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# Information technology prioritization, in merger integration: A grounded theory approach

Sandesh Dayanand RAIKAR
*Singapore Management University*, sdraikar.2012@phdgm.smu.edu.sg

# INFORMATION TECHNOLOGY PRIORITIZATION, IN MERGER INTEGRATION: A GROUNDED THEORY APPROACH

RAIKAR SANDESH DAYANAND

SINGAPORE MANAGEMENT UNIVERSITY

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# Information Technology Prioritization, in Merger Integration: A Grounded Theory Approach

by

**Raikar Sandesh Dayanand**

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**Dissertation Committee:**

**Philip Charles Zerrillo** (Committee Chair)
Professor of Marketing (Practice)
Singapore Management University, Singapore

**Goutam Challagalla**
Professor of Marketing and Strategy
International Institute for Management Development (IMD), Switzerland

**Saumya Sindhwani**
Senior Lecturer of Strategic Management
Singapore Management University, Singapore

**Singapore Management University**

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# ABSTRACT

This exploratory study, examines the significance of *Information Technology (IT) Prioritization* during the due diligence phase, in a merger integration scenario.

In a world where firms are becoming increasingly dependent on information systems and technology, IT continues to play a progressively significant role within organizations. There is growing literature, on the increasing importance of IT in the business environment. However, till date, neither has there been a study regarding the role and impact of *IT prioritization* and *IT integration schedule* on the *overall synergy savings*, nor is there a study on the relationship between *IT prioritization* and the achievement of the *technology priorities* of the firm.

This study, explores the concept of *IT prioritization* as an independent variable, and reviews its impact on dependent variables such as *IT synergy savings*, *overall synergy savings*, *IT integration budget* and the achievement of the *technology priorities* of the firm. The study intends to keep both academicians and practitioners informed, on the above topic.

A *systematic grounded theory* approach is used as the method of research, as it is well-suited to the exploratory nature of this study. This approach allows the analysis,
of both qualitative and quantitative data. The qualitative data is provided by the in-depth interviews, while the online survey provides the quantitative data. This study

draws on the *lived experience* of senior executives and seasoned practitioners, in the field of M&A integration. The said individuals, are from diverse industries and geographies.

The outcome of this research indicates that *IT prioritization* during the due diligence phase, has a positive relationship with (1) the *overall synergy savings,* (2) the *IT integration budget,* and (3) the achievement of the *technology priorities* of the firm. The results also indicate a negative relationship between *integration schedule delay* and *overall synergy savings*.

An interesting finding is that firms with *low information intensity*, deliver highly amplified *overall synergy savings*, as compared to *high information intensity* firms, under similar conditions of *IT prioritization*.

The most compelling finding of this research is that *IT prioritization* matters, and it makes a significant and direct contribution, to the success of the merger integration effort.

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I am forever indebted to my late parents, who instilled in me the importance of hard work, honesty, perseverance and resilience -- values that I hold dear, in my life.

# DEDICATION

*I dedicate this thesis, to my dear wife, Sharmila. She has always inspired and motivated me, to put my best foot forward. I am grateful for her constant love, encouragement and unstinting support, through all the ups and downs.*

*"Thank you, for never losing faith in me. I sincerely appreciate the endless hours you spent, proof-reading my draft. I am truly grateful for all your help, and also for your advice, valuable inputs, constructive critique and useful suggestions. I couldn't have done this, without you!"*

# CHAPTER 1: INTRODUCTION AND PROBLEM DEFINITION

## 1.1 Background

Every year, firms spend trillions of dollars acquiring other companies (Thomson_Reuters_M&A_Report, 2016). The primary drivers for the acquisitions, are the need to expand into new markets, to acquire new technologies or specialized resources or an innovative culture, to gain economies of scale, to reduce competition and to enhance revenue, profitability and margins.

As per the above report, the worldwide Merger and Acquisition (M&A) activity totaled US$3.7 trillion during the year 2016. This figure was down from US$4.7 trillion in 2015, which was the highest 'dollar level annual period' for worldwide M&A activity, ever since the recording of such deals began, in 1980. Cross-border M&A activity accounted for US$1.4 trillion during the year 2016, which constituted 38% of the overall M&A volume for this period -- the highest percentage since 2008.

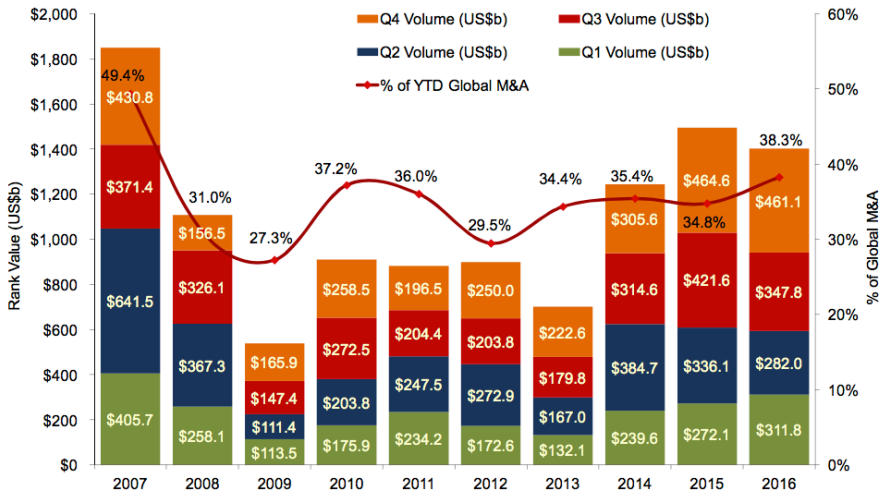
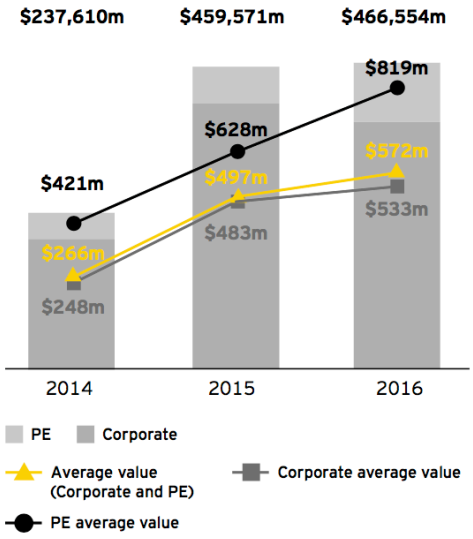



*Figure 1: 2016 worldwide cross-border M&A volume (Source: Thomson Reuters)*

In a similar report from Ernst & Young (EY_Global_Technology_M&A_Report, 2016), which covers the technology sector that is more *information-intensive*, the aggregate M&A value for 2016 shot up to US$466.6 billion, which is the highest ever recorded value -- a full 2% greater than 2015's record high. Even as the other industries' M&A activity decreased in 2016 (compared to the record high in 2015), the technology sector continued to grow at a blistering pace. This growth is due to a massive transformation in the SMAC (social, mobile, analytics and cloud) sector as well as in the areas of disruptive technologies like IoT (Internet of Things), AI (Artificial Intelligence), Connected Car and Cybersecurity.

Correspondingly, in 2016, cross-border M&A contributed to 63% (US$ 208.2 billion) of the total M&A value for the year, taking it to a second consecutive high, after 2015.




Source: EY analysis of The 451 Group Research M&A KnowledgeBase, accessed 10 January 2017.

*Figure 2: 2016 Technology M&A value (Source: EY)*

The recent surge in cross-border acquisitions, indicates that firms are using M&A as a strategy, to globalize their operations within a short time. The other reasons for M&As, are the need to diversify and balance the firm's portfolio, to acquire market share or a customer base, and to acquire new technology, patents and intellectual property. In a vast majority of the cases, companies hope that the mergers will help improve economies of scale, thereby resulting in a more efficient organization.

## 1.2 Drivers for M&A

M&A is often one of the fastest ways, for firms to globalize their operations. According to Deloitte_Report (2014), the respondents mentioned the following reasons, as the primary drivers for M&A.

- Expand customer base in existing geographic markets (73%)
- Pursue cost synergies or scale efficiencies (66%)
- Enter new geographic markets (61%)
- Product / service diversification (57%)
- Obtain bargain-priced assets (41%)
- Talent acquisition (49%)
- Technology acquisition (52%)
- Other (45%)

The survey respondents mentioned that the primary reason companies would consider M&As, is to expand and diversify their customer base. Almost three quarters of the

corporate respondents, ranked the objective of garnering new clients in their current geography, as a critical motivation for M&As.

More than half i.e. about 60 percent of the corporate respondents, said that their M&A investments would involve the acquisition of a target in a foreign market. When asked why they would pursue M&As, the CFOs indicated that the perception of growth opportunities abroad, was a motivating factor.

In second place at 66%, the respondents mentioned 'seeking cost synergies or scale efficiencies' as the key reason for M&As. Though this reason may not always sound convincing enough to spur firms to engage in M&As, the pursuit of cost synergies, is one of the key reasons why M&As have proliferated across various industries. Information Technology's contribution towards achieving greater synergy in merger integrations, is a core theme of this dissertation.

M&A is a key strategy adopted by most firms, as a means to improve performance. The general intent of any M&A, is that the combined entity will be greater than the sum of the individual parts (Garrie & Griver, 2014). Firms hope that M&As will bring in additional top-line growth in revenue, and achieve increased synergy between the two businesses, on overheads and shared functions. These two factors will then give the combined entity an opportunity to reduce the cost base, thereby driving performance improvement. In a recent study, Bain & Company carried out an analysis of firms over the period 2000-2010, and they found that the total shareholder return for businesses

that were engaged in an M&A activity, was 4.8% as compared to a much lower return of 3.3% for companies that were inactive in M&A. In other words, firms active in M&As delivered a performance which was 50% higher, as compared with firms dormant in M&As.

### 1.3 Role of Information Technology (IT) in merger integration

As we have observed earlier, the business environment is rampant with M&A activities. Firms continually seek to engage in M&A activities, whether it is to expand market share, globalize their operations, reduce costs, eliminate a competitor or to acquire new intellectual property.

The key question is: What portion does Information Technology contribute, to the *overall synergy savings*? The IBM_Report (2008), cites a CIO Insight article, which states, "15 percent of the synergy to be captured from a merger, comes directly from savings on IT operations. With another 25 percent stemming from business operations where savings are dependent upon IT, the simple fact is this: $2 of every $5 in merger synergy, comes in some way from IT."

From an IT perspective, a challenge posed by every M&A, is that it significantly increases the IT infrastructure that must be consolidated, managed and maintained, to support the new organization. Almost all IT organizations have the essential IT infrastructure such as email, messaging, etc., to support the general requirements of the firm. They also have critical infrastructure and applications such as CRM (Customer

Relationship Management) and ERP (Enterprise Resource Planning), or infrastructure and applications that are specifically developed, to cater to the needs of the firm's clients, which in turn directly contribute to the company's revenue stream and customer satisfaction.

Another critical aspect that is pervading the business world, is digitalization. Adoption of digitalization is continuing across industries, at a scorching pace. For example, entire banks are going digital, and in some cases, the only way one can interact with them is via a mobile app. Even a traditional bank like DBS, went from being a technology laggard a decade or two ago, to being nominated as the world's best digital bank in 2016 (Forbes, December 2016). Entirely new categories of businesses are spawning, leveraging the sheer power of technology and digitalization. Nowadays, we are very familiar with various social media platforms like Facebook, Twitter and LinkedIn, as well as mobile messaging apps like WhatsApp and WeChat (in China), which were non-existent two decades ago. Similarly, the availability of affordable cloud technology platforms like Amazon Web Services (AWS), Microsoft Azure, Google Cloud and IBM Bluemix, and the operating expense model associated with them, has enabled what is called a 'cloud-native' business. A good example of this, would be a 'wearable health and fitness' company like Fitbit, which didn't come into existence until 2007. Even traditional companies are no longer sitting still. They don't want to be left out of the digital revolution, and are investing heavily in Information Technology, as a means of enabling competitive advantage. Mining firms, shipping companies, the health care

industry, etc., are now embracing technologies such as IoT (Internet of Things) and public cloud platforms, to enable new business processes and drive higher profitability.

Given the explosive growth of technology adoption, in both traditional and new age businesses, it is evident that 'increased synergy on the technology front' is a key factor to consider in a merger scenario, in today's business environment. A large number of businesses are becoming increasingly reliant on a complex web of IT systems, either as a means of generating client revenue or as a means of creating a competitive advantage for themselves. Thus, the scope of IT during a merger integration process, becomes even more significant now, as compared to the role it played a decade ago. Irrespective of whether 15% or 70% of the potential impact of an M&A is in *synergy savings*, the questions that arise are (1) How do we achieve them? (2) What factors must we manage? (3) Can we manage them? (4) What steps can be taken to manage them better?

Another question is -- What are the IT integration issues, that merging entities have to consider? In order to get a wider perspective on this issue, the researcher interviewed several senior business executives and IT / M&A professionals across the globe, from academia as well as a cross-section of firms, including consulting firms and corporates.

The first challenge, is that the two merged companies have their IT applications and data, residing in multiple production and non-production environments. The processes used to manage them, are also disparate and in almost all cases, non-identical. It is not

uncommon for a multi-national company to have their offices and data centers, spread across different parts of the globe. Also, in the context of the original business plan, some of these high-cost data centers may have an extended return on investment of 10 to 15 years. To make things worse, some of them could be at the beginning or in the middle of the depreciation cycle.

The second challenge, is the difference in the formats and security policies, in which the data is held and managed across various devices. Although it may appear that one can easily consolidate two similar applications, sometimes it may take years to complete the data migration or to build a new system that can cater to the differing requirements of the merging entities. The fact that the two legacy applications may most likely be running on the same operating systems and hardware platforms, adds to the complexity of the integration process. What makes the entire process more complicated, is the fact that the IT organization has to meet the data requirements of the two merging firms, as well as ensure the upkeep and upgrading of the legacy IT systems. The IT organization also needs to continue working on defining and deploying the consolidated solution, while catering to the above requirements.

Next, IT organizations have to grapple with the dilemma of deciding which ERP, SRM or critical client applications to retain and which to retire, considering that both the entities have significant business processes running on them. While it may not be an easy task to consolidate different platforms, there is a tremendous potential for *synergy savings*, should consolidation be considered. The last thing a firm would want, is to

replicate the infrastructure as well as the cost of the two legacy entities. While a tactical decision may be made to continue to run the two platforms, the organization needs to make a strategic decision, to ensure viability in the long run.

Last but not least, managing the human aspect of technology integration, is a daunting task by itself. The ability to retain the highly specialized resources as well as the technology leaders of the target firm, is a key aspect to be considered during the integration phase. If this is not managed properly, the firm could see a lot of key people 'walk out the door', taking with them the knowledge as well as the expertise needed, to manage and grow the technology, which drives the business processes.

## 1.4 Challenges

For a merger to be considered successful, the value of the combined firm should outweigh the costs of the merger. However, despite due diligence and the right intentions, not all mergers are successful. Estimates indicate that 50-75% of merging companies, fail to maintain their book value, two years after initiating the merger (Greengard, 1999). As for those firms, which do manage to retain their book value after the merger, not all can be classified as successful. Sometimes, it takes a firm many years before the merger is fully completed, while others remain loosely bound and continue to operate as individual entities. Although the goal of M&A is to create an entity whose combined value is greater than its parts, sometimes the value of the parts is greater than that of the whole (Garrie & Griver, 2014).

There are a number of studies, on the contribution of IT in merger integration. Sarrazin and West (2011) estimated that 45-60% of the expected benefits from M&As are directly dependent on IT integration, while Vielba (2006) has shown that almost 20-30% of the post-acquisition benefits in a merger, come from IT. Despite these studies, firms often pay little attention to the IT integration aspect during the merger process. The overall integration strategy often lacks details, which could enable the success of technology integration. Below, are some of the reasons that researchers and practitioners offer, for the same.

- Short due diligence timeline - During the due diligence period, a very limited amount of research can be practically done, on the integration of the IT systems. The short timeline is compounded by the fact, that IT is often used as a critical business differentiator and hence sharing of this knowledge is limited, unless the merging parties have fully confirmed the merger activity. In fact, two-thirds of the companies involved in M&A, have confirmed that they had inadequate information to be able to make decisions concerning IT integration (Stylianou, Jeffries, & Robbins, 1996).

- Uncertain IT integration timeline - Given the complexity of IT integration, especially in the case of mergers of large firms, the IT integration process can be quite time-consuming. So, the time taken for the realization of *synergy savings,* can be quite unpredictable. For example, some ERP and client migrations can take

many years to complete, before the organization realizes the savings, by discontinuing legacy applications.

- The large investment required for IT integration - This investment can run into millions of dollars and can be a daunting task for the management of the newly merged entity to commit to, right at the onset of the integration process. Their intention is to show a favorable outcome for the merger undertaken, in the short-term, rather than worry about the long-term benefits of a successful IT integration. Hence, IT integration gets pushed to the background, with the hope that things will sort themselves out, in due course. All this can have a disastrous impact on the merger's success, in the long run.

Do firms realize the importance of IT integration, in a merger process? Do they plan in advance and invest sufficiently in IT integration, to make the merger a bigger success? The answer is: perhaps they do understand, however, they have other conflicting priorities to manage. Firms prioritize issues such as retaining the client base or ensuring that revenues and financial figures are as per expectations, or to a large extent they just go about the daily routine, rather than focus on the painful process of post-merger optimization. As a result, IT integration takes a back seat, to the detriment of the very objective, the merger is trying to achieve.

## 1.5 Research Objectives

With IT playing an increasingly important role in business, there is a need for additional research on its contribution, during the pre-merger and post-merger due diligence phases. This study tries to identify the latent variables involved in technology integration, which contribute to the overall success or failure of the merger activity. The key objectives of this research study are:

- To understand better, the role of management-controlled variables such as *IT prioritization* during the due diligence phase, in the overall success or failure of a merger integration.
- To investigate the *integration schedule's* contribution to the *overall synergy savings*, in a merger integration scenario.
- To understand the impact of deal-based variables such as *information intensity* of the firms, on the relationship between *IT prioritization* and *IT budget allocation*.
- To understand the relationship between *IT prioritization* and the achievement of the *technology priorities* of the merger integration.
- To provide prescriptive recommendations, for practitioners involved in IT integration activities.

## 1.6 Summary

This chapter presented evidence, of how M&As continue to grow at a rapid pace, and how companies use them as a means, to deliver superior performance. We also looked at M&A growth in the technology sector, which continues to outrun the overall

industry's M&A trend. We then discussed the key drivers for M&As, one of them being the pursuit of cost synergies or scale efficiencies. And, we saw that 66% of the respondents' views, resonated with the same. We also explored the role of IT in merger integration, and the challenges faced therein. This chapter concluded with a discussion, on the key objectives and deliverables of this research.

Chapter 2 will review the existing literature, on the role of Information Technology in merger integration.

# CHAPTER 2: LITERATURE REVIEW

## 2.1 Introduction

For the sake of completeness, the first couple of paragraphs provide a very brief synopsis of the M&A phenomena, before we proceed to the core literature review for this study.

Mergers and acquisitions (M&As) and research on them, are not recent phenomena. M&As and studies on them, have been around for at least 100 years, since the first M&A wave in the U.S. between 1899-1901, was recorded (Nelson, 1959). At some point in its life cycle, every firm will consider acquiring another company or merging with some other entity. It is a well-known fact that M&As come in waves. Thus far, five complete waves have been examined in academic literature; those of the early 1900s, the 1920s, the 1960s, the 1980s, and the 1990s (Martynova & Renneboog, 2008). Apparently, this 2008 study has not recorded the most recent wave in the late 2000s.

There is a strong correlation between the pattern of M&A activity in each decade and the industry in which the event took place, a factor that drives each wave of activity (Andrade, Mitchell, & Stafford, 2001). For example, in the last few years, a prominent aspect has been industry related deregulation i.e. the telecommunications industry, financial institutions industry, U.S. auto industry, airline industry, etc. (Andrade et al., 2001). Each wave also coincides with a surge of activity in the economy, meaning that

a great deal of M&A activity happens in a healthy economy rather than in a recession, and vice-versa. A healthy M&A market is a sign of a growing or recovering economy (Vielba, 2006). A more recent analysis of mergers of the past decade, found that they included major industries, each ridding themselves of smaller or less profitable companies for larger ones, as major businesses roll over the smaller ones (Vielba, 2006).

## 2.2 The M&A process

According to Deloitte_Report (2014), a typical M&A deal begins with the business valuation phase. During this phase, the acquiring firm assesses the current as well as the future financial costs of the target company, including the latter's capital and operating requirements, brand value, organizational structure, etc. The proposal phase begins, once the target firm's market analysis is complete. During this period, the acquiring firm typically issues a non-binding offer letter to the target company. Once the bid is accepted, the target company moves into the exit planning phase, where it plans the right time to exit and whether the exit would be partial or full. It also arranges for the taxation as well as the reinvestment of the sale proceeds. This series of steps, is followed by the signing of the purchase or merger agreement. The focus then shifts to the integration of the two firms' policies, systems, structures, people, and culture.

The Deloitte_Report (2014) also addresses the role that IT must play in the full cycle of M&A activities, right from the time the merger is conceived till the final

implementation of the IT consolidation activities, with a view to maximize the shareholder value. The report highlighted the four pillars of IT integration as follows:

- Strategy -- picking the right model for integration
- Due diligence -- getting the right information upfront
- Post-merger integration -- aligning systems and processes
- Execution -- effectively implementing the merger or acquisition

## 2.3 Definitions

We will begin with the key definitions, used for the purpose of this study. Kindly note that 'firm' will refer to the merged entity, unless the same is expressly mentioned otherwise.

*Merger:* two or more companies combine themselves by combining their stocks, assets / liabilities and all other components into a single entity. Epstein (2004), asserts that 'merger' usually refers to mergers of equals (e.g. JP Morgan merging with the previously known entity Chase Manhattan Bank) where two entities of relatively same stature come together, and take the best of both the firms to make a new organization.

*Acquisition:* 'act by which a bidder company, uses the money, stocks, or their combination to acquire some assets of the target company.' Ghauri and Hassan (2014) define 'acquisition' as the purchase of another business' assets or net assets. Net assets are the assets minus liabilities, taken over. Growth through acquisitions, involves the

much simpler process of fitting one smaller company into the existing structure of a larger organization (Epstein, 2004). For this study, the term 'acquisition' is interchangeable with the term 'merger'.

*Conglomerates:* constitute the third type of entity (e.g. General Electric Co.), bringing big businesses together without a clear attempt to create synergies or meld strategies, but keeping them separate to provide the advantages of decentralization and autonomy (Epstein, 2004).

*Merger and Acquisition:* the act of buying or selling assets or stocks of one company, and / or the combining of two different entities into a single entity, to operate the combined entity as a single unit, with the intention that the savings from the combined entity will outweigh the cost involved in combining these two or more individual entities. Lajoux and Reed (1998) define it as the combining of resources, processes, and responsibilities of the buying and selling organizations, domestically and globally. Stewart, Wingate, and Smith (1963) defined a merger as 'an acquisition that takes place with the agreement of the board of the acquired company' and a takeover as a 'direct bid to the shareholders of the other company, although the board of directors may oppose the bid.' Jones (1982) distinguished between the terms, defining a merger as a 'marriage of two companies, usually of roughly the same size with an inherent willingness to cooperate', whereas a takeover is 'a series of transactions whereby control is achieved over the assets of a company.' Bengtsson (1992) determined that

most organizations use these terms interchangeably with very loose definitions, and are most likely to use the definition that is best suited to the image they wish to project.

*Due Diligence:* 'investigation and evaluation performed by the acquiring company, of the company being acquired.' From an IT perspective, this typically involves the process of gaining an understanding of the state of the target company's IT systems and infrastructure, as early as possible. Due diligence happens, during both pre-merger and post-merger.

*Information Systems (IS):* A combination of hardware, software, infrastructure, and trained personnel organized to facilitate planning, control, coordination, and decision-making in an organization. IS consists of components of three different types: application programs, information resources like databases and knowledge bases, and user interfaces. These components are integrated in such a way as to accomplish a concrete (business) purpose (Guarino, 1998). Information systems (IS) is a wider term that encompasses the technology, processes and personnel needed to fulfill business requirements. Information Systems (IS) can include pen and pencil processes, and not necessarily those enabled through technology.

*Information Technology (IT):* broadly refers to the business processes primarily driven through the use of technology (hardware, software, database, applications, networks, etc.). IT includes the personnel needed to design, deploy and maintain the technology, which in turn supports the business processes.

IT also refers to hardware, software and related technical routines, and information systems (increasingly IT-based), which deliver on the information needs of an organization's stakeholders. Despite distinct differences between the two terms, most businesses use IT and IS as virtually the same word and title, with almost no consideration to the actual term's translation (Vielba, 2006).

*Information Systems & Technology (IS&T):* This is a term which is used to refer to activities, covered under both IS and IT. The study will use the word 'IT' and this will mean a reference to IS, IT or IS&T interchangeably.

*Project:* a complex set of inter-related activities and tasks, undertaken and completed within a set time to meet defined objectives (Project Management Institute).

*Project Management:* the application of knowledge, skills, tools and techniques, to meet project requirements. Project Management involves an integration of the project management processes of initiating, planning, executing, monitoring and controlling, and closing (Project Management Institute).

*Integration:* is defined as the process of combining two company's organizational components (Mehta & Hirschheim, 2007).

*Failure of an M&A IS&T integration:* Karas (2017) in her paper, mentions M&A IS&T integration failure as one that has not effectively identified synergies and has not been useful in the subsequent integration planning and execution.

*Integration Manager:* The Project Manager in charge of the integration activity. This person will oversee the integration's decision-making process, the achievement of milestones and deliverables, and the quality of the reporting process (Galpin & Herndon, 2014).

*Synergies:* Galpin and Herndon (2014) use the term synergy to designate some measurable reduction in costs, increase in revenues, or avoidance of capital outlay that comes as the direct result of the combination of two operations into one company and which would not be realized had the companies remained separate. Majumdar, Moussawi, and Yaylacicegi (2013) define synergy as the bridging of complementary resources of two organizations to increase growth. Teerikangas, Very, and Pisano (2011) define synergies as creating additional value through the integration of the two organizations to justify the cost paid for the deal.

*Information Technology (IT) prioritization:* Prioritization is the process of emphasizing the importance of one alternative, over the others. In the context of M&A integration, *IT prioritization* is defined as the extent of prioritization given to IT, as compared to other factors competing for the same pool of resources. Wen and Shih (2006) define

Strategic *IT Prioritization* as a three-level decision - strategic (technology level), tactical (project level) and operational (task level).

*Value of Information (VI):* The total value of the cumulative information, associated with the transactions between the firm and its customers (revenue generation), between the business and its suppliers (cost reduction), and that related to information exchanges within the company (Glazer, 1991).

*Information Intensity:* Defined as Value of Information (VI) normalized either by profits, revenue or overall assets. A firm is *information-intensive* to the degree that its products and operations are based on the information collected and processed, as part of exchanges along the value-added chain (Glazer, 1991).

## 2.4 Factors influencing M&A performance

A qualitative study conducted by Fish (2007), explored entropy (a measure of uncertainty of an outcome) through the experiences of senior executives of U.S. based, service-oriented corporations, who had gone through post-merger integrations (Williams, 2012). Fish (2007) suggested an underlying negative presence of the entropy phenomenon during integration, in terms of five interrelated entropy factors with an order of precedence: (1) leadership, (2) communication, (3) organizational culture, (4) people, and (5) strategy. This study also suggested future research from different perspectives, to expand the body of knowledge.

Williams (2012) suggests that one such perspective is the influence of the entropy factors on the post-deal integration of Information Technology (IT) systems of manufacturing oriented corporations. A 2007 study by PricewaterhouseCoopers showed that the IT function is subject to some form of integration effort in 89% of merger and acquisition cases (Polites & Karahanna, 2012).

Williams (2012) sought to expand the study conducted by Fish (2007) on integration factors that lead to entropy during the post-merger process, by considering the perceptions of mid-level and first-line IT managers, who lived through a post-merger integration. The results indicated that 35 major entropy factors and 80 minor entropy factors, existed in the study population. This provides valuable information to IT integration practitioners, to mitigate the entropy factors. While this is an important study that highlights the entropy factors in IT integration and informs the readers of the mitigation measures, it does not look at how IT integration or IT synergy, enhance the overall integration synergy.

