的東西，新增的東西不多，沒有甚麼新的東西好洽談，就資訊系統統整上算是滿成功。

問：請問您是否會以第二點作為評估資訊系統整合成功的條件？
答：以我們在現場的指揮人員來看只要營運不中斷就算成功，至於原來服務等級 SLA 會不太一樣，因為兩家公司的資訊系統跟客戶感受不太一樣，因此合併後不會因為這樣改變太大，基本上營運不會中斷。

問：第三點節省成本是否為您衡量資訊系統整合成功與否的因素？
答：以節省成本來講，基本上人員並未減少兩家就合併，被併銀行 80 人併購銀行 140 人，合併後是 240，人員上並無太大改變，設備的部分減少成本的比例也不高，合併不是完全為了節省成本，合併是當初有些可以一起辦公一起共用，但對資訊系統來說不明顯。

問：非以節省成本來考量的話，若花費超出預算的話如何解決？
答：合併有編一筆預算，原則上都在預算內執行，不容否認有時會臨時追加，但在合併前題之下追加預算基本上沒問題，大老闆會支持，這樣的現象不多，就少數周邊未考慮，主要都會考慮到，在預算上沒有問題，比較不會在考量範圍內。

問：在時間內達成資訊系統整合是否為您衡量資訊系統整合成功的因素？
答：這我們是在預定時間完成，剛好因為我們是要換招牌和有一些行政作業那邊有點 delay，讓資訊系統這有更充裕時間，原本預定一年合併因為行政作業未完成，所以從一年延到一年半，所以讓資訊系統多了一些時間做訓練和測試，資訊系統這反而覺得時間很充裕。

問：當初有找顧問公司協助兩間銀行的整併嗎？
答：我們在銀行合併時有找外面的顧問公司，因為顧問進來是從業務面營運面和資訊面做考量，從一些法規、計畫並全盤的諮詢，但現在要聯絡顧問不容易。

問：除了以上幾點您還有其他看法嗎？
答：當然不否認以個人看法來說，客戶滿意度是否比以前增加，我認為是滿關鍵的一點，提供整體的服務我們資訊系統的 total solution 是否完整，比如說網路銀行來說，像我們在網路上即

可轉帳，只是消金這塊部分，企金那塊要牽涉到經濟部 C 計畫，看那些計畫是否有延續下來，我們客戶分消金和企金，但以交銀和 ICBC 來說，主要服務對象都是企業客戶，所以兩家銀行合併之後整個系統更完整，不管是給客戶滿意度來說和 solution 來說，客戶是否滿意對我們來講是不是成功是關鍵之一。

問：客戶滿意度如何調查?
答：因為我們有 service desk，都會跟營業單位做聯繫，若有客戶抱怨我們就會馬上處理，看有沒有客訴或抱怨聲音，通常就是電話接得多不多以這來判斷，並無比較客觀數據。另外，我們有一統計方式就是問題修改單，一個問題進來之後我們電腦是不是要趕快配合調整，debug 和 trouble shooting 等等，問題修改單前後對照看起來增加不多，初期較多，兩三個月之後就滿平順。客戶滿意度並無掉下趨勢，客戶滿意度跟分行的服務態度、熟悉度有影響，若分行對系統熟悉度高抱怨聲音會比較少。由於存續銀行有 60 家分行被併銀行只有 30 家分行，所以存續銀行的分行兩家照顧被併銀行一家，以這樣模式來 run 還滿順的，印象中大概支援一個月後即撤回。主要是客戶滿意度和 total solution，算是之後資訊系統的擴充能力，看是否可以提供其他服務和 solution 給企業和顧客。合併之後國內分行並未改變，國外分行就有改變比如說新加坡，合併就是兩間分行變成一家，像美國紐約分行也是兩間變一間。
(訪談結束)

APPENDIX 6：Transcript of Interview with the IT manager of Bank C (Chinese)

Interviewee：IT manager of Bank C
Interview date：May 29th, 2012
Interview location：Commercial building in Neihu

問:請您簡介一下銀行 C 的併購背景?
答:因為銀行 C 併消滅銀行的信用卡業務，其實銀行 C 在這幾年業務發展非常快，所以在發卡和收單這兩部分還滿完整，業務量滿大，所以資訊系統滿完整，消滅銀行後續幾年大概整個銀行經營的比較不好，比較無多餘成本去支付其他投資，分行都賠錢只有信用卡部門賺錢，但是資源不夠,市佔率也從前面第二名一直退，變成多它的投資會比較少，業務推廣預算也比較少，所以業務能維持算不錯，因為信用卡在台灣的競爭激烈，在資訊設備上，由於僅只做發卡的業務，跟銀行 C 比較起來業務相對不複雜，在資訊設備和業務資料客戶群有一大段的落差，評估情況下我們使用的和銀行 C 不一樣，銀行 C 有自己更完整系統，當初僅作資料轉換，這邊的信用卡業務是委外由資訊服務公司來處理，由於是外包的關係，因此他們資訊能力也不錯，所以被併銀行這這僅提供資料，轉換工作由銀行 C 的外包公司去做，我們去幫忙檢核整合的成果，比如說客戶資料、帳戶資料有做一些檢核的程式，轉進他們系統還是由他們公司來做。

問:銀行 C 的系統是使用?
答:他的信用卡主要是 IBM，但還有其他的周邊系統，消滅銀行原本的系統也是 IBM。

問:所以在資料轉換上會不會比較沒困難?
答:也不是這麼說，主要是被併銀行的業務系統，雖然是 IBM 但是是自己開發，存續銀行原本也使用 IBM 代理的 package，兩邊都經過很多客製化，但兩邊背景、資料結構是有差的，其實信用卡業務都是客製化，每家銀行遊戲規則不一樣也都很複雜，所以客製化程度很高，我們並非模組化拿了就可用，他的所有業務規則基本上有很大的不一樣，那我們就按照流程下來。

問：那我們就從第一個問題開始，請問您們使用的資訊系統整併策略是?
答：基本上慶豐的系統完全沒使用，都使用台新的系統，所以是整體接收。

問：接下來第二點的看法?
答：我認為滿成功的，有照規劃在進行，合併一定會互相了解業務差別，找出差異化，然後討論如何做，這次是存續銀行主導，我們被併銀行配合資料但對慶豐的資料要有一定的了解，因此花了一些時間開會，因此有針對客戶的主檔、帳務的主檔做一個欄位介紹，介紹業務邏輯是如何邏輯差別在哪，它們會做邏輯的轉換，程式怎麼去調整，就是做 coding 和測試，會拿真正資料去模擬，到正式轉換那天就依照計畫執行，時間估的滿準的，雖然測試和正式上線速度有差 CPU 速度有差，但都是可以預估的。

問：請問你們大概花多久時間整合資訊系統?

答：從整個計畫到合併大概三、四個月，時程滿趕的，因為之前有另一家要做但後來出價沒成功 fail 掉，大概七八月招標，九月又在重新招標一次，三月上線，時程滿緊湊的。

問：所以您在評估整合成不成功，您是用了哪些條件嗎?

答：第一個就是說，原來客戶轉近來，信用卡客戶是否可以持續使用卡片、帳戶資料有沒有異常，轉換進來有無影響到原台新系統的使用，不會因為合併就造成程式有 BUG 或邏輯的錯誤，造成部分業務或邏輯異常，看起來是有小 BUG，但當天調整就調整好了，從各方面看來都還滿正常的，客戶也可以正常使用卡片，也正常送出帳單給客戶，整個業務都持續在運作。

問：以下從第一點到第四點，您的看法為何?

答：第一點當然，其實以我們消滅銀行本身例子，是分四個部分賣，信用卡業務是賣給存續銀行，海外分行、銀行端業務是賣給其他銀行，對我們來講其實存續銀行只買信用卡系統，只有買到信用卡資料和信用卡部，裡面設備都算存續銀行，但原本 IBM 的主機還有其他存放款業務，這當初規畫是在銀行，算是總行因為放在總行，應該算是其他銀行的財產。就是說其實對存續銀行來講應該只有信用卡資料和一些信用卡周邊系統，不和其他銀行業務共用的一些系統，那些信用卡專用系統的才屬於這包的資產帶過來，所以有一些 server 有帶過來，但也沒用就變成存續銀行的資產，上面有一些 license 就跟原廠談轉給存續銀行，所以這點算滿重要。整個資訊系統和客戶轉換的部分，如果像其他包，可以看原本合併的銀行本身資訊系統，也許它本身資訊系統不完整就會使用新併進來的系統，向另一間併購銀行外匯系統是 AS/400，原來我們銀行那組同事雖然辦公地點不一樣，但併購銀行使用的系統就和原銀行一模一樣的，他就繼續開發他那套系統。

問：那是因為業務上有一些不一樣地方麻?