## 2.5 IT integration models and frameworks

Each M&A is different, and there is no single approach to integration (Makri, Hantzi, & Antoniou, 2012). As such, the strategy for each IT integration effort should be decided, based on the level of synergies versus the degree of autonomy that the bidding and target firms would like to achieve (Vieru, Rivard, & Dutot, 2014).

Haspeslagh and Jemison (1991) developed a model, which is widely used. They classified the IT integration effort into four quadrants, depending on the level of synergies as well as the degree of autonomy that the bidding and target firms want to achieve. The four quadrants are holding, preservation, symbiosis, and absorption. In the holding quadrant, the acquired company remains undisturbed, preservation is a partial integration, symbiosis is an equal transformation of the merging companies, and complete absorption is a full integration of an acquired company into the acquiring company (Karas, 2017).

According to IBM_Report (2008), Forrester Research advances the following four approaches that drive IT integration requirements, necessary to support the success of M&A activities: (1) Coexistence (Preservation), (2) Absorption (Consolidation), (3) Best-of-Breed (Combination), and (4) Transformation.

Coexistence (Preservation) - the individual firms are allowed to retain their IT capabilities and virtually operate as two different entities with a small amount of IT corporate control over both. This approach does not need much integration to be carried out. Hence, it does not offer much scope for synergies from an IT integration perspective. This approach is usually taken, when two companies have different lines of business and have been merged to increase the market share.

Absorption (Consolidation) - this approach is often used to combine the IT organizations of two firms within the same industry, in order to reduce costs. It provides

the best opportunities for *synergy savings,* and can be completed relatively fast. Also, the risks are fairly small, with this approach. In this approach, the IT strategy, organization structure, platforms as well as processes of one IT organization, are adopted in favor of the other.

Best-of-Breed (Combination) - the most effective strategy, organization structure, platform and IT process of each firm are chosen, to provide the most efficient set for the combined entity. This approach is adopted for M&A of firms within the same industry, to realize savings by getting rid of duplication within the two firms. As it involves choosing the best from the two firms, this approach is more complex and consequently carries a higher risk of execution. It also costs substantially more, as compared to the consolidation approach.

Transformation - this entails aligning smaller companies within the same industry, with the aim of acquiring new technology and creating new products. This is the least common approach and involves retiring the existing IT structures, platforms and processes in favor of a new suite. It is a complex and risky undertaking, but can position the firms much better for the future, in the aspect of bringing new products to the market, in a more reduced timeframe.

Another IT integration framework that relies on the dynamic nature of M&A and its synergistic potential, is the Dynamic System of Information Systems Integration in Mergers and Acquisitions (DySIIM) model (Henningsson & Carlsson, 2011). By

combining previous research on M&A and IS integration, they developed a six-dimensional theoretical framework, to explain IS integration in corporate M&As. Henningsson and Carlsson (2011) proposed the following six dimensions: (1) synergistic potential or the efficiency and effectiveness, (2) organizational integration or the organization integration strategy, (3) intentions and reaction of the integration process, (4) IS ecology or the IS systems, (5) integration architecture of the combined companies, and (6) IS integration role. Through a combination of dimensions, the model can show the IS integration issues, decisions and actions that the firm has to address during the M&A process. Karas (2017) used the DySIIM model for her study, to identify issues that IT leaderships face during merger integration. According to Karas (2017), the issues that IT leaders face during a merger integration include anxiety, changes in their social identity, a lack of involvement in decision making, differences in underlying assumptions, issues with perceptions of corporate cultures (Schriber, 2012), lack of continuity (Lundqvist, 2012), and need for leaders to take part in decisions to alleviate anxieties and concerns of employees (Lundqvist, 2012; Schriber, 2012). According to Dunbar (2014), the leadership capabilities required for a successful M&A include motivating, influencing, and developing others, building relationships, acting with integrity, showing adaptability, and focusing on customer needs (Karas, 2017). The Henningsson and Carlsson (2011) DySIIM model is a capability model that explains, how decisions that are taken on one aspect of the IT M&A project, dynamically affect the other aspects of the project (Toppenberg & Henningsson, 2014).

The Cross-Business Information Technology Integration (CBITI) model, developed by Tanriverdi and Uysal (2011), is another framework for IT integration. Tanriverdi and Uysal (2011), conducted a quantitative study using a survey of IT executives involved in merger integration, and provided a framework for reducing the overall IS&T costs during a M&A integration. The CBITI framework provides five dimensions of integration: (1) strategic, (2) human resource management, (3) infrastructure, (4) applications, and (5) IT vendor management. The Tanriverdi and Uysal (2011) model is a capability model which explains, why acquirers with high levels of CBITI capabilities attain significantly higher abnormal operating performance (Toppenberg & Henningsson, 2014).

## 2.6 Post-merger integration

Epstein (2004), in his study of J P Morgan and Chase Manhattan Bank, highlights the importance of post-merger integration (PMI) in the success of the M&A. Epstein (2004) mentions that a strong post-merger integration process can overcome some miscalculations or problems in the design of the merger. A strong PMI process can also overcome merger activity that has been undertaken by Chief Executive Officers (CEOs) with political motives to cement their legacy or to achieve personal rather than shareholder-related objectives. But most importantly, a weak post-merger integration effort can destroy an otherwise well-conceived merger (Epstein, 2004).

Epstein (2004) identifies 5 drivers of success in corporate integration, and suggests the application of each of the drivers to the 3 scenarios -- merger, acquisition and

conglomerate (unrelated diversification). The 5 drivers are (1) coherent integration strategy - the integration strategy is in addition to the merger strategy, and defines how the integration will be carried out, (2) strong integration team - commitment to a successful post-merger integration, must be demonstrated through the structure, leadership, and composition of the integration team, (3) communication - senior management communication must be significant, constant and consistent. It must build confidence in the merger and the integration process, and reinforce the purpose of the merger with a tangible set of goals, (4) speed in implementation - speed is essential to a successful post-merger integration, and fear and indecisiveness can often be obstacles to rapid action. Early completion of integration projects, can mitigate risk and permit an earlier realization of merger benefits, and (5) aligned measurement - to achieve success, mergers need a clear definition and articulation of the drivers of success, how it will be achieved, and the appropriate measures of success (Epstein, 2004).

Another study by Morsell, Deek, and Chakrabarti (2009), puts forth the hypotheses and finds support that quality of merger planning, quality of communication of merger activities to IS, quality of IS integration planning, degree of end user involvement in IS integration activities, and quality of technical support to users during the IS integration, each have a significant influence on post-merger IS integration success.

The recurring themes and the theories that emerged from the in-depth interviews and the online survey conducted in this study, suggest the below hypotheses, which also seem to be supported by the studies done by Morsell et al. (2009) and Epstein (2004).

*(H1) Prioritization of IT during the due diligence phase, leads to higher IT synergy savings, which in turn leads to higher overall synergy savings.*

*(H2) Prioritization of IT during the due diligence phase, is positively related to the achievement of the technology priorities of the firm.*

*(H3) Prioritization of IT during the due diligence phase, has a strong positive relationship with IT integration budget. Information Intensity acts a moderating variable.*

*(H4) In integration scenarios involving significant delays to the original schedule, the degree of delay has a negative relationship with the overall synergy savings.*

The technology used for information management, as well as the information itself, is considered a primary asset and a major strategic concern for most organizations (Carrillo, 1998). IT and business strategy should be developed and advanced simultaneously, as they each depend on the other (Carrillo, 1998).

## 2.7 Merger and Acquisition prediction

Although every M&A tries to achieve the magic formula of '1+1 > 2', the drivers leading up to the M&A can be very diverse. It is crucial that the bidder firms identify the right target firm, which can bring in complementary resources, processes, technology or geographical coverage, to bolster the performance of the merged entity.

According to Yang, Wei, and Chiang (2014), there are a number of M&A prediction studies that have been carried out. However, most of them focus on the traditional financial and managerial parameters, ignoring the technology variables. Yang et al. (2014) propose the concept of M&A prediction using patent data analysis, to find the right fit between the bidder and target firms. This becomes a unique tool for startup firms to identify potential bidders, and for the venture capital and private equity firms to identify the right firms to invest in. In fact, studies have shown that the CIO or a senior IT executive is frequently overlooked and not involved, until after a deal is completed (Cohen, 2012), and are involved prior to the deal completion in only 24% of the cases (Chang, Chang, & Wang, 2014).

## 2.8 Significance of IT in merger integration

Fairfield (1992) found that 50% of mergers had fallen short of pre-merger expectations. Also, firms achieved anticipated synergies in less than 30% of the mergers, while 77% of the mergers failed to recover the cost of capital (Roehl-Anderson, 2013).

Information Technology integration is cited as one of the top three causes of merger failure (Ghauri & Hassan, 2014). Karas (2017) mentions that IT synergy forms a significant portion of the value derived from the integration (Kovela & Skok, 2012), and that IT integration often has the highest volume of integration activity spanning the longest period throughout the integration process, tending to have the highest number of dependencies. Hence, IT integration is considered as the most complex and most difficult aspect of integration to manage (Alaranta & Kautz, 2012; Chang et al., 2014).

Because of the complexity, lengthy duration and significant cost involved in the IT integration process, it is essential to prioritize this aspect, when integrating operations of the two merging entities. However, IT is seldom regarded as a mechanism for creating value in a M&A (Tanriverdi & Uysal, 2011), and hence it is largely overlooked during the pre-merger phase. Chang et al. (2014) noted that the role of IT integration in M&A, is largely unclear.

Jones (1982) identified four key variables that determine whether a merger is a success or not: (1) cash flow, (2) business growth or expansion of customer base, (3) revenue, and (4) shareholder value. Cash flow is an exceedingly crucial component of merger success, and as we have seen earlier, IT integration plays a pivotal role in the *overall synergy savings* of a merger effort. However, the fact of the matter is that *synergy savings* usually take a back seat in most pre-merger discussions. The CEO as well as the M&A steering committee, are more focused on justifying the other three factors (business growth, revenue, and shareholder value) that were initially promoted as the primary drivers for the merger or acquisition. The lack of focus on *synergy savings*, can work to the detriment of the integration objectives that the firm is trying to achieve.

Given the unprecedented pace of IT adoption during the last two decades, large consulting firms and researchers have been quick to identify the gaps, in the importance of IT integration during the pre-merger phase. There already is an extensive amount of academic literature available on M&As in the general management area (finance,

leadership, due diligence, culture, shareholder value, etc.), but literature on the IT aspect of M&As, has been sparse. However, this situation is changing, and academic research on IT is slowly but steadily increasing, some of which we mentioned earlier on, in this chapter.

## 2.9 Literature review summary and proposed study

Despite the steady increase in academic literature on the role of IT in M&As, there are several areas that haven't received much attention yet. For example, there is little research on the role of *IT prioritization* in merger scenarios, and the potential impact that it has on the *IT budget allocation*, *IT synergy savings* and *overall synergy savings* of the integration effort. Similarly, there is no prior study that researches the impact of the *integration schedule* on the *overall synergy savings,* of the merged entity. Also, no prior research has been done, regarding the relationship of *information intensity* of the merging entities, with the variables mentioned above. This aspect is especially important for practitioners, as it might open new avenues for optimizing integration synergy in the case of highly-intensive technology and internet firms, as well in enterprises that are not *information-intensive,* but wish to propel their businesses, through the innovative use of technology. The only other study which comes close to investigating the *information intensity* variable, is by Weber and Pliskin (1996), where the results point to a positive relationship between IS integration and effectiveness, only when controlling for (1) IT intensity, and (2) organizational culture differences between the merging entities.

Another area, which suffers from a lack of academic research, is the impact of *schedule delay* on the *overall synergy savings*. There is a small window of opportunity to capture *synergy savings* in a merger scenario. Gaining a better understanding of this window of opportunity and the variables that affect it, could have significant implications for a M&A integration practitioner. Except for Epstein (2004), till date, little research has been conducted in this area.

According to a study by Bain & Company, a significant portion of executives (55%) involved in mergers, cited overestimated synergies as the reason for deal disappointment. This aspect points to a couple of areas that could be studied further. A possible area of research is, ensuring CIO representation during the pre-merger stage, to gain a more realistic view of the potential *IT synergy savings*. One such study by Suliman (2015), finds evidence that involving the CIO or other key IT staff in the ex-ante due diligence process, does align with successful IT integration.

Another research area that begs for clarity, is to study whether prioritization of IT during the due diligence phase, leads to a more realistic estimation of the IT integration cost and synergies. Answers to this question, could shed light on the impact of *IT prioritization* on (1) the achievement of the *technology priorities* of the merger integration, (2) the *IT budget allocation,* and (3) the *overall synergies* of the merger integration.

This study will test the following hypotheses:

*(H1) Prioritization of IT during the due diligence phase, leads to higher IT synergy savings, which in turn leads to higher overall synergy savings.*

*(H2) Prioritization of IT during the due diligence phase, is positively related to the achievement of the technology priorities of the firm.*

*(H3) Prioritization of IT during the due diligence phase, has a strong positive relationship with IT integration budget. Information Intensity acts a moderating variable.*

*(H4) Meeting or exceeding the planned integration schedule, leads to higher overall integration savings. This relationship is moderated by the degree of schedule delay. In integration scenarios involving significant delays to the original schedule, the degree of delay has a negative relationship with the overall synergy savings.*

## 2.10 Summary

This chapter covered the literature review for the research questions, posed in this study. Firstly, the key definitions used in the study were included. The definitions were followed by a literature review of various relevant topics such as the factors influencing M&A, different IT integration models and frameworks, post-merger integration, M&A prediction studies, and significance of IT integration. The literature review is followed by a discussion of gaps in research, concerning the theories emerging from the combination of these studies.

Please note that this literature review happened in tandem with the in-depth interviews and the online survey, as findings and common themes started to emerge from the same.

*Grounded theory* is used as the research method of choice, for this exploratory study. As the study progressed, the researcher learned and made changes to the research questions as well as to the hypotheses proposed. Chapter 3 covers details of the research methodology that was used.

# CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

## 3.1 Introduction

In Chapter 2, the research topic and hypotheses were introduced. The area of interest for this study, is the role of Information Technology (IT) prioritization in post-merger integration success. This study specifically tries to establish the relationship, between *IT prioritization* (independent variable) and various dependent variables such as *IT synergy savings*, *overall synergy savings*, *IT integration budget*, and *technology priorities* of the firm. It also studies the impact of *integration schedule*, on the *overall synergy savings* of a merger integration. The study also discusses the role of *information intensity* of the firm and *integration schedule delay*, as moderating variables.

Due to strict confidentiality restrictions associated with merger or acquisition activities, it was very difficult to secure the financial and budgeting information, of both the merging as well as the merged entities. On rare occasions where this entire set of information was available for a particular firm, the respondents were not able to share the same, due to the company's confidentiality policies. Also, all publicly accessible M&A information that is available on the Thomson Reuters SDC and Factiva database, was too much at an aggregated level and lacked the granularity needed, to be of any use to this research. After unsuccessful attempts at getting access to secondary data sources, a decision was made to proceed with gathering a primary source of data. The

respondents identified, were senior technology and business executives as well as M&A practitioners, who had extensive experience in mergers and acquisitions.

## 3.2 Qualitative Research Methodology

Cooper and Schindler (2011) mention that qualitative research methodology has been around since the 19th century, which is much longer as compared to the relatively more recent quantitative methods. However, managers are often wary of using results of qualitative methods alone. Managers often deem the data to be subjective and error-prone, and they feel that the data analysis has the potential to be biased, depending on the researcher's agenda. Also, there are doubts about whether the results of a qualitative study, can be generalized to a larger population [p160].

However, Cooper and Schindler (2011) state that managers are returning to qualitative techniques, as quantitative methods often fall short of the deep insights needed to make crucial decisions. Managers use complementary methods to deal with the issues of untrustworthiness of a qualitative analysis, by:

- Using in-depth literature searches to build probing questions.
- Thoroughly justifying the combination of methodologies used.
- Using the chosen method in the field, rather than in a laboratory setting.
- Carefully selecting sample participants for the depth of the issue, rather than how well they represent the target population. [p161]

Quantitative research relies on precise numbers and data, to measure an outcome. On the other hand, qualitative research is based on a researcher's immersion in the phenomenon to be studied, whereby the researcher has a meaningful involvement in collecting and interpreting data. A brief comparison between qualitative and quantitative research as proposed by Cooper and Schindler (2011), is provided in Table 1.

| | *Qualitative* | *Quantitative* |
|---|---|---|
| Focus of research | Understand and interpret | Describe, explain and predict |
| Sample size | Small | Large |
| Research purpose | In-depth understanding, theory building | Describe or predict; build and test theory |
| Researcher involvement | High | Limited; controlled to prevent bias |
| Research design | May evolve during course of study. Often uses multiple methods, simultaneously or sequentially. Consistency is not important. | Determined before commencing study. Uses single or mixed methods. Consistency is critical. |
| Data type | Verbal or pictorial descriptions, reduced to verbal codes | Verbal descriptions, reduced to numerical codes |
| Data analysis | Human analysis, following computer or human coding. Forces researcher to see contextual framework; distinction between facts and judgements less clear | Computerized analysis. Maintains clear distinction between fact and judgements |
| Researcher involvement | Active participation in real time, or via taped interviews | Rarely has direct or indirect contact with the participant |
| Data security | More absolute, given the smaller sample size | Act of research is often known by competitors |

*Table 1: Qualitative versus quantitative research. Adapted from Cooper & Schindler (2011) [p163]*

Although much literature clearly distinguishes between qualitative and quantitative methods of data collection and analysis, in reality, the distinction between the two is not as obvious. Qualitative studies can involve multiple data collection techniques like field observation, surveys, questionnaires, interviews, experiments and historical data.

Cooper and Schindler (2011) use the term '*Triangulation*' to describe, the combining of several qualitative methods or the combining of qualitative and quantitative methods. *Triangulation* increases the perceived quality of research when a quantitative study follows a qualitative one. Four strategies are highlighted by Cooper and Schindler (2011) in this area:

- Qualitative and quantitative methods can be conducted simultaneously.
- A qualitative study can be ongoing when multiple waves of quantitative studies are done.
- A qualitative study can precede a quantitative study, and then a second qualitative study might follow the quantitative study, seeking more clarification.
- A quantitative study can precede a qualitative study. [p183]

To ensure robustness, multiple methods were used, for this research:

*Step 1:* Having had years of experience in the field of Information Technology (IT) and being a veteran of several IT mergers, the researcher conducted a review of the current literature available on M&A integration and in particular, the integration of information technologies. Much of this examination was discussed earlier, in the justification of the hypotheses for this study. A preliminary set of hypotheses, was developed.

*Step 2:* After constructing an initial set of hypotheses, regarding the factors that affect the success or failure of IT integration, the researcher went about speaking with domain experts, to see if their views were similar, divergent or more comprehensive, or if they contained novel insights. Five preliminary interviews were conducted, with peers and two potential subjects. These discussions were exploratory in nature, as the researcher sought to ask open-ended questions to the interviewees, to ensure that a pre-conceived theoretical bias, did not limit the scope of answers given by them. The information gathered in these interviews, helped the researcher to adjust the possible hypotheses, and to understand better the language that the informants used. The language usage was a key step in developing a questionnaire, which could be easily read and understood by future interviewees.

*Step 3:* This was followed by the development of a questionnaire, that could be used to elicit responses pertaining to the size of the company, the appropriateness of their budget for integration of the firms and their IT function, the level of pre-merger and post-merger due diligence, the time it took to merge the entities, and the eventual synergies that the company achieved. The potential survey was tested on 3 (three) novices (people not involved in the IT industry) and 3 (three) IT professionals, to check for readability and length of time for completion. Minor adjustments were then made, to improve the survey instrument.

*Step 4:* The model online survey questionnaire was administered to the first respondent, before the same was rolled out to other respondents. Iterative changes were made to the

online survey questionnaire, based on suggestions made by the first respondent. The questionnaire was then mounted and distributed to 25 other respondents. Ultimately, a total of 20 respondents filled in the online survey questionnaire.

*Step 5:* Lastly, in-depth interviews were conducted with 15 of these respondents, to glean further information and gain more insights, from their *lived experience* of the integration effort they were involved in.

There are certain limitations to a survey questionnaire. For example, sometimes, there is a vast amount of knowledge or a deeper understanding of a subject, which an informant wishes to share, but is unable to do so freely or within the constraints of a survey. These deep insights are often best gathered in an interview session. Another aspect is that an informant is able to explain the reasons for certain decisions made or a particular course of action taken, that may not seem sensible to others now, but which may have made better sense to the informant and the people concerned, at the time.

While different methods were used as part of data collection and analysis to improve robustness, this research primarily remains a qualitative study, given its exploratory nature. John W. Creswell, Hanson, Plano, and Morales (2007) recommended the use of qualitative methods, for studies that need people's *lived experiences*.

## 3.3 Qualitative Research Design

John W. Creswell et al. (2007) suggested that a single research problem can be viewed from multiple lenses; they took an example from a client, counselor and community perspective. They suggest five fundamental types of qualitative research design. Each type of qualitative research design differs in what one is trying to achieve and the end product the researcher has at the end of the study.

- Narrative - a detailed picture of an individual's stories.
- Case study - an in-depth study of a bounded system or a case (or several cases).
- Grounded theory - produces a theory, often portrayed in a visual model.
- Phenomenology - a description of common experiences of persons about a phenomenon.
- Participatory action research (PAR) - leads to a community action plan.

Table 2 provides a brief comparison of the applicability of each type of qualitative research design. The table was proposed by John W. Creswell et al. (2007).

| *Qualitative design* | *Type of research question* | *Illustration of question* |
|---|---|---|
| Narrative research | Chronological / story-oriented questions: Questions about the life experiences of an individual and how they unfold over time | What stories does a client tell us about the TI process? |
| Case study | In-depth, descriptive questions: Questions about developing an in-depth understanding about how different cases provide insight into an issue or a unique case | How do four counselors share problem-focused or potentially "hard-to-hear" test results with clients? |

| | | |
|---|---|---|
| Grounded theory | Process questions: Questions about experiences over time or changes that have stages and phases | What theory best explains the therapeutic effects of TI? |
| Phenomenology | Essence questions: Questions about what is at the essence that all persons experience about a phenomenon | What does timing mean to counselors who regularly share test results with clients? |
| Participatory action research | Community action questions: Questions about how changes occur in a community | How do community mental health centers better optimize their use of psychological tests in day-to-day practice? |

*Table 2: Types of Research Questions, Qualitative Designs, and Illustrative Test Interpretation (TI) Examples. Source: Creswell, Hanson, Clark, Morales (2007) [p239]*

The five research designs also vary in certain other aspects (John W. Creswell et al., 2007).

- Unit of analysis - varies from an individual in a *narrative study*, to an entire community in *PAR*.
- The level of structure - highly *unstructured* approaches in *narrative* research and *PAR* to more highly *structured* approaches in *grounded theory* and *phenomenology*.
- Discipline base - typically limited for *grounded theory* (sociology) and *phenomenology* (psychology), while *narrative*, *case study*, and *PAR* have a much broader disciplinary base.
- Data collection - varies by design type. E.g., *grounded theory* lays more emphasis on interviews for data collection, while *case study* uses multiple types of data collection techniques to provide a more in-depth finding.

## 3.4 Grounded Theory

John W. Creswell et al. (2007) mentioned two approaches to *grounded theory* -- *systematic design* (Corbin & Strauss, 1990), and the *constructivist design* (Charmaz, 2014). There is a third method called the *emergent* method; however, we will keep the discussion on this as 'out of scope' for this study.

Although it is the more recent approach of the two, we tackle *constructivist grounded theory* first. According to Charmaz (2014), this theory focuses on the researcher's view of the study and the interpretive tradition of qualitative research with flexible guidelines. Charmaz (2014) places more emphasis on individuals' views, values, beliefs, feelings, assumptions, and ideologies rather than on research methods, although she does describe the practices of gathering rich data, coding the data, memoing, and using *theoretical sampling* (John W. Creswell et al., 2007).

The *systematic grounded theory* proposed by Corbin and Strauss (1990), is a more structured and analytical process. *Grounded theory* is based on the premise that everything is data -- whether it is qualitative data or quantitative data. Even a literature review is considered data and is compared with emerging themes. Interviews are one of the main tools, of *grounded theory*. The researcher begins by asking broad questions, to develop the concepts (or themes) of the theory. The data collection and analysis happen simultaneously.

The concept of *theoretical sampling* forms the basis of *grounded theory* research. Here, the researcher analyses the data and decides what data to collect next and where to find it, in order to develop the theory as it emerges (Glaser & Strauss, 1967). The best time to use *theoretical sampling* is when the key concepts have already been identified (Charmaz, 1990). The researcher starts with a random group of respondents who have lived through the experience, to start developing the themes and concepts. Once this is done, *theoretical sampling* is used to generate more data to either confirm or refute the original themes / concepts.

In *grounded theory*, the researcher focuses on the process, action or interaction, and develops a visual model of the theory (Corbin & Strauss, 1990). Researchers begin with *open coding* -- which is the process of generating initial concepts or categories from data. This is followed by *axial coding* -- which develops and links the concepts and categories into core phenomena or themes. Lastly, comes the *selective coding* -- where the relationships are formalized into a theoretical framework. The researcher then re-examines the data, to build a model around this core phenomenon. The model generates and contains causal conditions, strategies, intervening conditions and consequences. The researcher then uses the model to develop hypotheses, providing interconnection between the various categories in the model, or proposes a story that describes the interrelationship of categories in the model (Corbin & Strauss, 1990).

*Systematic grounded theory* was the design of choice for this study, as it is more structured and rigorous, compared to the other qualitative techniques available. This

method is also more suitable to identify causal variables like *IT prioritization* during the due diligence phase, and then infer its relationship with dependent variables like *IT synergy savings*, *IT integration budget* and *overall synergy savings*. *Grounded theory* approach was used, to draw emerging themes from the in-depth interviews. The interrelationships between themes were identified, and hypotheses for this study were proposed. Quantitative results from the online survey tool, were used to rigorously test the various hypotheses proposed. The quantitative results combined with the inputs gleaned from the in-depth interviews, were used to validate the various hypotheses proposed.

The process began, with each respondent being administered an online survey, where a Likert scale (1 - extremely bad to 7 - extremely good; 4 - just right / enough) was used to gather the quantitative information. This was subsequently followed by a *semi-structured* (as opposed to *unstructured* or *structured*) interview, to extract additional information around the key parameters influencing the outcome of the merger, thereby providing additional insight, context and relationships between the various variables.

## 3.5 Data Collection and Analysis

Using the *systematic grounded approach* suggested by Corbin and Strauss (1990), the study proceeded as follows:

- Through peer reviews and interview sessions with experts on the subject matter, the researcher identified the research problem, and preliminary hypotheses were proposed.

- Possible sources of primary and secondary data were reviewed, and a qualitative research methodology was proposed as the most suitable design. A decision was made to gather primary (quantitative) data using an online survey, and in-depth interviews were used as part of the *systematic grounded theory* approach, for the qualitative inputs.

- Respondents were identified, from among the researcher's peer contacts, as well as from *LinkedIn* -- a professional social media site. The respondents were senior executives, who were involved in at least one large-scale merger integration effort. The professional network on *LinkedIn* was used, to identify senior respondents with M&A knowledge and experience. Over 750 *LinkedIn* profiles were reviewed, and invitations to participate were sent to 72 individuals, of which 26 responded and agreed to take part in the study. Ultimately, 20 respondents filled in the survey and most participated in the in-depth interviews, as well.

- Due to constraints of time for the study to be completed, and considering the willingness and time constraints on the part of the senior executives (respondents), a target size of 20 respondents, was agreed upon, as a starting point. The sample population is in line with the proposed rule of thumb that 20 interviews are a good sample size for the *grounded theory* approach (John W Creswell, 2011). The number of respondents i.e. 20 was not a fixed number, but rather a starting point. The goal was to attain a well-detailed theory, but the interviews could stop, as soon as it reached the saturation point.

- At this point, the online survey was piloted with the first respondent. Based on the feedback received, changes were made to the online survey and the same was then administered to the remaining 25 respondents. All 20 respondents who ultimately participated in the study, completed the survey, within a month of the request being sent.

- In-depth interviews were scheduled, upon completion of the survey. These took much longer to complete, as they were dependent on the respondent's availability. Each interview lasted between 35-50 minutes. The saturation point was reached at 15 interviews. At this point, there was a high level of confidence and convergence on the research problem statement, the variables impacting it and the relationships between these variables.

- The interviews were audio recorded and then transcribed (see Appendix 1). *Intercoder reliability* was used, to improve the robustness of the transcription process. Apart from the researcher, an additional transcriber was engaged to complete the transcription process. Both the transcribers reviewed the transcription drafts and agreed on the final content of the transcripts. *Intercoder reliability* is a critical (not the only) component in the content analysis of open-ended survey responses, without which, the interpretation of the content cannot be considered objective and valid.