答：主要是因為併購銀行吃下越南分行，它們當時並無越南分行，所以就先用我們系統，它們有它們策略，可能之後再整併，因為接過來馬上就要營運，所以那系統就可以馬上使用這樣子。

問：接下來第二點，就是維持公司的營運，包括 service 和其他部門的支援?

答：是，因為銀行本來就是受金管會規範，開起來的營業項目不能中斷，這樣是不太容易有這樣情形發生，會被金管局關切，而且銀行對資訊服務這段很重視，在怎樣的合併一定是在有把握上線沒太大問題，假設今天合併時間到，但還未 ready，時間和政策上應該會往後延，規劃出來時間前面可能會加班忙，就是合併那天一定要完成，合併那天我大概兩天沒睡覺，當天一定要 stand by，前一天沒睡抓帳抓了一天我整整兩天沒睡覺，這只是個經驗，重點是計畫那天只許成功不能失敗，其實時間都是高層決定，通常不會當天決定，測試階段就會看完成度和把握，至於資訊系統配合那就是平常的訓練。

問：第三點關於節省成本這部分，比如說是否藉資訊系統整合答成本降低或是要求再一定成本下完成？

答：根據我的了解應該是沒有，基本上就是說在合併時它會對被併銀行做實地查核，一定有自己人甚至顧問公司，判斷這間銀行價值多少，還要加上合併成本、人力、時間、設備都會評估在裡面再去出個價，基本上應該會有一些預算知道會投入多少，不會在合併時做整個 cost down 這件事，應該是業務整併之後，通常整併銀行就是要擴大市場，覺得這合併是對自己銀行有幫助，並非降低資訊成本，目的不在這裡，當然有可能用到一批好員工，進來會幫你做這件事，或說若原來業務是委外，若同業進來可以有好的資訊能力也可以接回來自己做,看怎麼樣考量，所以在這點上面比較沒有，出發點不是從資訊的角度去看而是從業務的角度。

問：最後一點，在預定時間內完成資訊系統整並您的看法是？

答：在我們這案例來說這是很重要的，因為整併的話既有客戶權益不能中斷，不能因整併就可以不用繳款不使用卡片，如果銀行端也一樣，本來有 100 家併了 50 家分行，50 間營業據點也要事先公告，讓客戶知道我有增加 50 個據點然後在何時開業，權益變更要讓顧客知道，既然訂出來對外公布就不太允許延後，若有狀況發生會有其他的配套措施。

問：想請問您是否有其他因素考量整合成不成功？

答：我覺得在整合成功與否，關鍵在員工心態，因為被併的員工可能不一被新公司留下，有可能員工會沒工作或購併公司會用你但你也不一定想去併購公司，對員工的上班情緒會有影響尤其在這種整併，時間不長是會有一定挑戰，有些可能離職人手會不夠，有些人心態是否能調整不見得每個都可如此，一個 team 裡有這種人，他的 loading 就會跑到其他人身上，這種人不能多不然合併過程會士氣低迷，配合度不佳甚至會和其他人產生摩擦，所以我認為這點滿重要。剛好我這組都六人留下，事情幾乎都是存續銀行在做，主要是輔助腳色，我們配合度算不錯，但若是一般合併可能只用 50% 員工，有些可能沒工作然後員工位居要職又沒留下來，其他人或多或少被影響，整個過程中會有一些干擾，這時要看 CEO 或是公司如何去安撫去安排出路協助，順利做完事情。

問：請問是否還有其他衡量標準嗎？

答：聽過說外商併本土，會有語言問題，外商都用英文，本土喜歡用中文，會有一段時間要改變使用英文,跟外商購併銀行開會討論必須用英文,若以前不習慣用英文溝通這會有一點壓力，之前是有聽過這個。大概是這樣，IT 平常就在做計畫，把業務需求弄清楚，上線目標死線弄清楚，中間就是你可以施力的地方不管 coding 或測試，大計劃小計劃通常都要跟上，中間不足就要加派人力，這 resource 就是長官要去尋求，基本上都會在規定的時程。

問：貴行的資訊部人數多嗎？

答：目前約有 300 多人。

問：主要是自己做維護和開發嗎?

答：存續銀行信用卡業務本來就是外包，早期可能大到一個量系統無法負荷，剛好有外包公司引進 IBM 套裝軟體，後來評估之後整個就委外，服務品質或 cost 可能比較划算。因為存續銀行業務非常多，我只單指信用卡這塊，大部分都自己維護，也有部份外包，都有。看起來將來委外機會可能會越來越多，因為業務越來越複雜，委外公司可能有專門做某一塊。其實我覺得合併狀況是 case by case 每次合併都不一樣，模式可能都會有差。我覺得會一樣的應該不少，但整併要做的事情是一樣過程是一樣，差異應該會滿多的，因為銀行的規格不一樣 focus 業務也不一樣，有些以消金為主有些以企金為主，消金又有很多業務方向也很不一樣，資訊能力有主要開發也有委外的。

(訪談結束)

APPENDIX 7：Transcript of interview with the vice president of Bank D (Chinese)

Interviewee：Vice president of Tech Infrastructure Department of Bank D
Interview date： May 17th, 2012
Interview location：Commercial building in Zhongshan

問：請問貴銀行的併購策略為何?
答：完全併購。

問：資訊系統整併的策略為何?
答：整體接收。

問：您認為此次資訊系統整合成功與否?
答：當然成功可以自己界定，你來問任何一個業界的人他不會說失敗，但是若你身在裡面你可以自己定義甚麼叫成功，這是你的定義非別人的定義，你可以說你經過這樣的訪談後你定義怎樣的合併叫成功，但是你不能說不符合這個表現就一定是失敗，所以你這題目還是可以，以我這 case 我一定是成功，因為花這麼多錢。那我先問你如果是你，你的 criteria 是甚麼?

問：我的 criteria 包括不管對顧客或內部提供一樣的 service、是否可以節省成本比如在預算內達成、revenue 的提升…諸如此類。
答：基本上都是 key point，第一個要 refer 到原先的目標，合併當初的目的是啥，回來看做完之後是不是達到了原來界定是不是成功，只有顧客會說失敗，我認為所謂成功的定義，當然你剛所說的那些比較屬於硬指標，能夠條列出來很清楚評斷的標準，我講的是行為上的，怎麼樣定出這些標準的方式，就說好如果要評定合併成不成功是用甚麼標準來評定成功應該回過來說你當初目的是甚麼，你有沒有達到你的目的就可以定義成功，你沒有達到你目的就不能定義為成功，但是回頭到我剛說的，所有人都不想說失敗，所以會去把最後的結果，操作最後的結果去 meet 最後的結果到原先的 target 然後定義叫做成功，所以大部分人都是這樣做，就算做出來的效果沒有我原先的預期比方說我預期要省多少成本，但是一般來講我認為合併沒有人叫做省成本，沒有人合併是為了要省成本，合併一定是為了要擴張，不會為了要省成本而去合併，我認為這樣，因為你剛有提到省成本，我認為沒有人合併是為了省成本，合併一定是為了擴大我們的業務，或著要吸收別人的技術，我沒有的技術，吸收技術讓我來 create 更多的產品，或著吸收技術讓我內部的作業流程做一些調整改善讓我的品質更好，讓我的產能更大，那當然你合併的時候有合併的預算，但這預算我認為不是為了解決我現在成本過高的問題，一定是為了要擴充，兩家變一家，那我之所以要買你是你有一些我沒有的，不管是沒有的技術或沒有的市場或客人，我與其自己發展不如我把你買進來就好，合併應該都是這樣的情形，所以合併我認為比較少去談可以節省成本。

問：請問會被要求在一定預算下達成資訊系統整合嗎?