- The interviews were *semi-structured*, and the following questions were asked. Depending on the topic being discussed, the respondents were allowed to elaborate on their answers, for the researcher to gain a better understanding of their perspective:

    1. What were the key business drivers for the merger?
    2. What were the top *technology priorities* of the merger?
    3. Was the merger a success or a failure? Please elaborate.
    4. Was IT a priority during the due diligence process?
    5. How *information-intensive* is your firm? Please elaborate.
    6. Did you meet the expected *overall synergy savings* and *IT synergy savings*? What were the drivers that worked for or against it?
    7. Was there a separate budget allocated for IT integration? If yes, was it sufficient? If not, why?
    8. Was the planned *integration schedule* delayed? What was the primary reason for the delay? Did the delay have any impact, on the synergy savings?
    9. What was the key takeaway for you, from this merger integration effort?
    10. Do you have any advice or recommendations for the success of future M&A projects?

- Wherever additional clarity was needed, a follow-up call was made to the respondent for more information or clarification. At this point, the hypotheses were finally firmed up with independent, dependent, mediating and moderating variables

and their interrelationships were established. The themes emerging from the transcripts as well as the online survey results, were used to test the proposed hypotheses.

## 3.6 Research Validity

Given the qualitative nature of this study, significant emphasis was placed on internal, external, construct, content and *face validity*, to ensure that the study provided a comprehensive and robust explanation, of the phenomenon under study. According to John W. Creswell et al. (2007), "Validity is the means used to establish justifiable and meaningful inference for the population under study."

*Internal validity* has to do with questions such as: "Do the findings of the study make sense? Are they credible to the people we study and to our readers? Do we have an authentic portrait of what we were looking at?" - (Miles & Huberman, 1994). *Internal validity* is usually tested in a laboratory or an internal simulated environment, where the theory is explored and tested. A research study with high *internal validity*, lets you choose one explanation over another with great confidence because it avoids confounding variables.

"*Construct validity* refers to whether the operational definition of a variable reflects the true theoretical meaning of a concept. Construct validation is involved whenever a test is to be interpreted as a measure of some attribute or quality which is not operationally defined" - (Cronbach & Meehl, 1955). For the purpose of this study, internal and

*construct validity* were obtained via peer review on the merger integration issues and through interactions with experts on the subject matter, who had domain expertise as well as practitioner experience in this field.

*External validity* refers to how well data and theories from one setting apply to another. *External validity* usually refers to how well a theory developed in a simulated environment, applies to the real-world scenario. "*External validity* is the degree by which the results received, affected the environment outside the study" - (Leedy & Ormrod, 2010). This study obtained *external validity*, by choosing survey respondents who had extensive M&A experience and had been through the pre-merger and integration experience at least once, if not multiple times. Additionally, an in-depth interview was conducted with 15 of those respondents, to obtain a validation of the theory proposed in this study.

*Face validity* has been defined as reflecting the extent to which a measure reflects what it is intended to measure (Nunnally & Bernstein, 1994). As mentioned in Wikipedia (https://en.wikipedia.org/wiki/Face_validity), a test can be said to have *face validity*, if it looks like it is going to measure what it is supposed to measure. *Face validity* is a weak measure of validity. However, its importance cannot be underestimated. *Face validity* was achieved, by interviewing senior business executives (CIO, President, MD, Global Head, Executive M&A Program Manager, etc.), who were well-versed with the objective, strategy as well as the integration phase of the merger process.

"*Content validity* is established by showing that the test items are a sample of a universe in which the investigator is interested. Content validity is ordinarily to be established deductively, by defining a universe of items and sampling systematically within this universe to establish the test" - (Cronbach & Meehl, 1955). *Purposive sampling* is a form of non-probability sampling used in qualitative studies (remember, qualitative sampling is not intended to generate a full representative sample), where researchers choose participants for their unique characteristics or their experiences, attitudes or perceptions, so as to get a balanced view of the phenomenon under study. Respondents for this research, were drawn from different geographies (Singapore, United States, India, France, Hungary, Russia, Hong Kong and China), and across various industries (Banking, Insurance, Semiconductor Chip Fabrication, Information Services, Information Technology, Logistics, Transportation, Shipping, Mining and News & Media). The selection was purposeful, to ensure generality of the theory proposed.

## 3.7 Confidentiality

Given that qualitative studies often contain rich and in-depth descriptions of the research participants' experiences, confidentiality breaches via deductive disclosure, are of particular concern to qualitative researchers. As such, "qualitative researchers face a conflict between conveying detailed, accurate accounts of the social world and protecting the identities of the individuals who participated in their research" - (Kaiser, 2009). Due to the confidential nature of this study, the names of the companies and the respondents, have been anonymized. Each respondent has been identified with a code, which is stored in a password protected file. As per Singapore Management University

Institutional Review Board (IRB) guidelines, respondents have been informed that all data will be kept confidential, and any information they shared will be presented in an anonymous and aggregate form only. All data pertaining to this study has been stored in a password-protected laptop, with relevant malware protection installed. A secure backup copy of the data, has been maintained.

## 3.8 Summary

Chapter 3 covered the method of research, used in the execution of this study. The chapter included reasons for using a primary data source for the study. The chapter looked at different types of qualitative studies, and highlighted the reasons for choosing a *systematic grounded theory*, as the research design. An online survey was also administered, to improve the robustness of the data collection and research method. Various concepts such as *triangulation*, *open coding*, *axial coding*, *selective coding*, *theoretical and purposive sampling*, and *intercoder reliability*, as well as their implications in this study, were discussed. Next, the data collection and analysis aspects were reviewed. Finally, the chapter was concluded by looking at the validity and reliability aspects of the study, covering concepts and application of various types of validity (internal, external, construct, face and content) to the study.

Chapter 4 will focus on (1) the various themes that emerged from the in-depth interviews, (2) the variables and hypotheses in greater detail, and (3) presenting the final results of this study.

# CHAPTER 4: RESULTS AND FINDINGS - QUALITATIVE ANALYSIS

## 4.1 Introduction

Through the use of the *grounded theory* techniques mentioned in Chapter 3, as well as from discussions with the respondents, key concepts and themes began to emerge, and the same are highlighted in this chapter. Extracts have also been taken from the respondents' interviews, to provide greater emphasis on the message being conveyed. Please note that the responses have been shortened as necessary, while keeping the core message intact.

## 4.2 Theme 1: Growing role of IT, in today's business environment

There was a consensus from all the respondents, on the growing role of Information Technology (IT), across all industries. IT is seen, not only as a business enabler and a business innovator, but also as a key differentiator. Even traditional businesses which are not *information-intensive,* are now embracing IT and investing in new IT-enabled business processes and platforms, with an aim to create a strategic advantage for themselves. Below, are a few extracts from the in-depth interviews, in support of Theme 1.

Commenting on the growing importance of IT in his industry, Respondent 13 said, "The shipping business has now moved from being a capital-intensive industry to being a service-oriented industry. Shipping has become more like a logistics company. And,

the capital cost is no longer important. Since Shipping is now becoming a service industry, there is a huge change regarding the importance of IT. Nowadays, you can't move a single thing without IT. Everything is dependent on IT. The whole process is done on IT."

Stressing on the importance of IT in his line of business, Respondent 5 says, "Even in the human capital industry, there are so many processes and IT systems such as performance management system and a system that manages compensation, rewards, stock options, etc. Nowadays, there is no process which is IT-independent. IT is a very important part of a Transitional Service Agreement (TSA). I'm talking about TSAs because they involve IT by default, and also because one needs IT systems everywhere. For example, the payroll runs totally on IT. Nowadays, most of the pension programs and Employee Stock Ownership Plans run on IT systems. The entire HR infrastructure, business infrastructure or any other process that is impacted by a merger, has some kind of an 'IT story' to it. There's nothing you can look at and say -- this is not dependent on IT."

Respondent 7, who is from an *information-intensive* and highly acquisitive financial services firm, says, "IT has a major role to play. The whole industry we are in, relies so heavily on IT, that the overall value of a company is not just the business model, the customers, the commitment and the financial status, but is actually the shape and the quality of the Information Technology, that we are operating at that stage."

Respondent 15 emphasized the importance of IT in the Financial Services industry, saying, “I think, one of the key differences is that the IT function or IT, is really at the heart or the core of the business. So, it’s far more than just a support function. It’s a key differentiator, which actually helps in propelling the business.”

Another key aspect that resonates with all respondents is that IT and business have to go hand in hand, for an organization to flourish. Neither IT nor the business, can afford to work in isolation and risk losing technology or business alignment.

### 4.3 Theme 2: Synergy, as a critical aspect of the merger process

A few respondents mentioned that achieving synergy was a primary driver for the merger, while a number of them felt that achieving synergy was a consequence, rather than a driver of the merger decision. The other drivers for mergers are -- to grow the business, to eliminate a competitor, to enter a new geography or to acquire a niche technology or skill set. However, irrespective of the primary objective, as soon as a merger is conceived, one of the first things that the acquiring firm’s senior leadership thinks about, is *synergy savings*.

Respondent 14 - “This was a merger of two very big British insurers. In fact, at that point in time, they would be individually considered as one of the largest insurance groups in the world. Both of them definitely would have ranked within the top 15 companies, globally. And when the two merged, that made them much more sizeable in the market, which basically was the intent of the merger. One organization was

focusing very much on the consumer business and was very strong in the consumer space. The other organization was much stronger in the engineering space i.e. construction type of businesses and more of corporate commercial businesses. So, when they saw that the businesses were fairly different, coming together made a lot of sense. Both were British insurers with a hundred years of history, and both were very strong in Europe as well as Asia. Due to this, there was a lot of overlap in all the countries they were based in. So, they saw that there was a synergy to try and bring those operations together, from a cost savings perspective. The primary drivers for the merger were (1) customer growth, and (2) cost savings in terms of the country's operations."

As we saw in Chapter 1, as per Deloitte_Report (2014), a very high number of respondents (66%) mentioned 'pursuing cost synergies' as a key driver for a merger, a sentiment echoed by a number of informants, who participated in this study.

### 4.4 Theme 3: IT due diligence, as a success factor for technology integration

All respondents were unanimous in their opinion of the importance of IT due diligence. What they differed on, were the practical aspects of being able to carry out a thorough due diligence during the pre-merger phase, and the effectiveness of the same. Most respondents felt that a balanced approach of conducting IT due diligence during the pre-merger and post-merger phases, yielded the most benefit.

Respondent 3 fully acknowledged the importance of due diligence, but felt that expending too much effort on IT due diligence during the pre-merger phase would be futile. When the researcher asked whether additional due diligence during the pre-merger phase would have helped, he replied, "I think it would not have made that much of a difference because the key objective was to stop that loss of market share, and that was pretty quickly appeased. To spend more time on technical due diligence, has a cost to it as well. There is also a limit to its effectiveness because at that point where you are in the planning phase, you don't have the ability yet, to look into the other party's systems and really get down into the nitty-gritties to see what they have, how it's set up, what the real quality is, etc. You don't really know 'the skeletons in their closet', and you're going to spend more months on that. It just wasn't what we were in for, and I also think we weren't even able to do that."

In response to why the integration was a complete failure, and whether enough IT due diligence was carried out during the pre-merger and post-merger phases, Respondent 13 said, "No! Nothing was done, and we should have done more. There was an underlying assumption in everything, that we'll just say -- Here are the new systems and here is the due date. But it did not work like that. So, we should have made an effort in due diligence, to try and understand what they were doing, what IT systems they were using, how it was interlinked between different offices and so on. We also should have mapped their IT process and ours. We would have then found out where the gaps were, and how to go about closing the same."

With respect to the importance of IT due diligence, Respondent 17 said, "In order to do the merger and in order to justify, you do need to do the due diligence, prior to the merger. That way, you will know what you're getting into -- the capital costs, the expenses, the headcounts and everything else. You will also get to know what will still remain and what will be gone, and what would now be your new profit coming out of the merger. Once the merger takes place, you do your due diligence and deep dive, and before you know it, you've gone from a 50,000-foot bubble bath to a 5-foot level, and you can now gain access to a lot more information. Sometimes, you find 'skeletons in the closet', which is not good. You know it's too late, now. But you've got to deal with it."

There was a general agreement that a combination of the following factors, helps in the achievement of the *technology priorities* of the merged entity. The three factors are (1) the early involvement of IT leadership, right at the onset of the merger, (2) a thorough, active and speedy engagement from the IT team, during the pre-merger and post-merger due diligence phases, and (3) the active participation of IT, in building and executing a realistic business-aligned integration plan that ties in with and enhances, the wider business plan. The *technology priorities* should be derived from and strongly aligned with, the business objectives of the merged entity. There is also a view that in today's business environment, IT's contribution is quite significant, both in the scope and complexity of the IT integration activities involved, as well as in the monetary savings that it contributes to the overall integration effort.

Discussions around this theme, strongly pointed towards a need for thorough IT due diligence prior to the integration phase, thereby providing support for the proposed hypothesis -- *(H2) Prioritization of IT integration during the due diligence phase, is positively related to the achievement of the technology priorities of the firm.*

### 4.5 Theme 4: IT due diligence - does it happen pre-merger or post-merger?

This theme consistently emerged during the interview sessions. Of the ten respondents who were asked this question, only two replied that IT was fully involved during the pre-merger phase. Some of the interviewees felt that IT due diligence came across as an afterthought, while others felt that a meaningful IT due diligence happened only during the post-merger phase, due to varying constraints. Almost all respondents acknowledged that the right balance of pre-merger and post-merger due diligence is essential, to extract the most synergy from the integration effort. Some of the comments that the respondents made on this theme, are mentioned below.

With regard to a query as to when a meaningful IT due diligence happens, Respondent 9 replied, “It depends on what you’re doing and how much information is allowed to be shared, pre-merger. Most of the space that I came from i.e. financial services and energy, is highly regulated within the U.S., and you’re extremely limited on what you are allowed to share, pre-merger. Usually, you get an idea beforehand, but nowhere near to the technical level that you need, to be able to do that kind of work. Almost everything that I’ve done, has been post-merger.”

Respondent 12 - “Generally, at the strategy stage, things are highly confidential, and only a few of us, usually at the ‘B’ level, are privy to that information. I will refer to it, as the ‘inner circle.’ So, the ‘inner circle’ would be given all the key information, and from there we could figure out what we ought to do and how.”

When asked a similar question, Respondent 2 replied, “I think it’s in the second and third opportunities, that you get to do the due diligence. On the surface, you uncover opportunities. Then, in the second and third passes, you verify and calibrate what your initial thoughts were. Sometimes, on the surface, things look very opportunistic but when you get into the details, you understand why they haven’t already been implemented, or they can extrapolate. It goes both ways. And it’s in that second or third view, where you get beyond, until you hit the servers and there’s an opportunity. But then, when you get into one of the applications, at that point you start to get the value of due diligence.”

Regarding the timing of due diligence, Respondent 17 said, “In order to do the merger and in order to justify, you do need to do the due diligence, prior to the merger. Realistically, due diligence doesn’t happen till after the merger, because that’s when everybody is feeling a bit more comfortable about ‘what’s behind the door’, and are willing to ‘open the door’ a little bit more.”

While it is desirable that a significant portion of the IT due diligence happens during the pre-merger phase, many practical limitations and at times, compliance reasons,

mean that a 100% due diligence is not possible, during this phase. Respondents were of the opinion that they need to take a more pragmatic approach and try to maximize what they can achieve with due diligence, during the pre-merger and post-merger phases. The crucial aspect is speed. The acquiring company's IT team needs to ensure that they are ahead of the game so that they can factor in a more realistic IT synergy plan, which will not only complement but also enhance, the wider business plan for the merger integration.

### 4.6 Theme 5: The role of *IT integration budget*

There were mixed views about the role of the budget, in IT integration. None of the respondents in this study, denied that a higher budget would help. However, some respondents who experienced over-budgeting in their projects, warned that, if not properly managed, an excessive budget could turn out to be a recipe for failure.

Respondent 12, who felt an additional *IT integration budget* would have helped, mentioned, "I think there will be some point of diminishing return if you have more money. But one of the issues that we faced post-merger, was that a lot of resources were not put full time on the post-merger integration. The resources had to do their day-to-day jobs as well as get involved in the post-merger integration process. So, they were stretched quite a bit, especially if another M&A was initiated, while we were doing the post-merger integration of a particular bank. However, if we had a bigger budget, we could have gotten more resources that were focused on the post-merger integration, only."

Respondent 1, who experienced over-budgeting in his integration project, said, "Basically, a huge amount of money was being thrown at the problem. There was very little accountability. We spent £600 million the first year as investment and £600 million the second year. Even at my level, I was given more money than I knew what to do with. So, lack of funding was not a problem. But I think with copious amounts of funding, there definitely was a general lack of accountability. People just did, whatever they wanted."

Respondent 9, highlighting the typical challenges with *IT budget allocation* in *low information-intensive* firms, commented, "There are multiple factors. No appreciation for what technology can do for them, is absolutely at the top of the list. They have no idea about how much things cost, and they don't do a good job of estimating. Also, within the existing technology department, confidence to deliver what is required, is very low. And I would say that, from a corporate perspective. Part of the reason why there are so many segmented systems, is the consistent inability of the technology department to perform over the years, which in turn is part of the fracturing of technology support. I think the other contributing factor, is the low maturity of the organization from a project management perspective as well as from the sheer 'running of a business' perspective."

Respondent 17, cautions against an unjustifiably high *IT budget allocation* stating, "First of all, every industry and every company in an industry allocates budget at a different percentage. It all depends on the strategy and where they are. Sometimes, they

are playing catch-up and hence, they need to allocate more budget. I think the business role, is to be supportive of IT budgeting. The business will also benefit from IT budgeting. But again, you also have to remember that if you're going to budget and improve or increase the budget because you want new technology, you have to have the operational backbone, to support it as well. Increasing your budget, doesn't necessarily mean that you are increasing your likelihood of success. Increasing your budget can actually mean, you are increasing your likelihood of failure, if you are not careful."

Based on the responses related to this theme, the following conclusion can be drawn. While an adequate or over-allocated IT budget, do not necessarily result in a successful IT integration, an under-allocated IT budget, almost always leads to project failure. This effect is especially significant, in low information-intensive firms. There is strong support from the responses, for the following hypothesis - *(H3) Prioritization of IT integration during the due diligence phase, has a strong positive relationship with IT integration budget. Information Intensity acts a moderating variable.*

### 4.7 Theme 6: How do *IT synergy savings*, affect the *overall synergy savings*?

IT synergy forms a significant portion of the value derived from the integration (Kovela & Skok, 2012). Following are some of the views, regarding the effect of *IT synergy savings* on the *overall synergy savings,* during the integration phase.

Respondent 12 - "When I put 60%, what I meant was Technology & Operations not just Technology per se. As you know, banks are practically run on technology. This technology could be internally developed, but most of the time, it is sourced from various technology partners. For example, if it is decided to standardize on a core banking system, we effectively stop work and maintenance on the older / to-be-discarded core banking platform. So, for the core banking platform, you are easily looking at savings of 15-25% in maintenance avoidance, when you stop using a particular vendor. Also, if we standardize on one platform, we can buy systems with economies of scale. That way, we can save on Technology alone. Operations, Shared Services, setting up a Centre of Excellence (instead of multiple call centers and multiple data centers), and leveraging more on the existing technology which we already have, can all lead to cost savings. A stronger bargaining power as a group, will also help reduce costs. We're looking at a range of between 10-20% cost savings, in terms of procurement as well."

Respondent 7, commenting on why *IT savings* lagged behind *overall savings* in the integration project that he was involved in, said, "Normally what happens is that we buy a company, which has potential or has certain market segments that we don't have, or is in a certain niche. But many times, these companies have lower levels of technology and IT standards. So, when we acquire them and we start to change the technology, it is not very easy from a savings point because we would like to improve the quality, and we also need to invest a lot to standardize their platform. We place great emphasis on IT security, so usually our security investment is much higher,

compared to what the acquired company had invested before, in order to meet the minimum standards. I think that's where the potential for *IT savings* is not very high because normally in case of these acquisitions, we need to invest a lot, whereas the savings come from certain parts of the back-end infrastructure, which can be provided from scaling up our private cloud infrastructure. But in terms of internet endpoints, gateways, the overall telecom connections, etc., these usually are the points where we need to invest, and not save."

In almost all cases, respondents shared the view that higher *IT synergy savings*, led to correspondingly higher *overall synergy savings*. This finding was prominent across a majority of the IT integration projects -- where success or failure of IT integration, led to corresponding success or failure of the overall integration. Within the responses related to this theme, strong evidence was found in support of the following hypothesis - *(H1) Prioritization of IT during the due diligence phase, leads to higher IT synergy savings, which in turn leads to higher overall synergy savings.*

### 4.8 Theme 7: Impact of *integration schedule*, on the *overall synergy savings*

Speed in implementation, is essential to a successful post-merger integration. Fear and indecisiveness, can often be obstacles to rapid action. Early completion of integration projects, can mitigate risk and permit an earlier realization of merger benefits (Epstein, 2004). Below, are some of the respondents' views on this theme, based on their *lived experience*.

When asked, as to why a 6-month delay in the project didn't affect the integration savings, Respondent 2 replied -- "In data center migrations or in technology transformations, sometimes there are drivers based on schedule, and sometimes there are drivers based on cost and in realizing the synergies. For example, we were to acquire a company that was in a co-location data center, and there was a lease that was expiring, so if we didn't exit by a particular date, to renew the lease would've meant another two or three years at that location. That would be one situation. If we acquire another company, whose data center is within their office space and if we intend to keep the employees in that office space, and the schedule is not a critical factor in our success, we still realize the savings, but the cost element around rent, allows us a little bit of flexibility around the schedule. It is certainly nice to realize it sooner, but it is not a direct impact as the schedule gets extended."

When asked for his comments on his rating of '2' (did not meet) for *overall synergy savings*, Respondent 15 explained, "In the expected timeframe? No! All in all, maybe five years or ten years or after that, I don't know. We didn't expect that in the initial two-three years' timeframe. Certainly not! We were supposed to shut down a massive piece of infrastructure, and replace a legacy piece of infrastructure with this brand-new infrastructure. We were supposed to deliver new products, and we were supposed to shut down a number of products and replace them with this new technology. All this never happened. All this eventually happened, but ten years later."

Respondent 17, who was managing a 7-year transformational integration project, shared a different perspective on the topic of *integration schedule*. When asked about why he rated the project as being right on schedule despite the unusually long duration of the same, he replied, "Well, it's not too long, if you think about the amount of transition and asset transformation that has to take place. You're transforming many areas of your business, and then you're transitioning the existing into the new. You've got to do that smoothly because it impacts the money that you make every day. You're not putting your business on hold for a year. It's got to be planned, and the business units have different priorities."

A *schedule delay*, almost always, has a negative impact on the *synergy savings*, and a long delay significantly increases the project risks and the chances of merger failure. The window of opportunity to complete an integration and realize synergies, is small. If the firm does not capitalize its gains during this short window, it starts to increase its chances of failure, on account of duplicated costs and lack of cultural integration between the two teams, etc. There was substantial evidence of the impact of *schedule delay*, on the *overall synergy savings*. This was especially significant when the delay exceeded 18 months. Strong evidence was found in this theme, to support the following hypothesis - *(H4) In integration scenarios involving significant delays to the original schedule, the degree of delay has a negative relationship with overall synergy savings*.

### 4.9 Theme 8: Issues during IT integration

Prior research has shown, that a large number of mergers encounter various types of integration issues. Fairfield (1992) states that 50% of mergers fell short of pre-merger expectations. Firms achieved anticipated synergies in less than 30% of the mergers (Roehl-Anderson, 2013). Encountering issues during merger integration, is not unusual. Many of the respondents in this study, highlighted issues with IT integration. Some of their comments are given below.

Respondent 13 - "Basically, people didn't want to accept the changes. Everything was there, but nobody wanted it and, the mistake was that all this wasn't factored in. It shouldn't have come as a shock to people, but it did. So, the expectation was not set right. The processes that should have been created, were not created. Nobody was willing to acknowledge that the other side was not going to accept the changes. Later on, we realized that nobody wanted to use the new IT system, and we were now wondering how to function. Had we planned around that, it would have been much better."

Respondent 13 went on to add, "Everything was a total failure. None of the synergies worked out. The costs actually went up. The integration didn't happen, as per schedule. Whatever we had envisaged that we would gain in terms of cargo by integrating trade routes, didn't happen either. And, the price that was paid was too much."

Respondent 3 - “I think it was difficult to integrate their products because it was built to different standards, different technological platforms, etc. The way we dealt with it, was that we just kept them in parallel and at some point, we closed down one system and migrated the clients over to the better platform. From the client perspective, it was a campaign that probably took about six months, to go account by account, identify the largest exposures and deal with them.”

Respondent 14 - “On the technology side, I would say the biggest challenge in any merger integration is -- how to put the two systems together. If you keep both systems running, it can work for a while with probably less disruption, but you can’t get a consolidated view of what’s happening in the organization. And, in the long run, that cannot happen. Next, a decision has to be made, to integrate the two systems -- do you take one system out or do you basically go in for a totally brand-new system? Even if you decide to migrate into one system -- how do you do that, when the data fields and the data in there, are different? To me, those are the biggest challenges.”

Respondent 14 went on to add - “That work was challenging because the systems were different, the data fields were different, the information that was captured in one system was different from that of the other system and so on. As a result, there were more technical problems that the technical people had to deal with. This was not an easy task because they had to build a lot of stuff in-between, to connect the information. As I mentioned earlier, the nature of the business that both companies were into, was fairly different. So, the way information is captured, is also very different. For example, in

the consumer business, we capture every individual customer's details including date of birth, address, etc. But in a corporate business, they just capture the company's name, and that's it. When we had to transfer the system over, we realized that the other system couldn't capture 'name' or it could capture 'name' but not 'date of birth', etc. Those were the kind of challenges that we had to grapple with."

Respondent 9 - "They have very segmented-like silo technology, seven different timekeeping versions, five different LMS applications, etc. None of them are current and none of them are maintained. The data integrity and the systems are suspect, at best. They don't have a concept of scope project costs. Their idea of scope is -- "Tell me how much money I can have and then I'll let you know what I can do with it." They have no idea about how much things cost, and they don't do a good job of estimating. Part of the reason why there are so many segmented systems, is the consistent inability of the technology department to perform over the years, which in turn is part of the fracturing of technology support. They can't even state what the requirements are. So, I am not sure how they are going to save any money or turn anything off. It's kind of hard to say that we're going to merge these two systems, if one can't even tell the architecture of the current system and why things are done that way, even down to IT, which is one of the most mature organizations in a company. They can't provide process documentation for their project management system. Neither can they produce a process diagram on how projects work, through their own application. If they can't do that, and it is their most process-intensive application, how are they going to do that for anything else?"

Information Technology integration is cited as one of the top three causes of merger failure (Ghauri & Hassan, 2014). In the current study, the respondents' most common reasons for issues faced during IT integration, were the lack of planning and last-minute 'surprises' due to improper due diligence. This highlights the importance of proper planning and IT due diligence, during the pre-integration phase.

## 4.10 Summary

In this chapter, 8 (eight) themes emerging from the responses which were gathered during the in-depth interview sessions, were highlighted. Moderately strong to very strong evidence and support, was found for each of the hypotheses proposed in this study, based on the respondents' *lived experiences*.

Chapter 5 will cover the quantitative analysis, of the online survey results.

# CHAPTER 5: RESULTS AND FINDINGS - QUANTITATIVE ANALYSIS

## 5.1 Introduction

The variables used in this study, are discussed in sections 5.3 through 5.6. A Likert scale (1 - 7) was used to capture the responses in the online survey tool, with '1' being at the lowest end (negative connotation) of the scale, '7' at the highest end (positive connotation), and '4' at 'just met / achieved'. To improve the reliability of responses to specific variables that were prone to personal bias (e.g. *information intensity*), apart from the self-rated response, the same question was asked in multiple forms, e.g. using the percentage value of overall budget allocation. The responses to each of the multiple questions, were then normalized to a Likert scale output. The *median* of these responses, was used as the operational value, as *median* provides a better representation for *ordinal* data. While *mean*, *median* and *mode* may be used as a measure of central tendency for *interval* data; *median* and *mode* are more commonly used for *ordinal* data. Between *median* and *mode*, *median* provides more information based on the ranking of data, hence it was chosen as the measure of central tendency for this study.

## 5.2 Online survey questionnaire

The following questionnaire was used, in the online survey tool.