答：當然，我們做事情都是錢，商業就是要賺錢，老闆當初要做這案子就是一定有個想法我要花多少錢，如果做這個案子跟我在當初預估的時候，若口袋只有 100 塊但要花 1000 塊他早就拍拍屁股就不做了，所以成本是一定會有，做任何案子一定都有成本會發生，如果你是老闆就會看口袋裡花不花得起這個成本，花不起應該就是不會去做，所以在做的時候一定是當初我說 100 塊要做這合併盡量就是不要超過，但是有時做到一半發現當初少評估了什麼，頭已經洗了一半不能不洗，那時候當然會再去追加預算，尤其是政府單位每次都搞這招，公營機構都這樣子，但是以每一個合併都一定有個預算在，這是一定的。

問：請問是否會以資料中心的整合、電子郵件的整合、軟體重新授權、重新簽訂供應商的契約等，以上四點做評估條件嗎?

答：以我們這 CASE 當然當初我們的目的是為了要擴展業務，講比較直接一點本行以前只有 10 間分行，銀行的生意來自於存放款的業務給客人或是現在比較流行的理財，客人來我這做理財業務然後我收手續費，或是我賣信用卡，那這些其實很流行叫通路，這些都是銀行產品需要透過分行這通路去賣，本行之所以要合併是因為我們是外商銀行，政府對外商銀行在國內擴點有管制，因此外商銀行和本國銀行不一樣，那他評估你能不能多開一分行或能否多設 ATM 我們政府對本國和外商銀行不一樣，當然本國銀行較寬鬆，外商銀行較緊，那我們是在再 06 年底完成 sign contract，06 年其實台灣的經濟是成長的，那時候我們自己就覺得我分行數不夠，台灣市場有很大成長空間，政府又不給我們開分行，於市政府說你們外商銀行有錢投資一些錢進來，併購一些財務比較有問題的本國銀行，當然有列出幾間銀行，如果購併進來來那些分行就是你的，這是當初併購的基本目的。當然買進來之後，剛問題是甚麼?為何談到這個。這些當然都是，其實當初在設定目標，不是要節省多少成本，但我認為更重要是資訊系統合併後能不能去支援當初公司購併的目的所需要資訊系統的功能包括 capacity 和 performance，我認為是評估依資訊系統合併後能不能 support 公司的需要，或是合併後會有新種的產品、業務，你能不能支援這種需要，或是你合併後客戶數增多資料庫增大，系統的 capacity 是不是夠，我認為這應該是更重要的，第一個是整合所有資訊系統，沒整合的話等於沒做完，所以這是必要條件，維持公司營運，這也是必要條件，不能說整合的時候說不好意思我要關閉銀行三天來整合資訊的問題不可能，所以以上兩點都是必要條件，節省成本剛提過，在預定時間完成當然是，不過誠如我剛所說，你整合完的資訊系統能不能支援新公司的 IT 需要，需要包括 capacity、performance 甚至以銀行的 case，從 10 到 60 幾個分行資訊系統的 coverage 要變大，剛還提到資訊系統可否支援新種業務，類似這樣的都是很重要的 criteria。

問:請問貴公司於 performance 的評估上有沒有一些衡量的指標?

答:見仁見智，比如說去 ATM 提款，多慢叫做你不能接受?這沒有一個一定的標準，各銀行不一樣也跟你投資的金額有關係，如果你現在的系統架設 ATM 提款一比十秒鐘， 假設你現在的系統是這樣，你的 capacity 你原先投資的資訊系統 support 十秒鐘比方說，那你如果要定義十秒鐘太慢，五秒鐘才行，這樣你資訊系統就要做更大幅投資才能提升這個，有些銀行就覺得認為要做這樣的投資提供那樣服務，有些覺得 10 秒 5 秒 user 都可以接受吧那我們省下來做其