**What firms fail to account for: Role of Information Technology (IT) in related diversification.**
For any questions/clarifications regarding this study, please contact the Principal Investigator, Sandesh Raikar, at the email address [redacted] and/or mobile number [redacted].

If you have any questions or concerns regarding your rights as a participant in this research study and you wish to contact someone unaffiliated with the research team, please contact the SMU Institutional Review Board Secretariat at irb@smu.edu.sg or +(65) 6828 1925. When contacting SMU IRB, please provide the title of the Research Study and the name of the Principal Investigator, or quote the IRB approval number IRB-16-067-A070(816).

Note: In order to maintain full confidentiality of the respondents and the firms involved, all responses will be anonymized and results will be presented in an aggregate form.

1. **Please list the most significant merger or integration effort you were involved in, and during which year(s). Your answers to the rest of the questions in this survey, would be with reference to this integration effort. Any reference to 'firm' in this survey, will mean the combined entity, post integration.**

2. **What was the key reason for integration (in order of priority)?**

| | Priority 1 | Priority 2 | Priority 3 | Priority 4 | Priority 5 |
|---|---|---|---|---|---|
| Gain access to new markets | | | | | |
| Increase market share | | | | | |
| Acquire new technology or specialized resources | | | | | |
| Improve free cash flow through synergy savings | | | | | |
| Eliminate competition | | | | | |
| Other reason 1 | | | | | |
| Other reason 2 | | | | | |
| Other reason 3 | | | | | |
| Other reason 4 | | | | | |
| Other reason 5 | | | | | |

3. **Please elaborate, if you answered 'other reason(s)' above.**

4. **How successful was the merged entity, in achieving the 'Priority 1' objective for the integration? 4 - met the set objective.**

1 2 3 4 5 6 7

underachieved far exceeded

5. **How successful was the merged entity, in achieving the 'Priority 2' objective for the integration? 4 - met the set objective.**

1 2 3 4 5 6 7

underachieved far exceeded

6. **How successful was the merged entity, in achieving the 'Priority 3' objective for the integration? 4 - met the set objective.**

1 2 3 4 5 6 7

underachieved far exceeded

7. **How successful was the merged entity, in achieving the 'Priority 4' objective for the integration? 4 - met the set objective.**

1 2 3 4 5 6 7

underachieved far exceeded

8. **How successful was the merged entity, in achieving the 'Priority 5' objective for the integration? 4 - met the set objective.**

1 2 3 4 5 6 7

underachieved far exceeded

9. **How important was the 'Overall synergy savings', as a consideration for the integration?**

1 2 3 4 5 6 7

Not important Very important

10. **How important was the 'IT synergy savings', as a consideration for the integration?**

1 2 3 4 5 6 7

Not important Very important

11. **How 'information-intensive' is your firm? Information intensity is a measure of dependency of the overall business processes on technology/IT.**

1 2 3 4 5 6 7

Low Intense

12. **Please provide a short explanation for the rating you assigned in the question above.**

13. **What percentage of the firm's overall revenue is generated by electronic means (no sale of physical commodity)?**

14. **On a year-to-year basis, is this percentage going up or down? What is the average annual percentage increase/decrease?**

15. **What percentage of your overall budget is allocated for IT?**

16. **On a year-to-year basis, is this percentage going up or down? What is the average annual percentage increase/decrease?**

17. **What percentage of the overall integration budget was allocated for the IT integration process?**

18. **Do you think the budget allocated for the IT integration process, was sufficient to meet the IT integration objectives? 4 - just enough.**

1 2 3 4 5 6 7

Low High

19. **Looking back, do you think the firm should have allocated more/less budget for the overall integration activity? If yes, what percentage increase/decrease would you allocate?**

20. **What was the 'overall annual synergy savings' (in US$), post integration?**

21. **Typically, what annual figure (in US$) would you consider as an acceptable level of savings, for an integration effort of this size?**

22. **Did the firm meet its 'overall integration savings' target? 4 - just met.**

1 2 3 4 5 6 7

underachieved overachieved

23. **If the firm exceeded the 'overall integration savings', what factors contributed most to the additional savings? List the factors in order of priority.**

24. **If the firm failed to meet the expected 'overall integration savings', what were the reasons for this underachievement? List the factors in order of priority.**

25. **What percentage of the 'overall integration savings' was attributed to 'IT integration savings'?**

26. **Typically, what percentage (as compared to the 'overall synergy savings') would you consider as an acceptable level of 'IT synergy savings' for an integration effort of this size?**

27. **Did the firm meet its 'IT integration savings' target? 4 - just met.**

1 2 3 4 5 6 7

underachieved overachieved

28. **If the firm overachieved its 'IT integration savings', what factors contributed most to the additional savings? List the factors in order of priority.**

29. **If the firm failed to meet the expected 'IT integration savings', what were the reasons for this underachievement? List the factors in order of priority.**

30. **What was the original planned schedule (in months) for the overall integration process?**

31. **How many months did it actually take, to complete the integration process?**

32. **Was the integration completed in time, behind schedule or ahead of schedule? 4 - on schedule.**

1 2 3 4 5 6 7

| behind schedule | ahead of schedule |
|---|---|

33. **If behind schedule, what were the key factors that led to this delay? List in order of priority.**

34. **If completed ahead of schedule, what were the factors that contributed to the acceleration of the integration process? List the factors in order of priority.**

35. **If the integration process was completed ahead of schedule, was there any increase in synergy savings that could be attributed to the acceleration? If yes, how much was it in terms of percentage (and in US$)?**

36. **What is the critical number of IT vendors, that you would expect for a firm of this size, post integration?**

37. **Approximately, how many critical IT vendors does the firm have at the moment?**

38. **Post integration, what is the percentage increase or decrease in critical IT vendors of the firm?**

39. **What are the top 5 'technology' priorities for the firm?**

| | Priority 1 | Priority 2 | Priority 3 | Priority 4 | Priority 5 |
|---|---|---|---|---|---|
| Improved agility and shorter time to market | | | | | |
| Improved product reliability and robustness | | | | | |
| Make IT simpler, by reducing complexity | | | | | |
| Improve customer experience (digital strategy) | | | | | |
| Use technology for disruptive innovation | | | | | |
| Reduce IT budget | | | | | |
| Rationalization of IT functions/Infrastructure (e.g. IT Helpdesk, Support functions, data centers, etc.) | | | | | |
| Improve IT security | | | | | |
| Improve efficiency by adopting newer technologies like Cloud Computing, Analytics and Big Data | | | | | |
| Acquire Specialist skillset to gain competitive advantage | | | | | |
| Improve culture and work life balance for staff (e.g. adoption of mobile solutions, and work-from-home options) | | | | | |
| Other reason 1 | | | | | |
| Other reason 2 | | | | | |
| Other reason 3 | | | | | |
| Other reason 4 | | | | | |
| Other reason 5 | | | | | |

40. **Please elaborate, if you answered 'other reason(s)' above.**

41. **How successful was the merged entity in achieving the 'Priority 1' technology objective of the firm? 4 - met the set objective.**

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
|---|---|---|---|---|---|---|---|---|
| underachieved | | | | | | | | far exceeded |

42. **How successful was the merged entity in achieving the 'Priority 2' technology objective of the firm? 4 - met the set objective.**

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
|---|---|---|---|---|---|---|---|---|
| underachieved | | | | | | | | far exceeded |

43. **How successful was the merged entity in achieving the 'Priority 3' technology objective of the firm? 4 - met the set objective.**

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
|---|---|---|---|---|---|---|---|---|
| underachieved | | | | | | | | far exceeded |

44. **How successful was the merged entity in achieving the 'Priority 4' technology objective of the firm? 4 - met the set objective.**

1 2 3 4 5 6 7

underachieved far exceeded

**45. How successful was the merged entity in achieving the 'Priority 5' technology objective of the firm? 4 - met the set objective.**

1 2 3 4 5 6 7

underachieved far exceeded

**46. In your opinion, what are the top 3 considerations, for ensuring a successful merger outcome?**

**47. In your opinion, what are the top 3 pitfalls to avoid, during an integration activity?**

## 5.3 Dependent variables

The following three dependent variables were factored into the study.

*Overall Integration Synergy Savings (OVERALLSAV$_T$)*: The Likert scale (1 - underachieved, 7 - overachieved, 4 - just met) was used, to capture responses to this variable. The question asked in the online survey tool, was -- 'Did the firm meet its *overall integration savings* target?' Of the four broad objectives of any M&A process (strategic, operational, organizational and technology alignment), technology alignment is probably the most minor consideration for the acquiring company's CEO and the board of directors. It probably comes in as an afterthought, once the deal is signed. Even though technology alignment may not be a high priority for many mergers, it is indeed the longest, most complex, and potentially the most expensive component of the integration process. As seen in chapter 2, there are various lenses to measure the success of a merger activity -- an estimated *synergy savings* from a successful integration of the merged entities, being one of them. In this study, *overall integration synergy savings (OVERALLSAV)* was chosen, to measure the success of the

merger effort, as IT integration has a large role to play in this process. In fact, Polites and Karahanna (2012) suggest that the IT function is subject to some form of an integration effort in 89% of merger and acquisition cases.

*IT integration budget ($ITBUD_{T-1}$):* Note the subscript ($_{T-1}$), indicating this variable as a point-in-time activity, happening at some point prior to achieving $OVERALLSAV_T$. *IT integration budget allocation*, usually happens after the post-merger due diligence has been completed and the integration plan has been drawn up. The Likert scale (1 - low, 7 - high, 4 - just enough) was used to capture the responses to this variable. The question presented in the online survey tool, was -- 'Do you think the budget allocated for the IT integration process, was sufficient to meet the IT integration objectives?'

*(Post-merger) Technology Effectiveness and Efficiency ($TECHE\&E_T$):* A prepopulated list of 11 *technology priorities*, was provided in the survey. The respondents were asked to choose the top 5 *technology priorities* of the merged entity, from the prepopulated list. Alternatively, they could indicate up to 5 *technology priorities* of their choice, and rate them. The respondents were then asked to rate the achievement of these priorities on a Likert scale (1 - underachieved, 7 - far exceeded, 4 - just met). The variable was operationalized, by using the *median* of the scores for the top 5 *technology priorities*. Two questions were asked in the online survey tool: (1) What are the top 5 *technology* priorities of the firm? (2) How successful was the merged entity, in achieving each of the *technology priorities* of the firm?

## 5.4 Mediating variable

*IT Integration Synergy Savings ($ITSAV_T$)*: The Likert scale (1 - underachieved, 7 - overachieved, 4 - just met) was used, to capture the responses to this variable. The question asked in the online survey tool, was -- 'Did the firm meet its *IT integration savings* target?' *IT integration synergy savings ($ITSAV_T$)* contribute to the *overall integration synergy savings ($OVERALLSAV_T$), and the extent of $ITSAV_T$* determines the significance level of its contribution to *$OVERALLSAV_T$*.

## 5.5 Independent variables

The following two independent variables were identified.

*IT Prioritization ($ITPRIORI_{T-2}$)* during the planning stage: Note the subscript ($_{T-2}$), indicating that this variable is at play, during the planning phase. The Likert scale (1 - low, 7 - high, 4 - just enough) was used to capture the responses to this variable. The question presented in the online survey tool, was -- 'How important was *IT synergy savings*, as a consideration for the integration?'

*Integration Schedule ($INTSCH_T$):* A self-assigned score on the Likert scale (1 - behind schedule, 7 - ahead of schedule, 4 - on schedule), was used to capture the responses to this variable. The question presented in the online survey tool, was -- 'Was the integration completed on time, behind schedule or ahead of schedule?' Please note the difference between the two variables -- *integration schedule ($INTSCH_T$)* and

*integration schedule delay ($INTDELAY_T$),* which we will discuss in the next section. While a higher score (>=4) has a positive connotation for *integration schedule ($INTSCH_T$),* a higher (>=4) score for *integration schedule delay ($INTDELAY_T$),* has a negative connotation.

## 5.6 Moderating variables

Two moderating variables have been factored into the study.

*Information intensity of the firm (INFOINTEN):* In Chapter 2, we defined *information intensity* as the *value of information* (VI) within the firm, normalized by either the firm's profits, revenue or overall assets. A business is *information-intensive* to the degree that its products and operations are based on the information collected and processed as part of exchanges along the value-added chain (Glazer, 1991). Due to the possibility of a significant personal bias attached with a self-assigned score for this variable, the below additional steps were followed to operationalize this variable, and improve its reliability.

- *Step 1:* The respondents were asked to provide a self-assigned score of 1 - 7 (1 - Low, 7 - Intense), to the following question in the online survey tool -- 'How *information-intensive* is your firm? *Information intensity* is a measure of dependency of the overall business processes, on technology / IT'.

- *Step 2:* The following two questions were included in the online survey tool, to improve the reliability of self-assigned scores in step 1: (1) What *percentage* of the firm's overall revenue, is generated by electronic means (no sale of physical commodity)? (2) What *percentage* of the overall annual budget, is allocated for IT?

- *Step 3:* The percentage scores for the two questions in *step 2,* were normalized to the '1 - 7' score on the Likert scale, by multiplying the *percentage* figure with 7. This figure was rounded off, to the nearest integer.

- *Step 4:* The *median* of the self-assigned score in step 1 and the two normalized scores in step 3, was calculated.

- *Step 5:* Firms with scores of '*1 - 3'* were classified as *Low information-intensive* firms, while firms with scores of '4 - 7' were classified as *High information-intensive* firms.

*Integration schedule delay ($INTDELAY_T$):* This variable indicates the degree of delay or advancement, in months, from the original planned *integration schedule ($INTSCH_T$)*. The online survey tool included two questions on *integration schedule:* (1) What was the original planned schedule (in months), for the overall integration process? (2) How many months did it actually take, to complete the integration process? The difference between the two [(2) - (1)], provides the information needed for $INTDELAY_T$ for each integration project, and was measured in terms of months of delay / advancement, for the integration process.

## 5.7 Respondent - Industry and geography breakdown

A mix of senior business executives and M&A practitioners with relevant immediate and past M&A experience, were invited to participate in the study. This experienced group of senior executives, with a diverse geographical and industry background, was purposefully chosen, to increase the *external validity* and *face validity* of the study. The respondents' details, are presented in Table 3.

20 respondents participated in the online survey. 15 of them, also had an in-depth interview session with the researcher. Each interview session lasted between 35 to 50 minutes. The breakdown of the respondent population by industry and by the geography in which the merger took place, is captured in Chart 1 and Chart 2.

Out of the 20 merger integrations that were included in the study, 18 integrations pertained to mergers or acquisitions of two separate firms, whereas the remaining 2 (two) cases, involved IT integration of large divisions within the same company.

| *Survey / Interview respondent* | *Job title* | *Industry of the merged entity* |
|---|---|---|
| Respondent 1* | Regional Head of Technology | Banking Financial Services |
| Respondent 2* | MD | Mass Media |
| Respondent 3* | SVP | Mass Media |
| Respondent 4 | CEO | Mass Media |
| Respondent 5* | Director | IT Services |
| Respondent 6 | Managing Partner | Market Research |
| Respondent 7* | Director | Financial Services |
| Respondent 8* | Executive PM (M&A) | Semiconductor |
| Respondent 9* | Director | Public Transportation |

| | | |
|---|---|---|
| Respondent 10 | MD | News & Media |
| Respondent 11 | Undisclosed | Banking Financial Services |
| Respondent 12* | Group MD | Banking Financial Services |
| Respondent 13* | Regional MD | Container Shipping |
| Respondent 14* | SVP | Insurance |
| Respondent 15* | President | Financial Services |
| Respondent 16* | CEO | IT Services |
| Respondent 17* | Consulting Partner | Mining |
| Respondent 18* | Program Director | Insurance |
| Respondent 19* | GM | Banking Financial Services |
| Respondent 20 | Group CIO | Real Estate |

*Table 3: Respondent list*

*Note 1: All 20 respondents completed the online survey.*
*Note 2: * - indicates respondents who also participated in the individual in-depth interview session.*
*Note 3: MD - Managing Director, SVP - Senior Vice President, CEO - Chief Executive Officer, CIO - Chief Information Officer, PM - Program Manager, M&A - Merger & Integration, GM - General Manager.*
*Note 3: Some titles have been shortened to conceal identity of the respondents.*

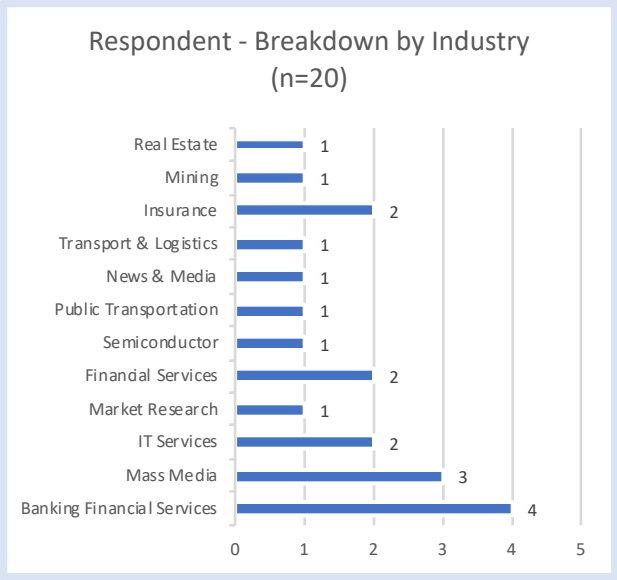



*Chart 1: Respondent breakdown by industry*

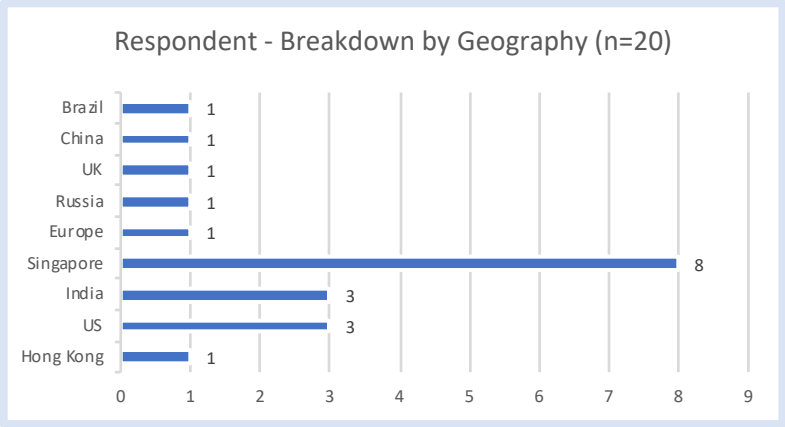



*Chart 2: Respondent breakdown by geography*

## 5.8 Summary of findings: Main effects

***Proposed Hypothesis 1 (H1):*** *Prioritization of IT integration during the due diligence phase, leads to higher IT synergy savings, which in turn leads to higher overall synergy savings. (H1): $ITPRIORI_{T-2} \propto ITSAV_T \propto OVERALLSAV_T$.*

The data points for $OVERALLSAV_T$ (dependent variable) and $ITSAV_T$ (mediating variable), were tabulated from left to right for ascending order of $ITPRIORI_{T-2}$ (independent variable). See Table 4 below for the data points.

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $OVERALLSAV_T$ *(dependent variable)* | 1 | 1 | 4 | 1 | 5 | 4 | 1 | 5 | 4 | 5 | 5 | 5 | 6 | 5 | 3 | 4 | 5 | 2 | 4 | 5 |
| $ITSAV_T$ *(mediating variable)* | 1 | 1 | 4 | 1 | 5 | 4 | 1 | 5 | 4 | 5 | 5 | 4 | 5 | 6 | 4 | 4 | 5 | 2 | 6 | 5 |
| $ITPRIORI_{T-2}$ *(independent variable)* | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 4 | 4 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 |
| | **L** | **L** | **L** | **L** | **L** | **L** | **L** | **H** | **H** | **H** | **H** | **H** | **H** | **H** | **H** | **H** | **H** | **H** | **H** | **H** |

*Table 4: Data points (H1): $ITPRIORI_{T-2} \propto ITSAV_T \propto OVERALLSAV_T$*

The results were tabulated (Table 5) for a percentage count of instances where dependent, mediating and independent variables move in the same direction. A *median* score was added for each of the three variables.

| | *Variable type* | *Count* | *% count where 'dependent, mediating and independent variables are in the same direction'* | *Median score* |
|---|---|---|---|---|
| *$OVERALLSAV_T$ >= 4, when $ITPRIORI_{T-2}$ >= 4 [and] $OVERALLSAV_T$ < 4, when $ITPRIORI_{T-2}$ < 4* | Dependent | 15 | 75% | 4 |
| *$ITSAV_T$ >= 4, when $ITPRIORI_{T-2}$ >= 4 [and] $OVERALLSAV_T$ < 4, when $ITPRIORI_{T-2}$ < 4* | Mediating | 16 | 80% | 4 |
| *$ITPRIORI_{T-2}$* | Independent | 20 | - | 5 |

*Table 5: Tabulated results (H1): $ITPRIORI_{T-2} \propto ITSAV_T \propto OVERALLSAV_T$*

A scatter plot (see Chart 3) was generated, to provide a graphical representation, and a linear trend line was added for the values plotted.

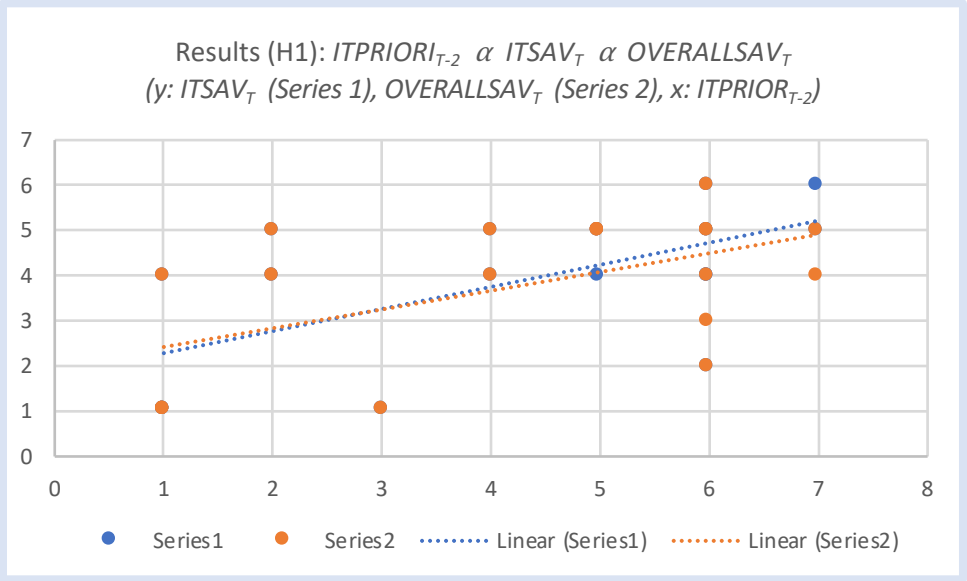



*Chart 3: Graphical results (H1): ITPRIORI$_{T-2}$ ∝ ITSAV$_T$ ∝ OVERALLSAV$_T$*

*Observations:*

- In 19 out of 20 (95%) cases, there is a positive relationship between *ITSAV$_T$ and OVERALLSAV$_T$* (both move in the same direction).
- In 16 out of 20 (80%) cases, there is a positive relationship between *ITPRIORI$_{T-2}$ and ITSAV$_T$* (both move in the same direction).
- In 15 out of 20 (75%) cases, there is a positive relationship between *ITPRIORI$_{T-2}$* and *OVERALLSAV$_T$* (both move in the same direction).
- Both *OVERALLSAV$_T$ (median=4) and ITSAV$_T$ (median=4),* have the same *median* score of 4 (four), indicating close positive relationship between the variables, across the entire *range of ITPRIORI$_{T-2}$ (median=5).*
- Intersection point indicates that *ITSAV$_T$ starts to outrun OVERALLSAV$_T$, as ITPRIORI$_{T-2}$ starts to go beyond the value of 3 (three), although the rate of increase is not significant.*

*Conclusion: Hypothesis H1 is strongly supported, across the entire spectrum of* $ITPRIORI_{T-2}$.

***Proposed Hypothesis 2 (H2):*** *Prioritization of IT integration during the due diligence phase, leads to achievement of the technology priorities of the firm.*

*(H2):* $ITPRIORI_{T-2} \propto TECHE\&E$.

The data points for *TECHE&E* (dependent variable) and $ITPRIORI_{T-2}$ (independent variable), were tabulated in a descending order from left to right for the independent variable $ITPRIORI_{T-2}$ (see Table 6 below).

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *TECHE&E (dependent variable)* | 5 | 4 | 6 | 5 | 6 | 7 | 5 | 5 | 5 | 5 | 3 | 5 | 4 | 4 | 4 | 3 | 4 | 1 | 1 | 3 |
| $ITPRIORI_{T-2}$ *(independent Variable)* | 7 | 7 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 5 | 5 | 4 | 4 | 3 | 2 | 2 | 1 | 1 | 1 | 1 |

*Table 6: Data points (H2):* $ITPRIORI_{T-2} \propto TECHE\&E$

The results were tabulated (see Table 7) for a percentage count of instances where dependent and independent variables move in the same direction, for two conditions viz. $ITPRIORI_{T-2} >= 4$, and $ITPRIORI_{T-2} < 4$. *Median* score was added for each of the four rows.

| | *Variable type* | *Count* | *% count where 'dependent & independent variables are in the same direction'* | *Median score* |
|---|---|---|---|---|
| *TECHE&E >= 4, when ITPRIORI$_{T-2}$ >= 4* | Dependent | 12 | 92% | 5 |
| *ITPRIORI$_{T-2}$ >= 4* | Independent | 13 | - | 6 |
| *TECHE&E < 4, when ITPRIORI$_{T-2}$ < 4* | Dependent | 4 | 57% | 3 |
| *ITPRIORI$_{T-2}$ < 4* | Independent | 7 | - | 1 |

*Table 7: Tabulated results (H2): ITPRIORI$_{T-2}$ ∝ TECHE&E*

A scatter plot (see Chart 4) was used to graphically represent the survey responses, and a linear trend line was added to the values plotted.

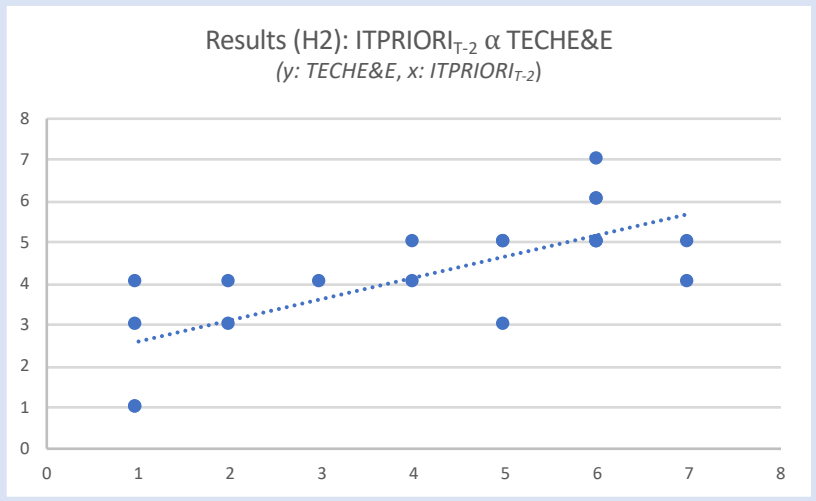



*Chart 4:Graphical results (H2): ITPRIORI$_{T-2}$ ∝ TECHE&E*

*Observations:*

- *When* $ITPRIORI_{T-2}$ >= 4 (*n=13, median=6*) - 12 out of 13 respondents (92%), noted a corresponding *TECHE&E* >= 4 (*n=12, median=5*).
- *When* $ITPRIORI_{T-2}$ < 4 (*n=7, median=1*) - 4 out of 7 respondents (57%), noted a corresponding *TECHE&E* < 4 (*n=4, median=3*).
- In 16 out of 20 (80%) cases, there is a positive relationship between $ITPRIORI_{T-2}$ and *TECHE&E* (both in the same direction).

*Conclusion: Hypothesis H2 is fairly strongly supported. The positive relationship between* $ITPRIORI_{T-2}$ *and TECHE&E is especially significant, when* $ITPRIORI_{T-2}$ is high (>= 4).

## 5.9 Summary of findings: Interaction effects

***Proposed Hypothesis 3 (H3):*** *Prioritization of IT during the due diligence phase, has a positive relationship with IT integration budget. Information Intensity acts a moderating variable.*

*(H3):* $ITPRIORI_{T-2} \propto ITBUD_{T-1}$*, (INFOINTEN - moderating variable)*

The data points for $ITBUD_{T-1}$ (dependent variable), $ITPRIORI_{T-2}$ (independent Variable) and *INFOINTEN* (moderating variable) were tabulated in an ascending order from left to right, for moderating variable *INFOINTEN* (see Table 8 below).

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *$ITBUD_{T-1}$ (dependent variable)* | 2 | 6 | 4 | 3 | 6 | 2 | 6 | 6 | 6 | 5 | 4 | 3 | 4 | 4 | 3 | 4 | 3 | 5 | 5 | 3 |
| *$ITPRIORI_{T-2}$ (independent variable)* | 1 | 4 | 4 | 6 | 7 | 1 | 7 | 3 | 5 | 2 | 2 | 5 | 6 | 6 | 6 | 1 | 1 | 5 | 6 | 6 |
| *INFOINTEN (moderating variable)* | 0 | 0 | 1 | 1 | 1 | 3 | 4 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 |
| | **L** | **L** | **L** | **L** | **L** | **L** | **H** | **H** | **H** | **H** | **H** | **H** | **H** | **H** | **H** | **H** | **H** | **H** | **H** | **H** |

*Table 8: Data points (H3): $ITPRIORI_{T-2} \propto ITBUD_{T-1}$ (INFOINTEN moderator)*

| *Moderating variable* | *Primary variables* | *Variable type* | *Count* | *% count where 'dependent & independent variables are in the same direction'* | *Median score* |
|---|---|---|---|---|---|
| *INFOINTEN < 4* | *$ITBUD_{T-1}$ < 4, when $ITPRIORI_{T-2}$ < 4* | Dependent | 2 | 100% | 2 |
| | *$ITPRIORI_{T-2}$ < 4* | Independent | 2 | - | 1 |
| | *ITBUDT-1 >= 4, when $ITPRIORI_{T-2}$ >= 4* | Dependent | 3 | 75% | 5 |
| | *$ITPRIORI_{T-2}$ >= 4* | Independent | 4 | - | 5 |
| *INFOINTEN >= 4* | *$ITBUD_{T-1}$ < 4, when $ITPRIORI_{T-2}$ < 4* | Dependent | 1 | 20% | 4 |
| | *$ITPRIORI_{T-2}$ < 4* | Independent | 5 | - | 2 |
| | *ITBUDT-1 >= 4, when $ITPRIORI_{T-2}$ >= 4* | Dependent | 6 | 67% | 4 |
| | *$ITPRIORI_{T-2}$ >= 4* | Independent | 9 | - | 6 |

*Table 9: Tabulated results (H3): $ITPRIORI_{T-2} \propto ITBUD_{T-1}$ (INFOINTEN moderator)*

Next, the data points from Table 8 were categorized into Table 9 for the two levels of *INFOINTEN* (LOW and HIGH), and the interaction between $ITBUD_{T-1}$ and $ITPRIORI_{T-2}$ was studied, under these two scenarios.

A scatter plot (see Chart 5) was used, to graphically represent the survey responses. The entire sample of 20 responses for $ITBUD_{T-1}$, was split into two series. Series 1 corresponds with *LOW INFOINTEN* (< 4), while series 2 corresponds with *HIGH INFOINTEN* (>= 4). A linear trend line was added to both the series.

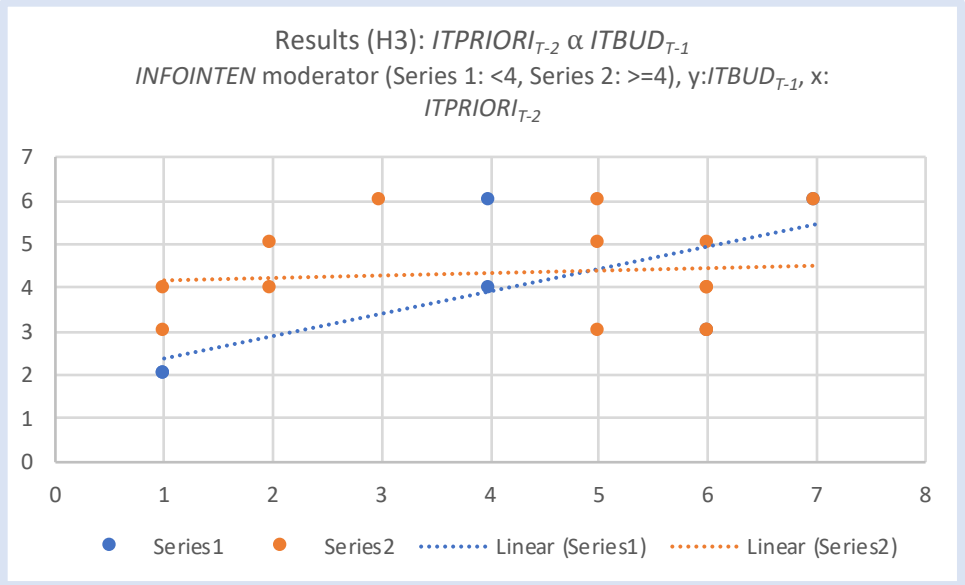



*Chart 5: Graphical results (H3): $ITPRIORI_{T-2} \propto ITBUD_{T-1}$ (INFOINTEN - Moderator)*

*Observations:*

- *For LOW INFOINTEN: When* $ITPRIORI_{T-2} < 4$ (*n=2, median=1*), in both cases (100%), $ITBUD_{T-1}$ (*n=2, median=2*), was also < 4.

- *For LOW INFOINTEN: When $ITPRIORI_{T-2}$ >= 4 (n=4, median=5)*, in 3 out of 4 cases (75%), *$ITBUD_{T-1}$ (n=3, median=5)*, was also >= 4.
- As such, for *LOW INFOINTEN: Overall, in 5 out of 6 cases (83%), $ITPRIORI_{T-2}$ demonstrates a strong relationship with $ITBUD_{T-1}$.*
- *However, For HIGH INFOINTEN: $ITPRIORI_{T-2}$ demonstrates a positive relationship with $ITBUD_{T-1}$ in only 7 of the 14 cases (50%) overall.*

*Conclusion: Hypothesis H3 is strongly supported. The effect of the moderating variable INFOINTEN, is clearly visible. Under conditions of LOW INFOINTEN (values < 4), the hypothesis holds strong (83% of the dependent variable, is moving in the same direction as the independent variable), however the relationship between the independent and dependent variables becomes much weaker under conditions of HIGH INFOINTEN (values >= 4), where only 50% of the of dependent variable, is moving in the same direction as the independent variable. Also, the median scores of the dependent and independent variables, are in closer proximity to each other, under conditions of LOW INFOINTEN as compared to conditions of HIGH INFOINTEN.*

***Proposed Hypothesis (H4):*** *Meeting or exceeding the planned integration schedule, leads to higher overall integration savings. This relationship is moderated by the degree of schedule delay. In integration scenarios involving significant delays to the original schedule, the degree of delay has a negative relationship with the overall synergy savings.*

*(H4): $INTSCH_T \propto OVERALLSAV_T$, ($INTDELAY_T$ - moderating variable)*

First, the data points for $OVERALLSAV_T$ (dependent variable), $INTSCH_T$ (independent variable) and $INTDELAY_T$ (moderating variable) were tabulated in a descending order from left to right for moderating variable $INTDELAY_T$ (see Table 10).

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *$OVERALLSAV_T$ (dependent variable)* | 1 | 3 | 1 | 2 | 1 | 5 | 4 | 5 | 4 | 4 | 5 | 5 | 5 | 1 | 4 | 4 | 6 | 5 | 5 | 5 |
| *$INTSCH_T$ (independent variable)* | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 3 | 3 | 1 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| *$INTDELAY_T$ (moderating variable)* | 72 | 36 | 24 | 24 | 18 | 10 | 6 | 6 | 6 | 6 | 4 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | -2 |
| | **H** | **H** | **H** | **H** | **H** | **M** | **M** | **M** | **M** | **M** | **L** | **L** | **L** | **L** | **L** | **L** | **L** | **L** | **L** | **L** |

*Table 10: Data points (H4): $INTSCH_T \propto OVERALLSAV_T$ ($INTDELAY_T$ - Moderator)*

| *Moderating variable* | *'Average ($INTDELAY_T$)' in months* | *Primary variables* | *Variable type* | *Count* | *% count where 'dependent & independent variables are in the same direction'* | *Median score* |
|---|---|---|---|---|---|---|
| *$INTDELAY_T$ > 18 months (series 1- H)* | *35* | *$OVERALLSAV_T$ < 4, when $INTSCH_T$ < 4* | Dependent | 5 | 100% | 1 |
| | | *$INTSCH_T$ < 4* | Independent | 5 | - | 1 |
| *$INTDELAY_T$ 6-18 months (series 2- M)* | *7* | *$OVERALLSAV_T$ < 4, when $INTSCH_T$ < 4* | Dependent | 0 | 0% | 4 |
| | | *$INTSCH_T$ < 4* | Independent | 5 | - | 3 |
| *$INTDELAY_T$ < 6 months (series 3- L)* | *1* | *$OVERALLSAV_T$ >= 4, when $INTSCH_T$ >= 4* | Dependent | 9 | 90% | 5 |
| | | *$INTSCH_T$ >= 4* | Independent | 10 | - | 4 |

*Table 11: Tabulated results (H4): $INTSCH_T \propto OVERALLSAV_T$ ($INTDELAY_T$ - Moderator)*

Next, the data points from Table 10 were categorized into Table 11 for the three levels of $INTDELAY_T$ (HIGH, MEDIUM and LOW), and the interaction between $OVERALLSAV_T$ and $INTSCH_T$ was studied for these three conditions.

A scatter plot (see Chart 6) was used, to graphically represent the survey responses. The entire sample of 20 responses for $OVERALLSAV_T$, was split into three separate series, each corresponding to differing levels of $INTDELAY_T$. Series 1 corresponded to *High* (>18 months delay in planned *integration schedule*), series 2 corresponded to *Medium* (6-18 months delay in planned *integration schedule*) and series 3 was for *Low* (<6 months of delay in planned *integration schedule*) levels of moderating variable $INTDELAY_T$. A linear trend line was added, to all the three series.

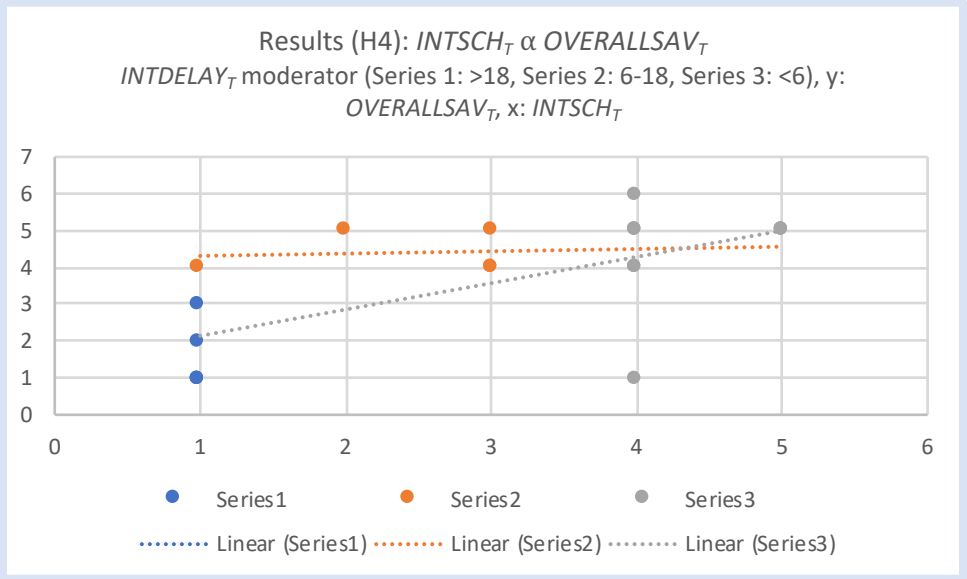



*Chart 6: Graphical results (H4): $INTSCH_T \propto OVERALLSAV_T$ ($INTDELAY_T$ - Moderator)*

*Observations:*

- *For HIGH $INTDELAY_T$: When $INTSCH_T$* < 4 (*n=5, median=1*), in all 5 cases (100%), *$OVERALLSAV_T$* (*n=5, median=1*), was also <4. In other words, 100% of the dependent variable is moving in the same direction as the independent variable.
- *Similarly, for LOW $INTDELAY_T$: When $INTSCH_T$* >= 4 (*n=10, median=4*), in all 9 out of 10 cases (90%), *$OVERALLSAV_T$* (*n=9, median=5*) was also >= 4. In other words, 90% of the dependent variable is moving in the same direction as the independent variable.
- *However, for MEDIUM $INTDELAY_T$: When $INTSCH_T$* < 4 (*n=5, median=3*), in all 5 cases, *$OVERALLSAV_T$* (*n=5, median=4*), the value was >= 4. In this case, 0% of the dependent variable is moving in the same direction as the independent variable.

*Conclusion: Hypothesis H4 is supported, under conditions of LOW (delay <6 months) and HIGH (delay >18 months) integration schedule delay $INTDELAY_T$. Put in a different way, when $INTSCH_T$ is either met or exceeded, this leads to an overall increase in $OVERALLSAV_T$. Similarly, when $INTSCH_T$ is delayed beyond 18 months (high $INTDELAY_T$), this leads to a corresponding decrease in $OVERALLSAV_T$. However, under conditions of MEDIUM $INTDELAY_T$ (6-18 months of delay), $OVERALLSAV_T$ is indifferent to changes in $INTSCH_T$.*

To summarize our overall findings, we found support for all the four hypotheses. The role of the two moderating variables under study, was also evident in the two interaction effects studied in hypothesis 3 (H3) and hypothesis 4 (H4).

## 5.10 Discussion - Main effects hypotheses

*(H1) Prioritization of IT during the due diligence phase leads to higher IT synergy savings, which in turn leads to higher overall synergy savings.*

The results of the online survey indicate that in 19 out of 20 cases (95%), *IT savings* and *overall savings* move in the same direction. Also, both have the same *median* score of 4 (n=20).

With IT continuing to make inroads in all types of industries, the result does not come as a surprise. As discussed in Chapter 2, IT integration is probably the most complicated, expensive and time-consuming part, of the overall integration process. As such, a good outcome on the IT integration front will lead to a good result of the overall merger integration.

*(H2) Prioritization of IT during the due diligence phase is positively related to the achievement of the technology priorities of the firm.*

16 out of 20 responses (80%), indicate *IT prioritization* (*median=5, n=20*) to be positively related to the achievement of the *technology priorities* of the firm

(*median=4.5, n=20*). This relationship is seen, irrespective of the level of *information intensity* of the firm or the time taken to complete the integration process.

This is also one of the themes that emerged strongly, during the in-depth interviews. Out of the ten respondents who were asked this question, only two admitted to being able to carry out IT due diligence during the pre-merger stage. Most of the respondents mentioned that they are not doing enough, to get technology included in the decision-making process at the pre-merger stage, nor are they putting in enough effort during the technology integration planning. Almost all respondents who experienced a poor outcome on the technology integration of the merger, were of the opinion that a more exhaustive IT due diligence (either pre-merger and / or post-merger), would have led to a more successful outcome of the *technology priorities* of the merged entity.

## 5.11 Discussion - Interaction effect hypotheses & moderating variables

*(H3) Prioritization of IT during the due diligence phase has a strong positive relationship with IT integration budget. Information Intensity acts a moderating variable.*

This hypothesis was supported. We found a positive relationship between *IT prioritization* and *IT integration budget* for 83% of the cases when the *information intensity* of the firm was low, and for only 50% of the cases when the *information intensity* of the firm was high. Hence, the result for this hypothesis is amplified, when the *information intensity* of the firm is low (< 4).

The results for (H3) are a little counter-intuitive, as we would generally expect higher *information-intensive* firms to have a higher *IT budget allocation*. One of the possible explanations could be the differing benchmarks for allocation of IT budget in different industries. In *high information-intensive* industries, IT is a mature process and stakeholder expectations are higher when it comes to IT merger integration. Here the process for *IT budget allocation* is well-documented, and there are several past cases to refer to, when making IT budgeting decisions. However, in *low information-intensive* firms, the IT process is not as mature. In these industries, the influence and impact of a more dynamic CIO / CTO or IT leadership within the management group and the board, plays a more significant role. As such, the results show that a higher *IT prioritization* in *low information-intensive* firms, does seem to have a bigger impact on the *IT budget allocation*.

*(H4) Meeting or exceeding the planned integration schedule, leads to higher overall integration savings. This relationship is moderated by the degree of schedule delay. In integration scenarios involving significant delays to the original schedule, the degree of delay has a negative relationship with the overall synergy savings.*

The last hypothesis was supported as well. *Integration schedule delay* acted as a moderating variable. Three conditions of delay were identified -- *Low* (< 6 months), *Medium* (6-18 months) and *High* (> 18 months). The hypothesis holds good under

conditions of *low* and *high schedule delays* but is indifferent when the *schedule delay* is *medium*.

Intuitively speaking, any amount of *schedule delay* should introduce a corresponding reduction in the *overall synergy savings*. However, in almost all integrations, there would be certain items (e.g. data center or office lease expiry) that could have a lock-in period, which is a sunk cost. As such, expediting such projects may not yield additional savings. This could be one of the possible explanations, for savings to be indifferent to a *schedule delay*, in the *medium* category (6-18 months of delay in the *integration schedule*).

## 5.12 Summary

This chapter dealt with the quantitative analysis of the online survey results. This section began with the definition of various variables used in the study, and explained how they were operationalized. To improve reliability, responses to certain variables subject to personal bias, were captured through multiple questions in the survey questionnaire. For reasons of consistency, all responses were normalized to the Likert scale (1 - 7) and operationalized, and *median* was used as a measure of the central tendency for the *ordinal* data points from the survey results. The responses from the online survey tool were tabulated and a standard methodology was used, to test the tabulated results for all the four hypotheses proposed. The tabulated results were then compared against a linear trend line plotted in Microsoft Excel, to ensure the consistency of the same. The quantitative technique used in this study, for tabulating

results with a small respondent sample size and comparing the same with a linear regression trend line, is another key contribution of this research. Studies with a small respondent sample size, are not able to use the more advanced statistical techniques, and hence are unable to demonstrate a statistically significant result. The quantitative technique used in this study, is well suited for drawing inferences, for research with a smaller respondent sample size. In this study, although the small sample size meant that the more rigorous statistical tools like regression analysis could not be applied, the quantitative results indicated moderately strong to very strong support for all the four hypotheses proposed.

Chapter 6 is the concluding chapter and will focus on drawing conclusions, highlighting the limitations of the study, providing a prescriptive recommendation for IT integration practitioners and making suggestions for areas of future research.

# CHAPTER 6: CONCLUSION

## 6.1 Study limitations

The most complex, important and resource-intensive projects a firm undertakes, oftentimes, happen infrequently. As such, they are important but hard to study in a uniform, systematic and statistically significant manner. The difficulties of integrating the IT systems of two merging entities, is one such problem. In interviews with veterans of this process, they all spoke of the need to do the job right, but there was a lack of theories or prescriptive advice, in this regard.

This study grounded in theory, was conducted primarily with data, which was gathered using an online survey tool, and by conducting in-depth interviews with the respondents. Due to constraints of time, the infrequency of the event occurring, access to qualified informants, and resources needed to identify and enroll senior executives as participants willing to share confidential company information, this study had to limit the number of respondents to 20. While we have no reason to believe that a larger sample size would have led to different results, the types of analyses that could be performed on the data, were limited. The study could have benefitted, from a linear regression analysis of the online survey data.

## 6.2 Prescriptive recommendations

The most compelling finding of this study, is that the prioritization of Information Technology (IT) matters, in merger integration. This study indicates, a strong positive

relationship between *IT prioritization* and the *overall integration savings*. This was evident in both the online survey, and the emphatic comments of the informants and professionals that were interviewed. While the top management needs to have a better appreciation of this finding, the technology leadership team has a role to play as well. The CTO and / or CIO need to be able to inspire confidence in the CEO and the board, and embed themselves as trusted members of the top management's 'inner circle'. This will help the CTO / CIO to fully understand firsthand, any developments regarding potential mergers, and will also help to make relevant decisions internally, as well as with technology vendors and partners. The above also aligns with the findings of this research, that *prioritization of information technology* during the due diligence phase, has a positive relationship with (1) the *budget allocated* for IT integration, (2) the achievement of the *technology priorities* of the firm, and (3) the *overall synergy savings*, emanating from both IT and non-IT based savings. The sooner the technology leader and IT team embed themselves deeper in the due diligence process, the greater the chances of a positive integration outcome. A point to be noted, is that the IT due diligence of the target company may not always be possible, due to a variety of reasons. For example, due to compliance issues in certain countries, no pre-merger due diligence can be done on the IT systems. However, this shouldn't deter the technology team from engaging themselves with the merger process, right at the onset. It gives them a head start, in understanding the scope and complexity of the merger integration process. Once the merger is announced and the target company slowly begins to 'open the door', the IT team can in some sense, hit the ground running.

Another consistent theme that came across as a key factor for a successful integration, is *Planning*. In almost all of the successful integrations that were discussed as part of this study, the respondents mentioned 'thorough and detailed planning', as a key factor for the success. Although it is a long and painful process, the more planning that can be done upfront, the better it is for results. Plans need to be detail oriented, capturing information right up to the field or character level that needs to be included. One of the respondents, who has extensive merger integration experience of almost two decades, shared that, of the 19 merger integrations she had worked on during her career, 18 of them were an unmitigated success and only one of them was 'okay'. And, for the one that was 'okay', she attributed it to the client's insistence on using an Agile methodology (that uses little or no advance planning), which ultimately led to a lot of data integration issues, as they didn't do the forward planning, upfront. In her expert opinion, "Right now, a lot of people are very much into Agile. But I wouldn't recommend doing anything Agile, because merger integration is not something you would want to do that way. You need to do really detailed planning, for merger integration." As another respondent put it, a major takeaway from a failed integration, is that, "We should first map the existing processes of the target company in every which way, before we start to draw up our plans and calculate our own synergy. Only after that, can we decide, whether this integration is going to work, or not. So, there's a lot of planning to be done, before a merger integration."

The *composition of the integration team* is another crucial factor, to be considered. When asked about his number one priority for merger integration success, a respondent

who led the Asia Pacific technology integration portion of one of the biggest bank mergers at the time, said, “Bring in an experienced acquisition management team.” Another respondent, who was hired as the M&A Integration Consultant, says, “In terms of integration, people tend to lose energy and focus, and business teams are more interested in running the day-to-day activities rather than spending time on integration. I think it is very important to keep the momentum going with the post-merger integration and ensure that there are dedicated teams, which can focus on completing the integration.”

A theme that came across repeatedly, was that although IT plays a crucial role, it is important to remember that merger integration is a business-led and not an IT-led project. The management decides to merge the businesses, and everything else has to follow suit. Alignment with the business, is crucial. If one doesn’t pay attention to it, the integration will not proceed in the right direction, and this will be detrimental to the business.

Another finding of this study, is the *limited window of opportunity* that is available, for the realization of integration savings. In the study sample, this window lasts for about 12 to 18 months, although with the small sample size and a rather insensitive set of measures, the exact timing is difficult to pinpoint. Conventional wisdom dictates that, if one can’t get the major components integrated within this period, then the project lingers on for much longer. This finding was reaffirmed, by the survey results and in-depth interviews. The general opinion is, that one may ultimately be able to integrate

the entire system in four or five years or more, or sometimes one may continue to operate the disparate systems much longer. However, the cost of running operations for two parallel systems starts to build up, and the company loses the opportunity, to extract synergies at an earlier date. That said, it is important not to consider just one specific factor (e.g. savings or schedule), as the success criteria for integration. It is fundamental to have a basket of success factors, so that one is aligned with the business objectives of the merger. One of the respondents, who was a strategic consultant for the merger of two large insurance companies, cites a good example. When he and his team descended in Thailand, the company had already spent millions of dollars and had gone live with a new system, just prior to the merger. As the respondent and his team reviewed the solution to be deployed, every single factor indicated that the merged entity would be better off with the other company's system. Understandably, there was a great pushback from the local team, but ultimately the system was replaced, in favor of the more strategic option. As the respondent rightly said, "I think that one of the success factors is, the ability to make some really tough and maybe not 'outwardly sensible looking' decisions."

Last but not least, every integration journey represents a *transformative opportunity*. While it may be tempting to choose the obvious solution, and close out the integration, some thought should be given as to whether the solution being deployed, will meet the needs of the merged business entity, in the long run. If neither the acquiring nor the target company's IT systems are a good fit, this may be the best time to consider an alternative solution, that would meet the company's objectives in the long run. One

respondent very aptly puts this situation into perspective by saying, “if a company is cutting down on the workforce due to duplication, but there are opportunities to reposition those teams, that is something one can consider, and also leverage the integration as a transformational opportunity to redefine some of the existing processes.”

From what we have seen thus far, the in-depth interviews and the themes in Chapter 4, reiterated the importance of detailed planning and also stressed the need for IT involvement right at the onset of the merger process. Apart from these, a strong will and determination to succeed are ‘obvious but often forgotten’ criteria that are as important when working towards a successful merger outcome. As one of the study respondents, a veteran of several integration projects, aptly stated, “The upcoming tests are going to be increasingly important and increasingly difficult. If you only seek to do the things that are easy to do and with minimum risk, you will not get where you want to be. So, if you are stuck or saddled with difficult situations, and it seems like nothing is working your way, you’re in the best possible position. That’s where you want to be. You want to seek that or ‘embrace the suck’, if you will. That’s what’s important, because, only then do you know that you, your group and your company will actually grow because you’re handling the correct situation.”

## 6.3 Conclusion

This study was carried out by using data, which was gathered from 20 merger integration projects. Of the 20 integrations, 18 were mergers or acquisitions of separate

entities, while the remaining 2 (two) pertained to integration of large divisions, within the same company. Executive-level respondents were drawn from 12 different industries, ranging from public transportation and mining, to banking and information services. The M&A integrations that were studied, covered 9 (nine) countries, spread across Asia Pacific, Europe and America.

*Systematic grounded theory* was used as the research method of choice, as it was well suited to the nature of the exploratory study that was carried out. The *grounded theory approach* allows the analysis of both qualitative and quantitative data. This worked quite well, as the in-depth interviews provided the qualitative data for this study, while the quantitative data was drawn from an online survey tool. The researcher began the process, by discussing key concepts with a few peers and experts on the subject matter, as well as with some potential respondents for the future study. This was followed by an online survey, the data for which, was tabulated and analyzed. In-depth interviews were then conducted, to identify the latent variables. Common themes from the in-depth interviews, were grouped and analyzed to determine the causal drivers. This helped the researcher to go through an unlearning and a relearning process, and firm up the various hypotheses.

There is growing literature, on the increasing importance of IT in the business environment. However, till date, neither has there been a study regarding the role and impact of *IT prioritization* and *IT integration schedule* on the *overall synergy savings*, nor is there a study on the relationship between *IT prioritization* and the achievement

of the *technology priorities* of the firm. This is the research contribution of this study. Also, most of the previous literature in this area of study, is based on samples with limited geographical diversity. The global nature of respondent sampling in this study, provides an added level of *external validity* to the research.

The study has strong *internal*, *external* and *face validity*. A larger sample size for the online survey, would have been ideal. But practical limitations of time, meant that the study had to be capped at 20 respondents. The hard data from the online survey and the soft data from the in-depth interviews, provide strong support for all the four hypotheses studied. However, the small sample size means that the ability of this study to generalize, may not be as robust.

## 6.4 Suggestions for future research

This particular study is based on an exploratory research technique, which highlights the significance of *Information Technology (IT) prioritization* in a M&A integration process. M&A is a very complex undertaking. At this point, the researcher cannot comfortably assert that any single variable or theory can explain the entire gamut of relationships, which take place during this process. There are many variables that can be studied e.g. technology, strategy, leadership, communication, and organizational change, and how they apply to the various technology groups, etc. This study explored the concept of *IT prioritization* as an independent variable, and reviewed its impact on dependent variables such as *IT synergy savings*, *overall synergy savings*, *IT integration*

*budget* and achievement of the *technology priorities* of the firm. Following are some of the potential areas for future study, as suggested by the researcher.