他的投資，所以這見仁見智很難有一個標準，但如果一直跑跑到 timeout 當然就不好，因此所謂好比較沒一定的標準。

問：請問貴公司有制定 Service Level Agreement 嗎？

答：internally 當然都會有，但是通常不會把 Service Level 公告外面的人，internally 當然內部有自己的一個要求,每筆 ATM 提款不能超過 10 秒但是這要求 IT 的環境和系統都是隨時在變，有時中華電信一個干擾進來就會比較慢，或是這一個 moment 客人比較多，平常假設同一時間只有 10 人，同時間暴增 100 人，原先 commit10 秒就做不到啦，所以 internally 我們都會有設定一個 service level，但這 service level 不見得 100% 可以達成，所以不會對外面宣稱我一定如何如何，到時做不到就沒面子顧客就有抱怨進來，所以通常不會，criteria 都是 internally，你說我們有沒有當然有,internal 的 criteria 很難用一、兩個標準就讓你知道，因為業務項目很多，比方說信用卡、ATM 都會有不同需要和要求，相對比較能說的是會定義系統的 availability，比較能夠看得到硬指標的都是說確保機器的 availability，當內部或外部的人要使用時，我的系統 always ready 不是當機狀態，比方 99.5%，100 個 case 裡面，99.5case 你要來用我的系統時是活著的，當然系統是不可能不當機，所以有幾% 是當機用的，這是比較容易去講，適用於所有系統，或是說 in case 我有 problem，我解決問題的速度有多快，十分鐘內可以解決或兩小時可以解決，這跟你業務重要性也有關係，其它因為業務部同，比較難有固定數據說喔你五秒鐘 response performance 叫做快，一般 performance 不是這樣子定的。總而言之，首選是維持公司營運，再來是統整所有資訊科技，接下來才是於規定時間內完成資訊系統整合，營運一定不能中斷,而後在大前題下進行整合。至於所謂預定時間只是邊做邊修正，直到有八、九成把握才會對外公部，並得金管會取得認可。

(訪談結束)

Interviewee：Performance management manager of Bank A
Interview date：June 7th, 2012
Interview location：Coffee shop

問：以您業務的角度您覺得資訊系統整合成功與否，您所考量的 criteria?
答：從歷次合併來看，我會從合併之後作業流程和客戶服務並無太大問題，整個業務銜接和流程都滿順的，客戶品質這邊也沒有重大客訴，應該說系統有時會出錯，但並未因整併有太大錯誤。我會界定整併成功是直接從流程來看，並未從效益來看，比較從基本面，業務銜接上是很順的。

問：兩家銀行不同業務如何整合?是否有問題
答：就我所知，有些系統採存續銀行有些採消滅銀行，因為信用卡只有消滅銀行在做所以就用消滅銀行的系統，存匯的部分是用存續銀行其實以存續銀行系統為主，比較偏向說當初 IT 再談時有談論雙方系統，若要銜接上如何修改幅度最少，比較能兼顧大利益，流程上沒有太大問題。

問：從過去文獻來看業務腳色著重於綜效產生，請問您對於以成本和收入的綜效來評估的看法是?
答：如果是我，我不會考量 cost，因為今天主要是整合，所以說既然是 1+1 我想不會大於 2，不管是 IT 整合或業務整合，要出個成本報告說 1+1>2 我想不大行得通，這點基本上是沒有，不太是考量因素。因為著重在併購，我會覺得說就併購後資訊系統收入的綜效會是 user 端比較會考量的重點，或著說產出時間的縮短、效能的提升、分析資料的精密度，比較類似客戶關係管理可以更深入，我比較會從這方面來看，簡化繁雜的流程，更精準、精細提供的報表和報告，第二點比較是考量因素。

問：請問您待的部門是?工作內容是?
答：績效考核，內部計價，轉投資管理，內部管理，各單位損益，業績報表，定期追蹤，考核打分數，計算獎金。

問：是否有使用其他因素來考量?
答：穩定性是一定要看的比如說系統中斷率，這些都一定會衡量，還有調整的彈性，比方說:就銀行業務來說有時候會新發展業務，IT 就要做相關的調整，不管是推出新產品或新產品的事後追蹤，都覺得應該要比以前系統要更好，這才相對有價值，以 user 來說，最怕 IT 說甚麼都不行這樣就甚麼都做不了，所以在整併過程中若能考量業務需求，反而會認為比較好。從現在有一些外包的系統看，我覺得如果可以的話即使耗費較多的成本或人力，仍然自行開發會較

好，因為有些外包彈性很小，事後使用上真的要做調整比較困難，IT 自行開發和外包在修改上會有差異，所以在業務擴充和衡量上會有些困擾。另外的話希望能夠協助簡化作業流程，當然整個業務簡化流程不是都在 IT，但起碼 IT 負責很大一部分，整個內控也會導致流程繁瑣或簡單，整個內控也會導致繁瑣或簡單，因為內控點多就會繁瑣，另一方面來看若 IT 能協助在流程這部分，可能只要一個動作相關資料都可以帶到，介面整合更有效率的話也可以讓流程更順，成本減少，人員花在上面的時間，