*Future research idea #1:* A recommendation for a future study would be, to define the constructs used in the IT integration process in M&A, more broadly and in a better way. For example, the researcher investigated *schedule delay* as a variable, in this research. This was operationalized as the number of months of deviation, from the original schedule. While the above definition served the purpose of this investigation, there is an opportunity to define this construct in a much better way. A future study could help to operationalize the various variables and constructs, and establish a standardized terminology for research in the area of IT integration, in M&As. This study would contribute significantly, in helping the field attain academic maturity.

*Future research idea #2:* A potential area for future research, is to conduct a similar study within a group of *low information-intensive* firms like Shipping, Mining, Real Estate, Human Capital Consulting companies, etc. An interesting finding of this study, is that *low information-intensive* firms deliver highly amplified *synergy savings* as compared to *high information-intensive* firms, under similar conditions of *IT prioritization*. This future study could provide a much-needed impetus, for *low information-intensive* firms to increase their IT investment in the merger integration process, and thereby achieve a much higher ROI (return on investment), on the same.

*Future research idea #3:* Another potential idea would be to conduct a similar research study, focusing on a particular industry or geographic location and using a much larger sample size of 50-60 respondents. In this case, the primary source of data could be quantitative in nature, the results of which, would have a greater potential for being statistically significant, if more of quantitative methods are employed. The results of the future study, could either validate or contradict the findings of this research. A strong suggestion for this future study, would be to use a respondent pool consisting exclusively of M&A Technology Integration Consultants / Specialists. Based on the researcher's experience during this study, it was found that these Consultants / Specialists carry the most amount of knowledge in this area, given that they have been involved in multiple merger integration projects. This group is also able to provide a richer and more unbiased opinion, on the best practices to be followed.

*Future research idea #4:* A recommendation for a potential future research study, is to develop an integration model or framework, for the highly acquisitive and *information-intensive* digital and internet firms, especially those in South East Asia, China, and India. There is well-documented academic literature regarding some of the technology companies like Oracle, Cisco, and Dell, as to how they grew to their current size and stature, through key acquisitions. A similar wave of consolidation is happening within Asia, with China most notably leading the way. This framework or model could help successful Asian digital companies like Alibaba, Didi, Tencent, Grab, Flipkart, etc., to rapidly grow inorganically, through acquisitions and successful integrations.

*Future research idea #5:* A possible avenue of future research would be to look at 'technology integration in M&A', through the lens of the various groups based in offshore locations. Large businesses have invested heavily in offshore locations, and have a high dependency on offshore processes, to ensure business continuity and profitability. For instance, of the 400,000+ employees in a global IT Services company, over 130,000 employees are based out of low-cost locations across Asia. Another global IT Services company with over 250,000 employees, has over 150,000 of its staff based out of India alone. Similarly, other companies have large footprints in low-cost locations like India, Philippines, Poland, Argentina, etc. How does technology integration apply to offshore locations? Is it any different from onshore locations? Given the vast geographical distance from the company headquarters, are there any factors that could be of greater importance, when considering technology integration for offshore locations? Future research could help answer these and other relevant questions.

*Future research idea #6:* Yet another possibility for a future research, would be to study the impact on the leadership of a small but successful niche technology company, when it is acquired by a much bigger organization. Niche technology companies are usually comprised of a single or a small core group of entrepreneurs, who understand technology and the market very well, and can anticipate and capitalize on future trends, much ahead of their rivals and the bigger organizations. These are the individuals that carry the bulk of the intellectual capital, which made their firm fortunate enough to attract keen bidders. What happens to these leaders, when their niche company is

acquired, or should we say, 'when the minnow is swallowed by a whale'? Are they able to carve out a successful career for themselves, in the bigger organization? Or does their entrepreneurial spirit drive them towards their next start-up venture? What impact does the huge cash or stock payout have, on their work culture? Do they continue to feel motivated enough, to work in the larger organization? Are they able to survive in the larger group? What happens to the A-team in the target company? Do they change their loyalty to the acquiring company, or do they follow their charismatic leader(s) in their next venture? It would be fascinating to study if there are any industry trends as far as the technology leader / entrepreneur is concerned, when a niche company is acquired by a much bigger firm.

In a world where firms are becoming increasingly dependent on information systems and technology, the role of Information Technology (IT) continues to grow within organizations, as well as in the merger integration scenario. The findings of this study, are consistent with the above statement. The researcher found substantial evidence, for the four hypotheses proposed. Given the small sample size, the survey results could not be tested for statistical significance. For studies of this nature, there are practical limitations to getting a large sample size, the reasons for which have been mentioned at the beginning of this chapter. Despite the small sample size, there are no indications, either in the survey results or in the in-depth interview analysis, that the results of this study would be any different, even if it were to be conducted with a larger number of respondents, results for which could be statistically validated.

Merger integration, is potentially the most complex project that a business undertakes during its lifecycle, as it deals with a large number of conflicting parameters, which are at play during the integration process. However, till date, there is no comprehensive guidance available, as to how a practitioner can successfully navigate through the arduous task of integrating two erstwhile independent business entities into a single successful unit.

Trying to fully explain all of the complex phenomena occurring during the M&A process, is a herculean task for any researcher. However, a number of researchers have risen up to the challenge and have been making their individual contribution towards finding a solution to this onerous business problem. With Information Technology pervading, almost every conceivable area in today's business environment, there is an urgent need to conduct additional research in the nascent field of technology, in merger integration. Through this study, the researcher made his own small contribution to this field, by highlighting the very critical role of *Information Technology (IT) prioritization,* in the success of a merger integration process. At the same time, the researcher remains firmly conscious of the fact that a lot more study needs to be carried out, before a saturation point is reached in the knowledge base pertaining to the abstruse issue of the role of technology in merger integration.

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# APPENDIX 1: RESEARCH INTERVIEWS

## Introduction

Interviews were conducted, as a part of the data collection and analysis process (which is highlighted in section 3.5 of this dissertation). All the respondents who had completed the online survey, were invited to participate in an interview session. The interviews were then conducted with fifteen respondents, at which stage, a saturation point was reached. Thirteen interviews pertained to integrations (merger or acquisition) of two different firms, whereas the remaining two interviews pertained to the integration of large divisions, within the same firm.

## Interview considerations

1. The respondents were senior business executives or senior M&A integration practitioners, with prior *lived experience* of at least one large-scale integration effort.
2. The respondents were drawn from diverse industries and geographies.
3. Each interview session, lasted between 35-50 minutes.
4. The interviews were audio recorded and then transcribed.
5. To protect identities and prevent confidentiality breaches via deductive disclosure, the names of the respondents and their companies, were removed from the transcripts. Certain leading information disclosed in the interviews, was also deleted from the transcripts.
6. The interviews were *semi-structured*. The respondents were allowed to elaborate on their answers, for the researcher to gain a better understanding of their views.

## Interview questions

1. Discussion on the key reasons or drivers, for the integration.
2. Discussion on the business and *technology priorities*, of the merged entity.
3. Discussion on the outcome of the merger / integration effort, and the reasons for the same.
4. Discussion on *IT prioritization* and due diligence, during the pre-merger and post-merger phases.
5. Discussion on *IT synergy savings* and *overall synergy savings*, and the drivers that worked for or against them.
6. Discussion on the *budget allocation* for the integration effort, and the factors influencing the same.
7. Discussion on the *integration schedule*, and its impact on the integration savings and the overall success of the merger process.
8. Key takeaway and recommendations given by the respondents, based on their personal experiences during the integration process.

## Banking Financial Services Company I

Respondent: #1

Industry: Banking Financial Services

Company: Global Bank (U.K. based), 90,000+ employees

Integration effort: Asian portion of the merger integration, for a very large acquisition of another global bank.

***Researcher:*** Could you briefly share some information about the acquisition -- its objective / priorities / driver, the focus of IT, and your role in it?

***Respondent:*** Right! Bank Y (the acquired bank) had a large global franchise in many markets throughout the world, and it was particularly strong in a couple of areas where Bank X (the acquiring bank) was not. So, the acquisition was predicated on becoming a giant worldwide universal bank, with the typical aspects such as retail and the commercial aspects including lending, cash management, trade finance, transaction processing and global investment banking business, both in the equities space as well as the fixed income space. So, basically, we were going to do it all. I mean, absolutely all. And, we were going to do it all, everywhere. This was to say, it was ambitious, but it might have been an understatement. It was quite ambitious. I didn't manage to fact-check this, but I'm told it was the largest attempted acquisition in general services, in history, at least up to that point. And also, the largest bank merger, however you term it. But again, I would fact-check that. It was a hot topic of discussion, at Bank X.

***Researcher:*** Were you on the acquiring side or on the acquired side?

***Respondent:*** I was on the acquiring side -- which is a big career help. You always want to be, on the acquiring side.

***Researcher:*** Regarding IT due diligence as a factor to be considered in merger integration, do you think there was enough due diligence done on IT?

***Respondent:*** Not really. I think the due diligence phase was quite lightweight. From what I heard, we had a competitor in the market, who was also very keen to acquire Bank Y, so our senior leadership team felt that the competitor must have already done enough due diligence, to have found the acquisition of Bank Y to be worth it. Hence, they didn't feel the need for us (Bank X) to do any more due diligence and decided to go ahead with the acquisition of Bank Y, without doing adequate due diligence. I don't think IT had a role in the pre-merger due diligence phase. Perhaps the management did some lightweight due diligence to look at what Bank Y had, but I don't think it was a serious undertaking.

There's also another aspect, you should be aware of. In those days, the investment bank was operated separately, from the rest of the bank. This was done legally. The wealth management, retail, commercial, transaction services, etc., were all separate, completely front to back. What that meant was, there were basically 2 ITs -- the investment bank IT and the retail side IT, as per what we called it back then. Both ITs were quite separate. In terms of due diligence, I don't really know how it is done on the retail side. But on the investment banking side, we were acquiring technology and people that were present in markets, which we did not do business in, and in completely

different asset classes. For example, equities -- we really didn't have much equity at all, to speak of. There were few equities, which were multi-market, and there were other bits and bobs as well. In general, I think Bank Y was much bigger internationally, as compared to Bank X, although Bank X was already present in some of those markets. For instance, we had no retail, outside of Europe. So, we acquired some more retail. Actually, we had a very big presence in the United States, India, all through Asia, and so on. But how much due diligence did we do? I think there was very little IT due diligence.

***Researcher:*** Would it be correct to say, that a meaningful IT due diligence happened only after the deal was signed?

***Respondent:*** Yes. Effectively, we had two CIOs. There was one for the investment bank and another for everything else. And, these guys never spoke. There was no co-operation, no sending mail, nothing -- to the point where we would have duplicate competing technologies within the bank. For example, VOIP services -- one side had Cisco while the other side had Avaya. This was the case even with technologies like anti-virus software, which effectively were like commodities or like commodity software. One side had McAfee whereas the other side had Symantec. It was almost like the two sides of a house. They deliberately chose different solutions.

***Researcher:*** What was the scenario, at the end of the merger process? Did you manage to integrate the investment side with the retail side, as well as with the acquired bank?

***Respondent:*** No. This was a complete dismal failure. No sooner was the ink dry on the contract, the credit markets froze up and the bottom just dropped out of everything. I think the stock went down 90+%. Basically, it turned into almost immediate divestiture, with everything non-investment banking. And, that's important. Non-investment banking outside of UK and Europe -- all the retail, transaction services, cash management, etc., all of that just went up in smoke, and many markets were exited, in total. So, in Taiwan, Philippines and countries like that, the entire place was shut down. It was a massive waste. The entire acquisition cost was basically, a complete write-off.

***Researcher:*** In those areas that you mentioned, did Bank X decide to divest, even before you could finish the entire integration?

***Respondent:*** I would say before the integration had even started, and not before we were finished. Or, to be more precise, I would say that the integration had barely gotten started.

***Researcher:*** What's the end state now? Are investment banking and the rest of the business still two separate entities, or did that change after the merger?

***Respondent:*** That's a long story. The infrastructure piece went to the central IT in 2010, but the application / development aspects of IT, were still separate in the Investment Bank. Now, because of ICB rulings regarding the ring-fencing and non-ring-fencing of banking entities in the UK, the retail and commercial side had to ring-fence from the investment bank completely. So, the investment bank was rebranded as Bank PQR. Can you believe that? We dusted off that old bank that hadn't been used in

more than a decade, actually, close to two decades. And, it was going to be a separate legal entity, carrying on just like Bank X. The infrastructure had been transferred back, to a legal entity. So, I would no longer be an employee of Bank X, but would now be an employee of Bank PQR, and consequently, we were going to be ring-fenced. In case you don't know, the theory behind ring-fencing is -- whatever the investment bank does, even if it completely blows off and sinks; it's not going to take the retail side down with it.

***Researcher:*** In your opinion, do you think it adds value, to have either the CIO or the IT leadership involved in the merger discussions even before the deal is signed?

***Respondent:*** Absolutely, because I think, without an informed opinion, you can't really estimate what IT integration costs might be or what the concerns may be, and you won't even know what 'bones' may be buried in there. There's also the risk element. If I was involved in the acquisition at a very senior level, one of the first things I would have done was, insist on the external facing network perimeter -- in terms of how robust it is, etc.

***Researcher:*** During the pre-merger due diligence phase, were there any impediments from the target firm, in terms of sharing details about their IT infrastructure and processes?

***Respondent:*** No. I think maybe for small things at the margin, because the NDA (non-disclosure agreement) process is accepted. The NDA process is taken seriously. The industry is pretty robust, especially senior officers who are accountable to regulatory

bodies. They take this kind of stuff, pretty seriously. I think, where firms are a bit secretive, they don't want to repeat anything about. They maintain client confidentiality. And, I think it's appropriate. But in terms of technical architecture and systems, and how they're built or how they're deployed and things like that, I haven't noticed. I've been involved in more than one acquisition, and I haven't noticed any impediments, as such.

***Researcher:*** In retrospect, do you think banks now consider IT, as an important part of due diligence?

***Respondent:*** Well, I think the Bank Y acquisition was somewhat unique. I'm genuinely surprised that the IT department of any firm or bank, could state that due diligence is not that important. Again, I've been involved in nearly all acquisitions for other banks, and once I got in, I was part of the due diligence team. I remember, one particular bank wanted to buy a small regional retail brokerage in China, and I was sent as part of the due diligence team. I was expected to travel with a bunch of senior executives and meet the IT person, so now I think IT due diligence is considered important. The uniqueness about the Bank Y acquisition was that, it was entirely ego-driven. Since the senior management wanted it that way, it had to happen. No questions asked.

***Researcher:*** You rated the importance of *overall synergy savings* as a '6'. And, the importance of *IT synergy savings*, which is a portion of the bigger pie, was rated as a '3'. Was there any particular reason for this?

***Respondent:*** From the investment bank perspective, our IT costs were going to increase because of the scale, and they absolutely knew that. Of course, it was expected because there would be another whole set of technologies, supporting a completely different asset class. There would be an equity trading platform front to back, which we thought we could probably bring into our stock. But, part of the reason for the acquisition, is to give one the equities business in a big way globally, and obviously, that costs money. Therefore, *IT savings* per se, were not really paramount in this. Synergies -- generally yes, looking from a massive scale. But IT wasn't placed at the forefront of that effort, that's the reason for the lower rating.

***Researcher:*** Regarding the IT budget that was allocated for the integration, you marked it as a '6', which is quite high. Would you like to comment on that?

***Respondent:*** Oh, yes! It was grossly over-funded. The money flowed like water.

***Researcher:*** You didn't meet either the *overall integration savings* or the *IT integration savings*. So, would it be correct to say that you had the money, but didn't realize the synergy savings?

***Respondent:*** Basically, a huge amount of money was being thrown at the problem. There was very little accountability. Frankly, I think Bank X did not bring in enough experience. They did not have enough people in-house. Of the non-investment banking people from the senior management level to the executive level, most had never even left the headquarters before. They didn't have any international business experience, whatsoever. The investment banking people were a little bit more worldly-wise. But

what happens in investment banking is that you typically get a lot of high-charging, type A, very smart and very young people, but not necessarily with the depth of experience that you would expect in a more mature industry. So, people were thrown at it, and they came along. Definitely no question, but we spent £600 million as investment in the first year and £600 million in the second year. Even at my level, I was given more money than I knew what to do with. So, lack of funding was not a problem. But I think with copious amounts of funding, there definitely was a general lack of accountability. People just did, whatever they wanted.

***Researcher:*** Did you meet the intended *technology priorities* of the merger?

***Respondent:*** I think we were given, whatever we could do in the time we were allotted. We made noticeable progress, against all of the objectives. I would say, none of it was hugely successful in the absolute context. But in the relative context, we were realigning as soon as the ink dried on paper. We did a lot of tactical things -- the bits and pieces we kept in Asia. We kept some of it, for a number of years. We didn't kill it right away. I think we kept the transaction processing, for 3 or 4 years. And, there were lots of stability issues in the underlying platform, which had to be fixed. We addressed the security issues there. A new customer-oriented digital tool came out. There was an automated quote engine developed and deployed for equity customers. Prior to the acquisition, I had never operated any of these, in this business. People could email in a request for a quote, and the engine would automatically respond. In those days, nobody thought of things like that -- global digital or this or that. Moreover, besides investment banking, we wouldn't know or care about anything like that. So, we

did what we could, and we made progress. We made decent progress, against all odds. But by no means did we complete the integration, for sure.

***Researcher:*** From your managerial perspective, if you were to share the do's and don'ts for a successful integration, what would they be? It does not necessarily apply, to this particular integration.

***Respondent:*** Okay, I would say (1) bring in an experienced acquisition management team, (2) have very diligent and robust governance, (3) have realistic timelines, and (4) define very clear and measurable outcomes.

## Mass Media Company I

Respondent: #2

Industry: Mass Media (Governance, Risk & Compliance division)

Company Profile: Global Co. (Headquarters - U.S.), 50,000+ employees

Integration effort: Acquisition and technology integration of a company in the Governance, Risk, and Compliance (GRC) division.

***Researcher:*** Could you briefly explain what the project was about, and what were the key objectives?

***Respondent:*** The project was about a transformation that would consolidate infrastructure and support for technologies. The drivers were the resource costs, non-resource costs around things like rent and insurance, administrative costs and other supporting indirect costs. These would be synthesized through the project, and indirectly reduced. They would include things like utility, and there would be some supply change scale or some other things.

***Researcher:*** Was this a project wherein you acquired a company and tried to rationalize the technology footprint?

***Respondent:*** Yes. Post the acquisition, one of the typical migration steps is to not only look for those cost saving opportunities, but also standardization and simplification that will reduce costs going forward, obviously beyond the initial save. If we can consolidate, we would immediately save things like rent. And, if we can

standardize and simplify, then over time, we will save the required investments -- over a period of 2 - 5 years, I would say.

***Researcher:*** Did you replace the target company's infrastructure and technology with that of the acquiring company, or was it a 'best-of-breed' approach?

***Respondent:*** Firstly, do an initial rationalization to verify that the capacity and the assets that were currently deployed (in the target company), were necessary to continue operations, whether they were consolidated or not. In other words, verify that all the assets that were in place, were actually being used. What we typically find in an industry, is that 20-25% of infrastructure components are not being actively used. Sometimes, they are left taking up space or power or another type of resource even though their use has ended but they have not been removed from the portfolio. The next layer would be, to look at consolidation that can occur if we move from one location to another. This is done by making a better use of the existing capacity, whether that is more space or cabinets or even things like storage or network ports. The third would be, how to transform to a more standard technology such as physical to virtual or virtual to the cloud or network or storage on demand. The third piece would be, how we can optimize. Rationalization, consolidation, and optimization would be the three phases that you would go through, to get to the desired end state. Then, in each of those phases and certainly collectively, you can understand the current environment and cost as well as the future environment and cost. They can be done in each of those phases, or in one transformation. Sometimes, you can go from the current to the end state, in one effort. In some situations, you need to go through each step, to get to the next level of savings.

***Researcher:*** Was there any salient feature of this particular acquisition that stood out, or was it a standard integration?

***Respondent:*** I think there is that standard view that I just described. But what happens in every one of these projects is that the return of that effort is going to vary, by what I'd call -- the technology layer i.e. network, server, storage in each project. One of those may be much more valuable than the other, and there might not be any savings in some of those. You have to go through the same process and phases, to uncover the size of the value of the effort, but you have to figure out the cost of that effort as well. For example, in this project we might get 10% consolidation on network, server, and storage, but in the next project, the consolidation might be 5% network and 20% server but only 10% storage. This will vary by technology and certainly vary by project. The ratio of savings, varies as well. So, physical to virtual servers -- that's pretty incredible savings, whereas consolidating switchboards is much lower savings, but it really depends on what the business drivers are. So, if it's space or support resources or network utilization or even utility, you have to decide what the priorities are.

***Researcher:*** When does a meaningful IT due diligence happen? Does it happen during the pre-merger stage, or does it happen as soon as the announcement is made and you get access to the information you need?

***Respondent:*** I think it's in the second and third opportunities, that you get to do the due diligence. On the surface, you uncover opportunities. Then, in the second and third passes, you verify and calibrate what your initial thoughts were. Sometimes, on the surface, things look very opportunistic but when you get into the details, you

understand why they haven't already been implemented, or they can extrapolate. It goes both ways. And it's in that second or third view, where you get beyond until you hit the servers and there's an opportunity. Then, when you get into one of the applications, at that point you start to get the value of due diligence. Certainly, post-close of the acquisition and when you really start understanding the use and dependencies, etc.

***Researcher:*** Do you think it's the business priorities that drive the merger?

***Respondent:*** I would agree that it's really based on the business drivers i.e. market share, content and things like that. What the acquiring company is trying to do with the IT due diligence is, make the business case and help justify it by looking for ways to make the cost more palatable. For instance, we're going to acquire a company for 'X' number of dollars, but the IT due diligence says it's going to cost us less to run it because we're going to take the following steps upon completion. So, it's really a secondary benefit, the primary being the business driver.

***Researcher:*** Have you come across a situation where you had the opportunity to either consolidate or rationalize the technology footprint, but instead, you went into a transformative mode and did something totally different?

***Respondent:*** Yes. There have been a couple of projects where we had taken non-standard steps, to enable the end state. We would do something like rent our risk infrastructure as a temporary bridge to get us through our transformation or, for example, we would virtualize servers before going to the cloud. So, we would take transformation steps -- and a lot of times, those are cultural drivers and customer

confidence drivers. We know that the technology will allow us to go from point A to point C, but the business would like us to go to point B. So, their confidence is gained along each step, even though it's not a technical requirement.

***Researcher:*** Overall, was this a successful integration?

***Respondent:*** Yes.

***Researcher:*** Could you explain why you rated *information intensity* as a '7', i.e. high?

***Respondent:*** Sure. In this particular project, both the acquiring and acquired companies were technology companies, whose core business is based on the collection, collaboration and distribution of information. So, they weren't using technology to aid in manufacturing. It is purely the level of importance of the information, that drives all of their revenue.

***Researcher:*** You mentioned that almost 85% of the overall budget was assigned to IT integration, but you felt it wasn't enough, and wanted to see a 90% allocation. Could you please explain?

***Respondent:*** Yes. It's because the non-technology costs were -- adding employees and customer information to existing systems that didn't require any investment. So, we were literally adding employees to email systems and adding customers to CMS or billing systems, and absorbing customer service calls from another set of customers. It didn't require any incremental investment. They were just scaled on existing

infrastructure and apps, whereas the data center portion or the actual product being consolidated, required a much larger investment, and more than a 90% range would be more impactful.

***Researcher:*** How would a higher *budget allocation* have helped?

***Respondent:*** It would have reduced the schedule, and helped us to take more of the expected value that was part of the business case.

***Researcher:*** You rated *synergy savings* as a '5' and also commented, "The project team found IT services that were no longer needed post-integration, which resulted in direct savings." Could you please elaborate?

***Respondent:*** Sure. From my experience, I think sometimes the business case for an acquisition doesn't stand on its own merits, without the benefits of the technology transformation. I've seen situations, where the first due diligence information is what's used in the business case and once they get to layer 2 or 3, there are times when it doesn't provide the value that was in the board paper or in the business case. But at that point, we've already acquired the company, to be able to get to the next layer of due diligence. I'll give you an example. If in initial due diligence, we think we can virtualize 50% of the servers, we first have to acquire the company before we can do the second round of due diligence, to find out that it's only 40%. So, I think, just as there are optimistic business drivers around market share and due content, there also are the same optimistic drivers for technology, and that's a natural opportunity that people look for. But it doesn't always work out. It doesn't always provide the value that we hold. And

I would think if there's a survey for the business owners, they might give the same ratings. Sometimes, deals look better on the surface, but after we acquire that market or that content, we know it won't grow any faster than it had grown in the past, just because it has been rebranded. So, more often than not, we have less value than we had assumed in the initial due diligence.

***Researcher:*** Can you explain how a 6-month delay in your project, didn't adversely affect the *integration savings*?

***Respondent:*** In data center migrations or in technology transformations, sometimes there are drivers based on schedule, and sometimes there are drivers based on cost and in realizing the synergies. For example, we were to acquire a company that was in a co-location data center, and there was a lease that was expiring, so if we didn't exit by a particular date, to renew the lease would've meant another 2 or 3 years at that location. That would be one situation. If we acquire another company, whose data center is within their office space, and if we intend to keep the employees in that office space, and the schedule is not a critical factor in our success, we still realize the savings, but the cost element around rent, allows us a little bit of flexibility around the schedule. It certainly is nice to realize the savings sooner, but they are not directly impacted, as the schedule gets extended.

***Researcher:*** Given your extensive experience in merger integration projects, could you share some valuable advice for M&A practitioners?

***Respondent:*** There are two important things. Not necessarily in this order, but (1) Plan for the unexpected. The data that you need to do this effectively, will not always be available. The data that is available, will not always be accurate. Expect that the asset database is at best 80% accurate or complete, often times much less. (2) The other piece of advice, I can't reinforce more, is transparency and communication. Regardless of what the technology or the business drivers are, the biggest hurdle will be the relationship, which has to be tried, to justify and implement change. And, what's more important to remember is that it's not hard to move data centers, technology-wise. Sometimes, it's harder to work with people who don't want to work with you. That drives home, the importance of the relationship and the transparency. It's a team effort, and there is no hidden agenda. Everything is shared by both parties, in order to be successful. And, without that, the project won't be a success. It will cost extra money because there will be delays. It will cost extra money because you're going to do what you intended to do. It is very much based on building strong relationships that are trustworthy, and working together. That's number 1! That's the most important thing!

## Mass Media Company II

Respondent: #3

Industry: Mass Media (Financial Information Services division)

Company Profile: Global Co. (Headquarters - U.S.), 50,000+ employees

Integration effort: Takeover of a small competitor in India.

***Researcher:*** Could you briefly describe what the integration was about, and what were the highlights of that particular integration?

***Respondent:*** Sure. I think it was integration, which was largely driven by the need to take out a competitor who had been eating up a large amount of market share. The decision to take over that company, was very much based on trying to secure market share in a localized market of India, and also, to stop the loss of market share that we had experienced for about two years. The business that the company was engaging in, was very information-intensive. Essentially, in the business of market data and financial information, companies are extremely information-intensive. Although the takeover was because of securing the market share, there was system integration involved too. We basically took over their product, but the goal of the takeover and the key motivation behind it, was really very market specific i.e. to just take out a competitor and take back the market share.

***Researcher:*** In your opinion, how was the overall integration process?

***Respondent:*** It was hard work because we had a large number of clients who had essentially signed up with a small emerging competitor, and a large competitor then

went and ‘ate up’ the small competitor. Basically, the clients were back to square one. You’ve on-boarded the clients who had left you, and that means you’re having a bowl of difficult discussions. The way we dealt with this, was by making sure that we retain the business manager of the competitor firm, who had single-handedly sold into a large number of these clients but then migrated the contract over to us. We had frank discussions with him and said, “Look, we are now back with the incumbent, but this is how things are going to be different.” The integration effort had a number of experts. There was the technical side i.e. the integration of the systems, and there was the client side or the marketing side, if you will. They each had their own challenges. I think it was difficult to integrate their products because they were built to different standards, different technological platforms, etc. The way we dealt with it, was that we just kept them in parallel and at some point, we closed down one system and migrated the clients over to the better platform. From the client perspective, it was a campaign that probably took about six months, to go account by account, identify the largest exposures and deal with them.

***Researcher:*** So, basically, was the strategy, that you would kill the target company’s product and migrate the customers on to the acquiring company’s platform?

***Respondent:*** That’s correct. Although, not immediately. It was done gradually, over a period of time because we first wanted to keep a steady stage, go in and assess, and then migrate over, the ones where we would have no issues. We migrated those over first, and left the tougher and larger accounts for last.

***Researcher:*** Regarding the schedule, how long did it take to complete this integration?

***Respondent:*** I think the planning probably took longer than anticipated. We took a little over a year, to properly plan everything, to the point where we executed on it. Then came the rollouts, on the technical side. I think the technical side probably took six months, but the toughest part was migrating the clients. I must admit that I had less visibility to the technical side, then. I was mostly involved in migrating the clients. We had to come up with a migration plan and go to the board to secure funding and approval. And then as they say, "Life happens!" Things then started to happen, in the local market. But I must say, that the pre-integration planning phase really took time.

***Researcher:*** In the due diligence process, was technology or IT an important consideration at all, for the acquisition decision?

***Respondent:*** It was not a driver of the decision. As I mentioned earlier, the driver was really the competitive argument. We needed to sort out the loss of market share for the premium product in India, and the systems part was practical, so it just had to be overcome. The competitor's product was considered to be inferior, on a number of levels, mostly because their technological platforms were quite inferior, internally. Pretty soon it was clear, how we were going to deal with that. We kept it parallel for some time, then properly assessed it and later shut it down.

***Researcher:*** Do you think it would have helped, if there was a higher level of due diligence on the technology side, or was that just not important at all?

***Respondent:*** I think it would not have made that much of a difference because the key objective was to stop that loss of market share, and that was pretty quickly appeased. To spend more time on technical due diligence, has a cost to it as well. There is also a limit to its effectiveness because at that point where you are in the planning phase, you don't have the ability yet, to look into the other party's systems and really get down into the nitty-gritties to see what they have, how it's set up, what the real quality is, etc. You don't really know 'the skeletons in their closet', and you're going to spend more months on that. It just wasn't what we were in for, and I also think we weren't even able to do that.

***Researcher:*** Was there anything else at a high level, regarding your key takeaways from this integration?

***Respondent:*** I was quite impressed at how well the migration campaign was executed. It was tough, but I think the local account managers and the two local business managers, both outgoing and incoming, did a really good job. Still, the clients were tough. By tough, I mean -- look I've lived in India, but those clients were especially very tough because they left an incumbent to join and support a local startup, which subsequently sold out on them, so there were a lot of feelings of disappointment that had to be dealt with, a lot of assurances that had to be given about how this relationship was going to be new and how we basically had to regain the trust. I think that took time, but it was successful. What was good about it, was that we went about it in a pretty structured manner. There was a team of about 7-8 people who met daily and took care of that migration campaign. Every day, they were comparing notes, going

line by line and account by account, to see what phase this account was in and what kind of help it needed to get people to migrate from one company to the other. Regarding a lesson learned or what I would do differently -- I think we didn't fully realize how much work it was going to be. It was just a gigantic load of work, and so many late nights. I think we underestimated that. Another thing is that I underestimated how emotional some of these migrations could get. In migration discussions, a lot of people took it very personally, especially some of the promises that had been made by the outgoing business manager. The systems on the business side or on the contract side were one aspect, but it was also very human. That maybe something, I had underestimated.

## Information Technology Services Company I

Respondent: #5

Industry: IT Services

Company Profile: Global IT Services Co. (Headquarters - India), 30,000+ employees

Integration effort: Takeover of a large IT company by another large IT company in India.

***Researcher:*** Could you provide some background about the integration you worked on?

***Respondent:*** The story begins with two most important criteria: (1) What is the deal all about? (2) Is it an assets sale or a stocks sale? Depending on whether the deal is an assets sale or a stocks sale, a Transitional Service Agreement (TSA) may be needed. If it's a stocks sale, there is no problem as most of the dependencies are carried forward, and it's as if nothing has changed. It's basically a financial transaction. In a 'stocks sale' situation, someone is buying a chunk of your company, so the ownership and promoters might change, but services will continue and are not really hampered, that much. But if we are talking about a 'carve-out' or an assets sale -- where a large company actually carves out a small unit, which is not profitable or which is not in line with the future strategy of that company, and someone else buys it, then there are lots of issues which can come up, in terms of the TSA. In the case of a stocks sale and an assets sale, there are lots of ramifications and complications, and these vary from country to country. For example, let's say, Singapore might follow a U.S. model, but

this kind of thing becomes very complicated when it comes to the European Union. Germany, for instance, has very strict laws concerning the handling of TSAs, in the case of a 'carve-out' or an assets sale. France has its own rules, and so do all the other countries.

In a post-merger scenario, when one defines what kind of services or business processes need to be transitioned, to ensure that there is a smooth integration -- we are looking at a lot of people dependent things such as compensation, benefits, retirement plans, life insurance, health insurance, etc. We're also talking about Employee Stock Ownership Plans (ESOPs), stock exchange programs, severance plans, etc. We also have to consider what the accounting norms are for all these things, and accordingly decide what kind of new accounting norms we will take up. There are other things like trade unions, which also come into play. Every country has its own way of dealing with trade unions. For example, when we do a merger in Germany, it usually takes longer, because of the kind of approvals you have to get, through the work unions or trade unions. This kind of stretches the process a little bit longer, as compared to the U.S. An important point to remember is that, out of every foreign result of assets sales or stocks sales, most of the problems arise in assets sales. First of all, one needs to see what kind of TSA programs are available. IT is a very important part of a Transitional Service Agreement (TSA), and so are other business processes such as Accounting, Human Resources, etc. I'm talking about TSAs because they involve IT by default, and also because one needs IT systems everywhere. For example, the payroll runs totally on IT. Nowadays, most of the pension programs and Employee Stock Ownership Plans run

on IT systems. The entire HR infrastructure, business infrastructure or any other process that is impacted by a merger, has some kind of an 'IT story' to it. There's nothing you can look at and say -- this is not dependent on IT. And the question that comes to the fore, is whether that IT program is covered under a TSA or not. So, if a company takes over another company's assets, we have to ask these questions: (1) Do they have all the necessary processes? (2) Can they come under a new owner, overnight? (3) Do they have some kind of a backup plan? (4) Who will support this? That's why the TSA becomes very important.

***Researcher:*** The survey that you completed, was about the integration of two Indian IT multinational companies. Can you just talk a little bit about that?

***Respondent:*** It was a large IT company which took over another large IT company because the latter was not in shape to expand its growth, and the market dynamics forced the acquiring company to acquire the target company. The target company was present in about 18-20 countries. So, the acquiring company had to look at each and every country because you know the typical IT setup is not just about being represented in a country but also about how it is represented in that country. Questions such as (1) What is the legal entity that you set up? (2) Is your office overseeing it? (3) Is it a subsidiary, a rep office, a full-fledged branch office or some tie-up with another company in that country? There are a lot of Indian companies, which are based out of London. They have a proper office in London -- a registered company, which they call an official subsidiary. But they also have some kind of a rep office, let's say, in Prague, and there are people employed over there as well. So, what usually happens in a post-

merger scenario is that all the legal entities are impacted, and depending on the nature of the entity itself, you can have some kind of a ramification.

From the HR perspective or the IT perspective, the payroll and expense systems or other security systems running the company, will impact each and every legal entity of the company that is being targeted to be acquired or that has been acquired. So, the buyer has to ensure that all these problems are legally addressed. In the IT space, things are a little bit faster because usually there are lesser worker council issues, and we're not talking about real tangible assets here. We're talking about things that can be integrated faster, as compared to, let's say a chemical industry or a pharmaceutical industry, where there are a lot of factories and tangible assets that need to be integrated, and which becomes an even bigger headache. IT can happen a lot faster. But the problem of IT is that nothing else is needed. Since IT is easy to set up, IT companies get more legal entities globally, in a large company. For example, in The United States, an IT company can have 50 - 60 subsidiaries, depending on each and every state. So, the problem that usually arises, is the integration of all of these people and the processes, etc.

***Researcher:*** Am I correct in saying that what you have filled in the survey, is about the integration of the HR portion of this merger?

***Respondent:*** Yes. Primarily, from the human capital perspective.

***Researcher:*** Was this particular portion, a completely separate work stream in the overall integration? And, did this feed into the larger integration of this merger? Could you please explain?

***Respondent:*** I'll explain the general idea, of how this works. Once a company decides to finish the most important part of the merger i.e. the financial aspects (the stock swap or evaluation, in case of an assets sale), the tough part is done and the handshakes are over. Then the post-merger activities begin, and things are sorted out. Once the boss of the company is instated, a lot of specialists handle different areas. For example, a human capital specialist will not be getting too much into the legal aspects. Or let's say, someone specialized in a tech venture or a tech company, will not really go into the human capital perspective. Some companies try to bid for the entire gamut. But usually when the merger involves a reputed company, they tend to hand out individual aspects, to ensure that the experts in that particular work stream do that job, because they have the experience of having done it in the past.

***Researcher:*** What was your role, in this project?

***Respondent:*** My role was on the impact parameters i.e. on the human capital and a few systems pertaining to human capital. It was overall workforce impact. It was as deep as looking at role duplication as well, which is quite a sensitive thing because it's like looking at how many roles are getting duplicated, and things like severance would be connected.

***Researcher:*** As the human angle is the biggest aspect of any integration, were you involved in the same?

***Respondent:*** Even in the human capital industry, there are so many processes and IT systems such as performance management system and a system that manages compensation, rewards, stock options, etc. If a company using a particular system is acquired, and the acquiring company already has another system, we're talking about a lot of redundancy in terms of IT systems. Nowadays, there is no process which is IT-independent. So, it all comes together, and that's where nothing is actually separated, from the project you're doing.

***Researcher:*** Was IT considered a crucial factor, when the decision for the acquisition was made?

***Respondent:*** Yes, because as strategy consulting firms, our role is to give the best advice. We are not auditing firms, which will technically get into it and then see it when everything is done. In our role as strategy advisers of that particular process, the expectation was -- "set it up and tell us what to do, in the right way." So, regarding ROI, measurements of the results, whether the integration has worked out or not, etc., one could tell regarding our advisory, regarding the human capital integration and so on. Those results are shown very quickly because the company gives a report that this will work out, or it will work if that is done. However, the problems with IT and any TSA, are that they are long-term processes. One cannot tell within 3-4 months whether the IT part is successful, because the results of the integration, the vendor selection and the vendor reallocation, will be known only after a year or so since we're talking about

big processes. As far as integrating people is concerned, since they are senior people, they can give their feedback right away, saying, "this idea is good, or that can be done, or this is not a problem." Next, we have an entity. For example, let's say, we had two subsidiaries in Prague, the question then arises as to why we need two subsidiaries there? We had a target company and an acquiring company. It is logical to retain, just one. That's an obvious solution. When you're looking at things regarding transitions, the systems and processes take some time to generate results for that. We have consulting partners who don't wait that long because those results will be shown a bit later. It is a continuous process. Consider TSAs, for example. There is no end to it. It goes on for a pretty long period, until one system is called off or until a new vendor is decided, in the transition phase. And, the transition phase can extend as well. It depends on a lot of uncertain factors.

***Researcher:*** Did IT integration get its due importance or do you feel something better could have been done in that aspect?

***Respondent:*** Not in this project, because post-merger integration depends on one big thing which is intangible. It's called cultural integration. The culture of the two companies is an important aspect because if it's similar or they hail from the same country of origin, things are much faster. For example, imagine an American company taking over a German company. The kind of friction that might arise in this particular acquisition, will be different from that of an acquisition where one Indian company takes over another Indian company. So, culture does make a lot of difference in the integration process. It can either help in resolving problems or it can raise even more

issues. From the knowledge that I have gained and from what I have seen over the years, I would say it is the friction of cultures, that impacts the post-merger integration process and everything related to that. For instance, a choice of a vendor can be from a particular country, which the people from the acquired company like. So, replacing it with a vendor from the acquiring company's country of origin, meets with a lot of resistance. Technically, everyone has the same level of technology, the same kind of hardware or software or any kind of adapting, but the choice comes down to the company that has a higher level of knowledge. Similarly, when it comes to the implementation of TSAs or vendor selection for the long-term, that has a lot to do with the culture of the company in question.

***Researcher:*** Can you share some of your managerial insights, on the integration process?

***Respondent:*** Well, in these pre-merger / post-merger situations, what usually happens is what I had anticipated, although I'm not a hundred percent sure, as it's just an intuitive feeling that one sometimes gets. Let me list down a couple of things, to give you a better understanding: (1) As you probably know, the pre-merger exercise is very secretive because it has to be that way. But eventually, a lot of decisions are sometimes taken, which percolate down to the post-merger phase, as if these decisions had already been made. It appears that way, sometimes. So, the post-merger integration is not starting from scratch, rather, some things have been carried over. Although, one would have preferred to begin with a clean slate, one now has to begin at a certain point. (2) The second aspect is, the importance of due diligence. Due diligence is a big part of the

pre-merger phase, but the post-merger phase also needs a lot of due diligence. So, when one has been allocated a project to do the post-merger work, one would like to have the same level of deep research that was done, even before the project was initiated -- the same kind of team travel, the same kind of interviewing of people, etc. just like it was done in the pre-merger phase. But sometimes, post-merger becomes more like an operational task, with 'a little bit less on the strategy and more on the operational side' kind of approach. That's why in one of the phases, I've driven the project faster than it actually should have been, on account of due diligence, and by taking apart the 'nuts and bolts', as well as assessing options such as -- if we do this, that will be impacted, and so on. Once one does that, the rest of the process becomes relatively easy. These are just general issues one sometimes faces in large projects, whereas in some models, things are so streamlined that there are no issues. But at the end of it all, the job gets done.

**Financial Services Company**

| | |
|---|---|
| Respondent: | #7 |
| Industry: | Financial Services |
| Company: | Primarily European-based operations (Headquarters - U.S.), 5,000+ employees. Operating in electronic payment and transaction processing services for big banks. |
| Integration effort: | Growing inorganically through a series of strategic acquisitions, of niche market players. |

***Researcher:*** Could you please share some information regarding the merger? What did it entail, and how did you go about the integration process?

***Respondent:*** In my current company, we do acquire smaller companies from time to time. This activity is sometimes higher and sometimes lower. We acquire different companies, so we have to keep the ongoing program running, as well as the previous ones that we have done. But I see an evolution, in terms of how we approach these acquisitions and the post-acquisition integration of these companies. From the Information Technology point of view, we built a kind of very scalable internal PCI compliant cloud environment i.e. a private cloud, which is sufficient to host any of this infrastructure, for any company which has been acquired and requires integration. I would say that probably one of the biggest hopes, is to build an infrastructure and service layer, where this flexibility can be close to maximum, and any kind of (target firm's technology) environment can be hosted and integrated, at a service level. In addition to that, there are traditional non-technical integrations which happen, like

organizational alignment, and also new companies and new things joining a wider corporate IT team. There is process integration that needs to be done, to maintain corporate security policies, operational processes, IT processes, service management, monitoring, etc. These are probably the usual challenges which any company faces, independent of the service sector that they are from, or any sector they have business activity in. And, I would say that we have different kinds of approaches, in terms of the speed or in terms of the focus, when the new company joins the corporate group of companies. From what I've seen in the last two acquisitions, which happened last year and even more recently, is that we have a much clearer view, about what the business wants to achieve. This makes the IT part of the deliverable much simpler to define, to have a plan, start to execute the plan, set the budget for those activities and really keep pushing towards those business outcomes, which had originally been defined. So, that is a very important part of any people activity.

***Researcher:*** You mentioned about building infrastructure, setting up processes and creating capacity on a PCI compliant cloud. Does this mean, going to an external vendor and getting those cloud services or would you build your own?

***Respondent:*** No. That's an internal private cloud, which we built and which can be used for transaction processing services.

***Researcher:*** Would it have been a bit too bold, to do an external cloud?

***Respondent:*** Well, it is possible because in the past, we built the Microsoft Azure based PCI compliant processing environment just for a portion of the service, and

Microsoft was reasonably well prepared because in terms of PCI compliance, they are very clear. It's well-documented in their case, that as a public cloud provider, exactly which parts of this PCI compliance regulation they deliver, and which the partner needs to take care of, in terms of processes or additional security. So, it is quite easy to set up any operation, to do that level of security and compliance with Microsoft Azure. And, we had that running, for a year. Since we have other capabilities in other divisions as well, we decided to move those kind of public-facing and internet-facing components internally, which we were running on Azure. We closed that after a year of experimenting, but the compliance part was actually running okay.

***Researcher:*** From an IT perspective, when does a meaningful due diligence happen, in an acquisition? Do you think this happens before or after the deal is signed?

***Respondent:*** In our case, luckily, we do have involvement in due diligence even before the business decides and makes any legal commitment, or closes the deal. Normally, I would say, IT has a major role to play. The whole industry we are in, relies so heavily on IT, that the overall value of a company is not just the business model, the customers, the commitment and the financial status, but is actually the shape and the quality of the Information Technology, that we are operating at that stage. So, we try to involve IT and give it a chance to really understand, what the company possesses at the time. Of course, I have to admit that companies are not as transparent as you would hope because sometimes they just don't have enough documentation or not everything is up-to-date. Sometimes, it is a bit of a struggle to make out from their available documentation (made available by Legal), what they actually have. And, then you need

to have a number of rounds of discussions, to clarify the same. Regarding your question about a thorough due diligence during the pre-merger phase, this normally does not happen one hundred percent, even if the intentions are right from both sides and the resources from our side are focused on the same. When we buy at least a minority stake in the target company, that's when we get closer to that company, and we start to get some real understanding of their technologies. That's when certain information surfaces and needs to be incorporated into the previously approved 3-year plan. We've had experiences when I would say, the planning of the migration took significantly longer because some of the steps took much longer, to get the customer base moved over to a different technology platform which provides more-or-less the same service. This could also be because some of the information was not presented during the pre-merger due diligence phase, so things needed to be significantly changed at that time.

***Researcher:*** Besides the other key reasons you marked for integration, you also mentioned 'widening service portfolio to increase competitive advantage' as one of the other reasons. Could you please elaborate on the same?

***Respondent:*** Yes. For example, we acquired a company last year, and we are working on the integration right now. Technically, we provide a kind of high-tier service, in terms of ATM services cash machines. This company is actually providing a low-tier model, with so-called merchant filled ATMs -- where an ATM is placed in a merchant store, and the merchant is supplying the cash. Therefore, the cost of the operation, the whole model, the profitability and so many other things are different. For example, in Europe, we are very close to the saturation point, practically having only 4 or 5

countries in which we don't have a very strong presence, for a particular market segment that we are a leader in. But on these low-tier services merchant filled ATMs, we did not have a market presence, so we decided that we would like to extend our portfolio, not just in the aspect of top-tier services but in that of low-tier services, as well. That's why we were driving this acquisition, from a business angle.

***Researcher:*** Could you elaborate on the acquisition and integration model, that you use?

***Respondent:*** I think all these acquisitions pretty much rely on the country, regional and industry-wide trends and happenings. Normally, these acquisitions are always part of improving our strengths but are also about trying to see what's going on in the market place. We also need to understand the region, the industry trends, what work our major partners and customers such as banks, are doing in the region, etc. We do have competitors, but our competitors are not really competitors for all services that we provide. It's a kind of interesting situation that we don't have competitors in the overall service portfolio -- but in separate segments, we do have one, two or three competitors, different ones in different regions. We need to get information in terms of business, to really understand these trends and make good decisions, where we can enjoy the benefits of any acquisition and subsequent integration. Normally, a company is not integrating for financial benefits. So, we are not acquiring another company, firing half of the human resources and just scaling down the operations, to save cost. That's not really the model, we are using. We buy those services, and that's just where we might do some technology transformation in the back-end. We usually try to keep the human

resources or even increase the number of resources. I believe we are relatively unique from that angle -- it's not about firing people and just picking up the market which they created. We try to reuse those skill sets and experience, which we acquire with the company, and retain as much as possible.

***Researcher:*** For this particular integration, you rated the *IT integration savings* a little lower than the *overall integration savings*. Would you explain the reasons, behind this?

***Respondent:*** Yes. Normally what happens is that we buy a company, which has potential or has certain market segments that we don't have, or is in a certain niche. But many times, these companies have lower levels of technology and IT standards. So, when we acquire them and we start to change the technology, it is not very easy from a savings point because we would like to improve the quality, and we also need to invest a lot to standardize their platform. We place great emphasis on IT security, so usually our security investment is much higher, compared to what the acquired company had invested before, in order to meet the minimum standards. I think that's where the potential for IT savings is not very high because normally in case of these acquisitions, we need to invest a lot, whereas the savings come from certain parts of the back-end infrastructure, which can be provided from scaling up our private cloud infrastructure. But in terms of internet endpoints, gateways, the overall telecom connections, etc., these usually are the points where we need to invest, and not save.

***Researcher:*** This particular integration was originally scheduled for 24 months, but eventually took 34 months. However, the delay didn't seem to have too much of an impact on the integration savings. Could you please explain why?

***Respondent:*** Yes. The project had been planned, to move services from the old infrastructure, to get that synergy and efficiency. But as I mentioned earlier, the savings have been delayed. In a way, I would say those services are organically growing, as we got a decent growth in those markets. Although we lost customers, we also increased the business because of the customers which we had migrated. I would say, probably 80-90 % of the business volume of the acquired company, has been migrated over. We still have one service which is running out of that old data center, and that's a tricky service called 3D Secure. As you know, that service is for e-commerce payment, and you have a two-factor extra verification for your e-commerce shopping with MasterCard or Visa. This practically requires a very heavy audit, before the service can be validated and can go live. We built an environment, where we ran into some issues, and we wanted to change things around and kind of re-build the environment, especially the encryption and key management part. Now, we are waiting for that other audit, which hopefully will happen in May, and after that, we will finally be able to migrate that service out, from our acquired data center. We also had other activities which were there in credit card issuing -- the personalization and handling of the old plastic card. These are very cumbersome and security driven processes, and we were doing such card personalization activities in that location, with heavy security in the building and everything. It also took us time to migrate that activity out from that building, within the business in the region, and that has been completed as well. Finally,

things are coming together. There has been quite a delay, and I would say that we are now closer to the fourth month of delay. But these things are running at a relatively minimal cost, as we have not invested in data centers, since long. A bit of electricity and telecommunication is still running in that place, and hopefully within two months we will be able to close that down and just focus on the new parts of the technologies and what to build in the country and the center.

***Researcher:*** What are some of the managerial insights that you could share, regarding do's and don'ts for a successful integration? Also, what do you think would be the top 3 considerations for a successful merger?

***Respondent:*** Well, probably the best example that I see, and possibly more in our recent acquisitions, I would say that what is required is a little bit more involvement in due diligence, and more importantly, the closure of that acquisition and the start of the migration. The planning is there, but the activities need to be happening, cross-functionally. We acquired a company last year, and we are quite advanced with the core activity needed for this kind of integration process. We spent three days in the office together, because of the announcement of that acquisition. Practically, almost 30 - 40 people from different disciplines, right from finance, operations, IT, sales operations and different parts of the company -- really went through and outlined what exactly they want to achieve, what is the timeline is, what the dependencies are, what they see, etc.

What I see in some of the earlier migrations e.g. the one where we have these delays, one of the weaknesses was that this kind of cross-functional planning was weak. It was too segmented. People were working in the same room for a few days, to establish a common understanding, but they had different streams of ideas and these were just coming together very slowly. That made the plan probably more vulnerable, for execution. From what I see, if we create the inner information flow i.e. if we get to know the stakeholders from the acquired company and the parent company, and if we have this initial planning session and immediately set up a project organization with communication, then the quality of the migration and the integration plan that we can put together, is much higher. Also, because of the well-organized nature of the project, handling exceptions and unforeseen events, is going to be slightly better, than in the case of a less organized approach.

***Researcher:*** Is there anything I missed, which you think is important to state in this interview?

***Respondent:*** Well, I would say that many things could be important, for a successful integration: (1) Communication with stakeholders or those employees who are part of the acquired company -- It might just be communication, related to budget or technological direction or regarding which technology needs to be deployed. (2) Retention of employees who have deep knowledge, vast experience or expertise -- Sometimes, we see a situation, where people are not motivated to execute the integration. For example, when we acquire a company, some of the key managers (who were probably owners there) get a very nice payout and due to the sudden change in

their financial situation, they lose interest, and their passion and drive also decreases. So, we need to have a plan, on how to retain them because many times, the acquired company's knowledge and expertise, is only in a few hands. (3) Retention and motivation of other employees -- Sometimes, there is a high employee turnover after the acquisition i.e. a higher number of people than expected, leave the company. So, we need to retain those individuals and keep them motivated by showing them what they can gain in terms of career advancement, by being in a bigger company. (4) The need to understand team dynamics, about different roles of individuals -- In the acquired company, we sometimes have an IT team with a dynamic and strong leader. Consequently, there may be some people who are very good technology-wise but are living in the shadow of this strong leader. Or sometimes, there are people who can work reasonably well in a certain team, but after we place them into different dynamics in a wide variety of teams, things that were previously working well, no longer do so, or some things which were weak, suddenly start to improve. So, we have to be able to understand these team dynamics about the different roles of individuals and plan accordingly, as to how to move them to different positions that are related to their work entity and capabilities, within the company.

Quite often, we see that many of the above steps are critical, only after an acquisition doesn't go as well as we planned. Therefore, besides the technology and IT aspects, it is also very important to properly deal with the different kinds of soft factors, to ensure a successful integration.

## Semiconductor Manufacturing Company

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| Respondent: | #8 |
| Industry | Semiconductor Manufacturing |
| Company: | U.S. based equipment supplier to large semiconductor companies |
| Integration effort: | Semiconductor equipment manufacturer, acquiring a competitor, to increase footprint and market share in Europe and Asia Pacific. The project involved IT integration of the acquired company, using a best-of-breed approach. |

***Researcher:*** What was your company's role in this integration? Were you the consultants, for this integration process?

***Respondent:*** Yes. We were hired as the integration consultants. We would be managing and implementing, the post-merger integration work for this client (Company X). The acquiring company (Company X) had engaged McKinsey, for the initial advice regarding the acquisition. Once the agreement was signed, they brought in our company as the post-merger integration consulting company.

***Researcher:*** Could you briefly explain, what the integration was about?

***Respondent:*** Yes. This is a U.S. based company that manufactures equipment for semiconductor manufacturers. AMD and Intel are their main customers. Company X acquired Company Y, which was its competitor in this business. The main reason was that the semiconductor manufacturing industry is cyclical, so it is very crucial for any

company that is in the marketplace, to survive the downturn during this difficult period. The second reason was mainly to expand its global footprint. The acquiring company (Company X) had a presence in North America, while the acquired company (Company Y) had a presence in Europe and Asia Pacific. Company X wanted to have a global presence, in terms of its marketplace and its manufacturing base. In order to complete the integration, Company X wanted to identify the right integration model, to merge with Company Y. Besides this, Company X also wanted help to identify which of its processes and systems should be extended to Company Y, and which processes it should retain in Company Y. That was the primary objective. Company X was also looking for a framework to identify the integration model or the processes and functions, across the value chain. To add to this, the company had a huge SAP footprint. Company X wanted to understand the SAP migration strategy, especially the master data migration, and how it would reconcile the SAP footprint between the two companies. It also wanted to know what elements of Company Y, were to be incorporated into the parent company. These were the primary objectives. A model was adopted to define the processes across the value chain, right from research & development, marketing, and product development, to maintenance, delivery of finished goods to the customers, after-sales support and all the associated back-end processes. Basically, Company X wanted to set up a framework that they could use, to look across both the parent and the acquired company's processes and functions.

We used what is called the APQC framework. This is a non-profit organization that develops process classification -- industry specific and now industry agnostic. As I

mentioned earlier, we had level 1, level 2 and level 3 processes that cover a complete process or value chain from the beginning of the life of the product, all the way to delivering the product, to maintaining it and managing the back-office operations. We identified the leaders for each of the functions, from both Company X and Company Y, and we developed a set of work products, for them to define which processes to choose and what data they would gain. We also defined the processes between different functions and how to incorporate them in different states, and based on the above, we then developed an integration model. During this process, we identified the SAP migration strategy for the company, and also how to rationalize the legal entity. In a sense, Company Y mitigated this risk, across the globe. They import and export a lot of equipment for internal use, and they also import for customer delivery. We had to define the overall global legal entity structure for Company X. That was one of the key objectives, as well. In the end, I think we were able to identify the integration model, and we broadened our company's best practices, in terms of how we helped our other clients to define the migration strategy and execute the integration. With that, we were able to guide Company X, to successfully complete the integration.