問：當初有因為資訊系統整併有達到業務的簡化嗎?
答：整併前期不是太有印象，印象中前期就是相對彈性較小，若要調整都要起一個內部流程告訴她重新調整，相關的東西都在 IT 手上，對 user 來說相對產出是死的，當時系統較就比較死，現在新系統比較富彈性，有一些報表是我們可以彈性調整維度可以自己拉，比較類似動態管理，想看東西可以自己調整，不需要再告訴 IT 需要更細的明細，這是好處，壞處是就我 user 的角度，人力使用上反而增加，就後來導入的系統來說有一些部分需要自己人員去維護，比如說欄位新增，比如當月有一些新增項目阿都要我們自己去控管，所以我們需要花比較多時間，IT 有他負責的部分，我們也有負責的部分，跟以前不大一樣，現在等於說要自己下去維護，等於說單位業務量增加。

問：除了彈性和流程簡化還有其他考量嗎?
答：比方說新業務的部分，像最近網路銀行、第三支付平台這塊，若有銀行在這塊做得好的話，我會認為它的 IT 系統相對比較強。在於資訊系統整併上，當今天衡量一家資訊系統好不好我會從這方面去看，因為這方面 IT 需要有非常實力才可以做出來，就是非實體銀行的部分第三支付平台這塊，這部分 IT 在銀行裏頭扮演腳色很重要，不是企劃單位甚麼業務就可以做出來，我會覺得這部份很大重點在 IT 身上。
(訪談結束)

APPENDIX 9：Transcript of interview with the General Manager of Bank C (Chinese)

Interviewee：General Manager of Bank C
Interview date：June 8th, 2012
Interview location：Commercial building in Neihu

問：以一個業務單位來說您如何評估資訊系統整合成功與否?
答：因為其實以一個業務單位來說，應該也是站在 user 立場來看，合併之後系統可否讓之後業務順遂，可否銜接的上以前業務有無衝突的地方，後來回查資訊可否完整提供。

問：從第一點來看，您認為此次資訊系統整合成功與否?您如何評估?
答：個人覺得算是成功，評估部分就剛提到，因為在事前有規劃和突發狀況模擬所以在之後上線合併之後並無太大問題，業務上銜接都還 ok。

問：我根據文獻列出了以下幾點考量，請問您的看法為何?
答：你剛提到那個主要是 IT 來評估，比較專業來評估會不會占用 resource，業務面部分成本也是 IT 在考量，業務部份是只要達到 user 需要的資訊，成本和收入面可能會是 IT 來評估。業務上並不會因資訊系統整合達成成本降低。

問：那請問第二點收益明顯增加，增加顧客關係這塊是否為您的考量?
答：當然會，整併後帶來的效益剛提到的對於顧客面的部分，第二點比較顯著，就業務上來說收入面佔比較大考量，比較會用這樣方式來看資訊系統整合成功與否。

問：除了上述兩點您是否有其他的考量或看法?
答：除了收入和成本，我覺得大方向就這兩個，因為如果整併當中有些問題就會影響到收入面。也會考量之後業務的擴充，其是否可以協助之後業務的發展，擴充性是否足夠。此外，系統可以依照業務需求彈性、迅速提供相關需要的資訊。

問：在當時有無遇到一些困難?
答：整併多少會有，比較大的問題都在測試階段排除掉，小問題當下才做處理，基本上不影響合併，因為本行有合併的經驗，有些經驗在所以並無太大問題。

問：除了系統上有彈性還有甚麼考量?
答：就業務和 user 角度就是順利，不要中斷服務。都是滿基本的要求，不會希望從資訊系統提供多大效益，站在前端的立場就是這樣，服務不要中斷，讓客戶要的收到的資訊不出錯這是最重要的，如此就不會有客訴和一些問題。如您所說就是系統是否穩定。

問：請問有無一些操作上或換到新系統有無學習困擾?

答：如果是用消滅銀行角度來看存續銀行 base 是比較大，系統龐大分工又細，基本上兩個 base 完全不同，消滅銀行之前系統主要都是 IT 人員直接負責，但存續銀行的部分很大一塊都是委外，在溝通上不管新的開發或維護比較難快速溝通，在溝通成本上會增加，若自己 IT 開發比較能符合需求和迅速回應。

(訪談結束)