***Researcher:*** What was the reason for looking at a new business model?

***Respondent:*** In this case, we mostly used Company X's master business processes, and we had to come up with a justification as to why we had to use Company Y's processes. I think there were a couple of places that needed re-definition of the processes. One of the issues was after-sales support. Company Y had a very robust after-sales support. Labor resource management of the after-sales support has a price

attached to it, because it is a huge part of the revenue base in this kind of business. They sell equipment for 10 million dollars, but the actual product costs only about 7 million. About 3 million would be the after-sales support and the warranty support. There is a lot of revenue that goes to the warranty and the labor management's ability to find the right package and manage the work efficiently, so as to achieve the right profit margin. So, we had to define the core business processes in this area, but we chose a majority of the processes, from Company X.

***Researcher:*** Did you adopt the best-of-breed approach, for this integration?

***Respondent:*** Yes. That is true. We began with X's processes and looked at whether those would be a good option, before we looked into Company Y. We were looking for the best of both worlds, in each of the business processes. We didn't try to re-invent the wheel with Company X's processes.

***Researcher:*** Was there any additional driver for the merger, apart from gaining access to new markets and increasing market share?

***Respondent:*** Yes. I think those were the main criteria. The other aspect was the ability to cross-sell to the customers. Company X had a large business with Intel whereas Company Y had a large business with AMD. Company X's ability to sell to AMD, and Company Y's ability to sell to Intel, was a big part of the revenue criteria for them.

***Researcher:*** Why did you feel that the merged entity was highly *information-intensive*?

***Respondent:*** I think there were a couple of reasons. One is that Company X had to work closely with the supplier, for the new product certification process. When they developed a new product, they had to think about the manufacturing and the supply chain -- what would be the manufacturing process, what toolset would be used to develop the product, the client's stipulation about the new product and how that would create and enhance competitive advantage. That was crucial. One of the synergies to be achieved in an acquisition, is to understand the business across different customers. Secondly, SAP migration constituted a huge part of the acquisition costs. In terms of the risk and also from the cost synergy point of view, it was important to decide whether to maintain the two SAP instances or to merge them into one. The effort to identify the migration strategy, define the data migration process and implement the overall SAP migration, was a significant part of the integration costs. Also, there were some technical points from the external customer's perspective, and information systems played a crucial role in internalizing the implementation point of view.

***Researcher:*** Did you face any issues during the SAP integration process?

***Respondent:*** The key was data migration strategy and how we would run the business during the transition period, and that was defined by more accurate statements from the firms. I had experienced our company's best practices, in terms of managing these kinds of migrations in the past. Those helped to define the migration strategy and implement it.

***Researcher:*** Do you think an additional budget would have helped, to meet the integration objectives?

***Respondent:*** During the acquisition phase, there were assumptions related to, how simple or complex Company Y's exact footprint would be, and how the dependency on the dealer processes and the master data setup, would influence the final scope of the project. Some of the unique processes that we had to support, and the difference in the data that we had from Company X and Company Y, was significant. Additional effort was required, to define a data model that would meet the business needs of both the companies. A lot of data that had to be imported into the system, had to be cleaned up. This required bringing in third-party help, and that created the additional budget requirement. In retrospect, I think Company X should have been more conservative in estimating the effort that would be needed, to meet the integration expectations.

***Researcher:*** Was there a particular reason, that the *IT integration savings* exceeded expectations, as compared to the *overall integration savings*?

***Respondent:*** There were a couple of reasons. The IT integration timeline was almost attainable because of the ability to develop the integration model and implement it, whereas overall integration took a little longer. Also, the cost synergy that Company X was expecting from its customers, was a bit delayed in the sense that they were chasing moving revenue targets as to what a customers' product line would be and what their demand forecast would be, which would drive the business for Company X. As for the customers, their business needs would vary, and that slowed down the revenue synergies. From that point of view, I think IT was more containable in terms of planning

the integration strategy and how much it would cost versus the revenue synergies Company X was expecting from its customers.

***Researcher:*** Is IT considered a competitive advantage for any firm, in the semiconductor manufacturing industry?

***Respondent:*** I wouldn't say IT is the only competitive advantage or the core competency, but IT plays a crucial role. In this business, the ability to go to the market in a relatively short time, is critical for success. IT's ability to shorten the product development lifecycle so that they can stock up new products and support the clients' needs, is crucial. From that point of view, IT's ability to support this process, is crucial.

***Researcher:*** Can you elaborate on your statement, that digital transformation was one of the *technology priorities* for this integration?

***Respondent:*** I think that was the time when our company was also into front office automation and digital transformation. The ability to bring information to the hands of the employees when they need it e.g. when a company has to send its support team to the client site and minimize the downtime for the client, it is a significant part of their cost savings. Having all the information at their disposal, it's then up to the support team's initiative to fix the problem with these expensive machines, and ensure that they are up and running, in a relatively short time. The ability of the employees to access relevant information, repositories and the knowledge base across both the acquired company as well as the acquiring company, was one of the expectations of the integration effort. Based on this information, they could combine the teams or cross-

pollinate the teams, to achieve the most optimal outcome. So, digital transformation was a crucial part, in terms of affecting the revenue in this space.

***Researcher:*** When did your company get involved, in the due diligence process?

***Respondent:*** Due diligence is usually conducted, before signing the acquisition agreement. We were brought in, just before they were closing the acquisition deal to ensure that we were well poised, to avoid any potential risk. So, we were part of the due diligence, but just a little bit. Immediately after that, we started the overall acquisition integration planning.

***Researcher:*** When do you think a meaningful IT due diligence happens? Is that prior to the merger announcement or post-merger?

***Respondent:*** We have to do a part of the due diligence and integration planning, prior to the merger. I suspect we were brought in earlier, to do some due diligence. Ideally, we would want to be more involved upfront, in the process. In my other experiences, we were part of a due diligence team, way before the client signed the agreement. We had signed a Non-Disclosure Agreement, so that allowed us to get access to the client's information. I think in most of the cases, it boils down to defining what information you are looking for, that is specific to this industry or the client and the IT footprint they have. There would be some common IT elements to be found -- some unique IT portfolio that you would need to look into, in addition to the IT infrastructure portfolio. The common elements would be (1) What is the application for the portfolio? (2) What is the IT organization structure? (3) What is the cost base for this structure? (4) What

is the supplier base? You also have to look at the overall IT architecture and business architecture that are impacting the business, and how they are being sourced and serviced. SAP integration cost was the determining factor, in that acquisition. A small part of the conglomerate, was up for sale and Company X wanted to buy it. Company X was a family owned business, worth maybe US$200 million or US$300 million. SAP migration became a huge part of the acquisition cost, disproportionate to the revenue that they were hoping to get. So, it is important to engage in 'IT due diligence' upfront, to make sure you validate any assumptions as close as possible with the IT integration costs, that would fit into the overall acquisition business case.

***Researcher:*** What would you do differently or what would you advise somebody else doing a similar integration?

***Respondent:*** I think in some cases, it would be looked at this way -- we sign an agreement on a certain date, and the business development team now equips the business case, to move ahead with the acquisition. They do research on why this acquisition makes sense, what are the revenue and cost synergies, etc. So, that is primarily the position, at that point. Once the target company is acquired, the post-merger integration team proceeds with the integration and implementation phases. Some integrations are shorter, so when the market changes, it would have a minimal impact. In cases where the integration is longer, the market changes would have a huge impact. What one thought would be the acquisition goal, may change as one goes through the integration planning and implementation. So, it is critical to have continuous inputs from the executive team, on what is changing in the marketplace and

what is changing from the strategy point of view, and how that should be factored into the post-merger integration as much as possible. We can't continually re-define the integration. But we want to ensure that we have the right information at the right time to define the integration, as we go through the process and implement it. I think that would be a good point to consider. The second one is from the cost perspective. I think it is important to have good control over the integration costs. That means one has to see what features would make sense. For example, if a company is cutting down on the workforce due to duplication, but there are opportunities to reposition those teams, that is something one can consider, and also leverage the integration as a transformational opportunity to redefine some of the existing processes. There would be a key question that may come up in most of the cases -- "Okay, we outlived both. I think we now have an opportunity to do something new here that may help but which will take longer. So, should we do a faster integration that would meet our immediate goals, or should we do something that is good for the long haul?" There needs to be a good decision framework to address this -- in terms of what the benefits are, what the costs are, how it impacts the business and who makes the decisions. A good support framework would help the integration teams to make the right decision on the transformation opportunity, and then move forward.

***Researcher:*** Lastly, in terms of pitfalls, what do you think should be avoided?

***Respondent:*** In terms of integration, people tend to lose energy and focus, and business teams are more interested in running the day-to-day activities rather than spending time on integration. I think it is very important to keep the momentum going

with the post-merger integration and ensure that there are dedicated teams, which can focus on completing the integration. It's very crucial to gain alignment with the business. If one doesn't pay attention to this, then the integration could move in a direction that would be detrimental to the firm.

## Public Transportation Company

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| Respondent: | #9 |
| Industry | Public Transportation |
| Company | Domestic U.S. based operations, 20,000+ employees |
| Integration effort: | IT integration of various divisions within the company (Firm-wide technology transformation initiative). |

***Researcher:*** Firstly, could you share a little about the background of this integration and also mention which industry it pertains to?

***Respondent:*** It's in the transportation industry. The company is extremely low maturity. So, if you're familiar with the CMMI or OPM3 assessment, they are in the same category -- more like, way down at the bottom. They have very segmented-like silo technology, seven different timekeeping versions, five different LMS applications, etc. None of them are current and none of them are maintained. The data integrity and the systems are suspect, at best. For example, I would call a request from, what's supposed to be their system of record for project IDs. And, the Project Manager for most of the projects in IT, is listed as the CIO and not as a Project Manager. The real CIO is listed as the Project Manager! They don't have a concept of scope project costs. Their idea of scope is -- "Tell me how much money I can have and then I'll let you know what I can do with it." Very, very immature. A new CEO came in and understandably said, "This is unacceptable," and that they needed to merge all this stuff and make it how it should be, for a corporate environment.

***Researcher:*** What were the key drivers for this merger?

***Respondent:*** There are a few, cast as a major factor. This company is wholly owned by the federal government, and has been poorly managed for many years. They got a new person to run the company, who came from a commercial environment rather than from inside the government. This person wanted the company to be run like a business, and not like a government. And, that really was the impetus for the change. So, if you combine that with the series of reports from the Inspector General's office, talking about the company's inability to perform projects anywhere near a minimum standard level, it's really bad.

***Researcher:*** May I just re-confirm, that we are talking about a merger integration project, where two companies combine?

***Respondent:*** Yes. Although it's not really two companies, it's multiple divisions. There's a division that runs Human Resources. Another division, that runs High-Speed Rail. There's a third division that runs Commuter Transportation, and a fourth one that runs Long Distance Lines. Every single division has their own 'everything' -- their own Financial Services, their own Learning Management System, their own Human Resources, etc. The new company leader came in and said, "This is unacceptable. We are one company, we share one platform for each other, and one platform for everything." He forced everyone to combine them all, so we ended up with one timekeeping solution and one Human Resources department. While it wasn't a typical merger, it was a merger of multiple systems. From a systems integration perspective, it was exactly like a merger because of the different applications, the different systems,

and the fact that we had to go through the whole data mapping and all of those things that you would do in a pure M&A environment. They were doing all that, though the requirements were different.

***Researcher:*** You scored pretty high for *technology priorities* 1, 2 and 3. Was this reflected in the project outcome?

***Respondent:*** No. I wouldn't say it was good. It is a priority of the company, to merge all those things -- a very high priority, to have even the CEO asking for the status on a weekly basis. So, it's extremely high priority and has lots and lots of visibility, but it's still not done, and it's not going well.

***Researcher:*** Was *overall synergy savings* one of the objectives, in this whole exercise?

***Respondent:*** We will get savings once the old systems are turned down. For example, every single one of the 5 LMS systems that they have now, is at least two revs behind, if not more. So, they looked into this and did a cost benefit analysis, for upgrading one of the existing platforms to a newer version of the ones they already have versus buying a new one altogether, which is not one of the ones they have. They selected a new application, went ahead and submitted the business case for it and then the business case was denied. So, that's kind of what the process has been, to do that.

***Researcher:*** Regarding information intensiveness of the firm, you rated it as a '4' i.e. medium intensive. Could you elaborate on this?

***Respondent:*** Some of the pieces of equipment that are run to deliver the services, are 75 to 100 years old. But the scheduling of all that equipment, mobile devices, etc., is web enabled. So, one end of it is fairly modern, and the other end is archaic. While getting people from point A to point B is not necessarily technology driven, the devices that they use to get people on the train, are data driven. For example, selling tickets online or on the phone, etc. As far as getting people on the train is concerned, all of that part is fairly modern and data intensive. But once you get to that point, it stops. Even on the high-speed rail, the technology that they are using is almost 30 years old. As a matter of fact, they are just getting ready to expire and then they'll have to give all those trains back.

***Researcher:*** You marked the *budget allocation* for IT integration as a '2' i.e. low. Would you please explain why?

***Respondent:*** They have no idea about how much things cost, and they don't do a good job of estimating.

***Researcher:*** What could be the reason for the *low budget allocation*, for IT integration? Is it because there is no appreciation for IT, as a business enabler? What's your managerial perspective on this?

***Respondent:*** There are multiple factors. No appreciation for what technology can do for them, is absolutely at the top of the list. Also, within the existing technology department, confidence to deliver what is required, is very low. And I would say that, from a corporate perspective. Part of the reason why there are so many segmented

systems, is the consistent inability of the technology department to perform over the years, which in turn is part of the fracturing of technology support. I think the other contributing factor, is the low maturity of the organization from a project management perspective as well as from the sheer 'running of a business' perspective. The common philosophy or understanding is -- 'You are in business, to make money.' And, this is fine with them. Since the company is owned by the government, they don't think they need to make a profit. They don't even think that they need to break even. A lot of things that you would see as commonplace within a commercial enterprise, do not exist here. They are completely absent.

***Researcher:*** The ratings for your *overall integration savings* and *IT integration savings*, were both marked as '1' i.e. the expectations weren't met, for either. Could you please clarify?

***Respondent:*** Yes. I don't think they are going to be able to do it. They can't even state what the requirements are. So, I am not sure how they are going to save any money or turn anything off. I have a strong disbelief that they'll ever be able to merge. It's kind of hard to say that we're going to merge these two systems, if one can't even tell the architecture of the current system and why things are done that way, even down to IT, which is one of the most mature organizations in a company. So is the way in which they manage projects, which is all process driven, process flow, work flow, etc. They can't provide process documentation for their project management system. Neither can they produce a process diagram on how projects work, through their own application. If they can't do that, and it is their most process-intensive application, how are they

going to do that for anything else? Just to upgrade that particular application and get their current system documented and understood, they estimate that they are going to have to put in at least a million dollars' worth of labor hours, which is crazy.

***Researcher:*** Since you are from a commercial enterprise space, have you worked on quite a few M&As?

***Respondent:*** Yes. I did M&As for banks, for 17 years. After that, I left and went to the energy space, where I did another merger before this. And, I thought that all that M&A experience I had for the last 18 years would be helpful here, but no amount of commercial enterprise experience can prepare you for this.

***Researcher:*** Regarding the schedule, is the project ongoing and the end date not yet known?

***Respondent:*** Well, they can't even define what their requirements are. According to the CEO, this project is a high priority for the company, for the next 12 - 36 months, and he said that is his legacy for the company. But the first business case that they put forward was so poorly constructed, that even though he considers this project high priority, he did not approve the first business case. It gives you an idea about how bad it is.

***Researcher:*** When do you think a meaningful IT due diligence happens, in an IT integration project? Is it during the pre-merger stage or is it post-merger?

***Respondent:*** It depends on what you're doing and how much information is allowed to be shared, pre-merger. Most of the space that I came from i.e. financial services and energy, is highly regulated within the U.S., and you're extremely limited on what you are allowed to share, pre-merger. Usually, you get an idea beforehand, but nowhere near to the technical level that you need, to be able to do that kind of work. Almost everything that I've done, has been post-merger.

***Researcher:*** If you can share a couple of managerial insights, regarding do's and don'ts for a successful merger, what would those be?

***Respondent:*** Absolutely, the most planning that you could possibly do upfront. Right now, a lot of people are very much into Agile. But I wouldn't recommend doing anything Agile, because merger integration is not something you would want to do that way. You need to do really detailed planning, for merger integration. It does require full and complete discovery and all the data mapping, right down to how many characters go into that field. So, it needs to be very detail process-oriented, in the beginning. I know it's painful and long, but there's a reason for it, in order to make the merger integration successful. That's coming from someone who's done 19 merger integrations and this one debacle that I am a part of. Out of 19 prior mergers, I would say 18 of them were an unmitigated success and only one of them was 'okay'. For the one that was 'okay', we did not do all of the forward planning that we would normally do in a merger. That was partly because of the insistence of the other company that we do this in a more Agile format -- kind of like two weeks. And, there's not enough time for the level of detail that's required, to do that type of integration. When we did do the

merger, we had lots of data integration issues since we didn't do that forward planning upfront. So, I can't say enough, how important it is, to do the most planning that you could possibly do upfront.

## Banking Financial Services Company II

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| Respondent: | #12 |
| Industry: | Banking Financial Services |
| Company: | Asian Bank (Singapore based), 20,000+ employees |
| Integration effort: | Acquisition and integration of smaller banks in the region, to de-risk its previous Singapore-centric focus. |

***Researcher:*** Could you briefly describe, what the project was about and what was your role in it?

***Respondent:*** Some years ago, the bank had publicly announced a change in their strategy, to go regional. The strategic reasoning behind it was because they realized that having too much of their revenue generated just from the Singapore location, was very risky. So, they wanted to de-risk themselves by generating separate streams of income, particularly from the international operations. Then, there was a change in the management. The new management made a series of announcements, and the analysts / investors quite liked the new direction. After this, a new series of very senior management was brought in, to look at the possibility and management, of acquisition targets. Later on, I joined this bank, from a regional international bank. One of the reasons was because of my prior M&A experience, in Technology and Operations. I joined as the equivalent of a Chief Operating Officer, of what we initially called, the Technology group. Eventually, the Technology group was transformed into what we now call T&O i.e. Technology & Operations. We came under one single group entity. I was also hired as the Group MD but was mainly responsible for the Business

Management Office, which looked after the portfolio of project, sourcing, procurement and shared services across the whole banking group, including corporate real estate. My role was to help in the execution, once we had decided on which target to acquire. We had acquired quite a few banks during that period, one of which was a bank in Thailand while the other was a bank in Hong Kong. During my tenure with this bank, there were one or two acquisition attempts including a major one in Australia. But unfortunately, these did not go through. My role in M&As, was that of post-merger integration -- to ensure standard processes, efficiency and effectiveness, when we operate as a group.

***Researcher:*** Apart from de-risking the business and diversifying across geographical locations, what were the other objectives?

***Respondent:*** As I said earlier, the key objective was to ensure that the bank's income was not solely from Singapore. Before all the M&A activities, the bank's income was probably 80-90% from its Singapore operations, but the whole idea was to bring that number from 80-90% to maybe about 60% or 50%.

***Researcher:*** What were the key criteria, when acquiring these banks? Also, was it a friendly takeover or was there resistance from any of these banks?

***Respondent:*** I would say that the two takeovers were friendly ones except for the Australian one, which we aborted because there were many objections from the Australian regulator.

***Researcher:*** You have marked a fairly high score for all of the key objectives of the mergers. Does that mean that these acquisitions were fairly successful?

***Respondent:*** Yes. I would say they've been fairly successful, as we did not really face major hiccups during the whole post-merger integration.

***Researcher:*** When you say the acquisitions were successful, what were the key parameters you were looking at?

***Respondent:*** For example, we were making sure that compliance requirements and regulators' deadlines were met. In terms of integrating the two distinct cultures of two different banks, I think over time there was much more co-operation and very little resistance (although there was some, occasionally). But generally, the teamwork was quite good, and we also met the strategic objectives of the acquisitions.

***Researcher:*** How important were *synergy savings*, for this entire integration? Was that one of the objectives?

***Respondent:*** Yes, it was. I think we achieved probably very close, as stated. In fact, in some instances, we exceeded the target.

***Researcher:*** From a managerial perspective, what are the key parameters that you would look at, in terms of a successful integration?

***Respondent:*** From my perspective as a Managing Director - Technology & Operations, I would say that our focus was on efficiency and effectiveness. Efficiency is about inputs and outputs, and ensuring that whatever resources we consume, were

effectively generating the kind of outcomes that we wanted. For example, if we look at the procurement and strategic sourcing space, we also wanted to make sure that every dollar we spend on outsourcing or using vendors, was actually beneficial to the group, rather than to each individual location. One of the outcomes of that was, we also purchased what we call a major (more than one billion US dollars) 8-year IT outsourcing program. We did quite a few things such as standardizing vendors and service providers, and joining procurement or group procurement, so that we actually had economies of scale. Effectiveness is defined as, doing the right thing and making sure that it's not just about input / output. It's about whether, what we are doing, aligns with the group's strategic direction. For example, doing the right thing can mean, bringing appropriate technology that could be used as a group, or making a wise decision regarding which technology platform we should keep and which we should discard, and so on. So, these are some of the things that were looked at, and some of them were done, obviously with some challenges. We probably did most of them. It was a very tough slog. It wasn't a 6-month thing. There was a protracted period of several years, associated with the acquisition.

***Researcher:*** You rated *IT synergy savings* as a '5', and mentioned that it was a fairly important factor. Did you do anything differently, for the IT integration part? And, were there any highlights on this front?

***Respondent:*** One of the highlights was that we discovered some very good technologies outside the group, in those banks, which we acquired outside of Singapore. As a result, we found that we had gained a lot of expertise in those

technologies that we didn't have, or which we were not using in Singapore. So, that was a big plus point. Getting an understanding of original market offerings, was also quite enlightening.

***Researcher:*** Regarding your rating of '3' for the *IT integration budget*, did you feel that if you had a bigger budget, it would have helped?

***Respondent:*** Not necessarily. I think there will be some point of diminishing return if you have more money. But one of the issues that we faced post-merger, was that a lot of resources were not put full-time on the post-merger integration. The resources had to do their day-to-day jobs as well as get involved in the post-merger integration process. So, they were stretched quite a bit, especially if another M & A was initiated while we were doing the post-merger integration of a particular bank. However, if we had a bigger budget, we could have gotten more resources that were focused on the post-merger integration, only.

***Researcher:*** For the *overall integration savings*, does your rating of '5' mean that you exceeded the target for the same? If yes, what were the factors that contributed to this success?

***Respondent:*** It was probably the team that was assembled, at the senior level. And subsequently, the middle level and more junior staff, that had prior experience doing mergers and acquisitions. Moreover, I think the whole team understood the Asian banking culture, quite well. Those three factors were definitely, the major contributors. For example, if we were to bring in people who were not familiar with Asian banking

and corporate practices, it would probably take longer, create more misunderstandings and result in an inefficient integration.

***Researcher:*** As you mentioned that Technology Operations' early involvement in due diligence, was also a contributing success factor -- in your opinion, when does a meaningful due diligence for IT, happen?

***Respondent:*** It should actually begin at the strategy stage, so that we know what is the intent of the strategy and which direction the bank wants to head in. That way, when IT does the due diligence, they will ensure that it is looked at, from the 'lens' of the strategy intent.

***Researcher:*** Quite frequently, due to confidentiality reasons, you get a very limited exposure to the target company's IT infrastructure. From the acquiring bank's perspective, what do you think really happens?

***Respondent:*** Generally, at the strategy stage, things are highly confidential, and only a few of us, usually at the 'B' level, are privy to that information. I will refer to it, as the 'inner circle.' So, the 'inner circle' would be given all the key information and from there we could figure out what we ought to do and how. My role was quite instrumental in the technology operations space because at one stage, we looked after the portfolio of projects. For example, if we found that an M&A of a particular acquiring bank had certain expertise in an area and our project actually related to that area, we would stop that project or program or at least defer it, if we thought that the chances of the M&A were quite strong. I was also quite fortunate because I was working as the right-hand

man, of the Group Head of Technology & Operations, and consequently, I was privy to highly confidential information. As I was doing strategic sourcing, we also had to figure out where the vendors were, and we probably needed to slow down, if we intended to pursue a particularly big merger and acquisition.

***Researcher:*** You mentioned earlier, that 60% of the *overall integration savings*, was attributed to IT integration. Could you elaborate on this?

***Respondent:*** Actually, when I put 60%, what I meant was Technology & Operations not just Technology per se. As you know, banks are practically run on technology. This technology could be internally developed, but most of the time it is sourced from various technology partners. For example, if it is decided to standardize on a core banking system, we effectively stop work and maintenance on the older / to-be-discarded core banking platform. So, for the core banking platform, you are easily looking at savings of 15-25% in maintenance avoidance, when you stop using a particular vendor. But having said that, you will then have to increase your maintenance investment for the new core banking system. Obviously, we are not talking about an equivalent of an exact dollar for dollar cost increase. Also, if we standardize on one platform, we can buy systems with economies of scale. That way, we can save on Technology alone. Operations, Shared Services, setting up a Centre of Excellence (instead of multiple call centers and multiple data centers), leveraging more on the existing technology which we already have, and things like cost-effective airlines, hotels, etc., for business travels -- can all lead to cost savings. A stronger bargaining

power as a group, will also help reduce costs. We're looking at a range of between 10-20% cost savings, in terms of procurement as well.

***Researcher:*** The project's original schedule was 12-18 months, but you actually completed it in 15-20 months. Did this delay have much impact, on the *overall synergy savings* that were generated?

***Respondent***: Usually, the delay is due to the business unit. So, I'm not very certain about that.

***Researcher:*** But if the delay is too much i.e. more than one calendar year, does it impact the *overall synergy savings*?

***Respondent:*** Yes, and it also increases the risks.

***Researcher:*** When the delay is one year or more, why do you think it impacts the *overall synergy savings*?

***Respondent:*** I can't quite comment on that. The reason is because, so far, I've done just a few mergers and acquisitions, maybe about 2 or 3, and for most of them, I did not experience this 12-month delay. But my reading of it, is that we constantly push the post-merger integration team very hard from behind because it's not just about cost over-run but also about risk, or about a loss of personnel, because of the possibility that the M&A integration staff either resigned or quit. For whatever reason, you are losing a lot of knowledge that is needed, and this slows down the momentum, and increases

cost at the same time. You could also get into compliance risk issues because Regulators expect you to complete your work within a certain period.

***Researcher:*** Does the regulation part, apply to the IT integration work as well?

***Respondent:*** Yes, it does.

***Researcher:*** In the banking industry, does the entire integration (including the IT integration) have to be completed, within the specified period?

***Respondent:*** Yes.

***Researcher:*** Is the project schedule a very strong driver for M&As, in the banking industry?

***Respondent:*** Yes, it is. The sponsors of the M&A, will constantly be hounding you, to check on the progress, status and so on.

***Researcher:*** From a managerial point of view, can you share a few insights such as Do's and Don'ts for successful merger integrations?

***Respondent:*** There are three important things, for successful merger integrations: (1) It is very important for Technology & Operations, to get involved as early as possible, preferably at the strategy stage rather than towards the end, when the deal is more or less decided. This is to ensure Top Level Management alignment as well as buy-in. If these groups are involved at a later stage, the buy-in is not as strong as when they take ownership of the M&A. (2) The support of the sponsor and the PMI team is extremely

important because there are many unanticipated outcomes or issues that the PMI team will face, during the integration. In order to ensure the successful completion of a merger integration, it's important to have a very strong and active sponsor who is very supportive, especially when it's really tough. (3) And, if I'm not wrong, prior studies have indicated that many M&As are not successful because the PMI was not fully executed. So, if your sponsor realizes that and makes an effort to form the PMI team, and you find a chance to talk it out, it's much better.

## Container Shipping Company

Respondent: #13

Industry: Container Shipping

Company: Global Co. (Headquarters - Europe), 20,000+ employees

Integration effort: Asian portion of integration of two large container shipping global companies (merger of equals)

***Researcher:*** Regarding the importance of IT integration, you rated it as very 'low' and mentioned that IT integration was not important.

***Respondent:*** Yes. Back then, that was true.

***Researcher:*** Could you briefly describe what the integration was about, and why you rated 'low' for overall and *IT synergy savings*?

***Respondent:*** The acquisition of the target company was based on the acquiring company's market share and maintaining of the same. At that point in time, we calculated synergies, which would come. It was decided that the target company or the acquired company, would simply adopt the systems, which existed in the acquiring company. So, it was more about getting those people to buy-in to the system that we were working on, rather than trying to integrate the two systems. Clearly, there were areas where integration was required, but we messed around it for so long, that in the end, it just didn't work. The integration didn't happen, in the end. But integration from a cultural perspective, including the cultural perspective as applicable to IT, turned out to be the most important. People were simply not used to the new system, and they

didn't want to adapt to it. They just wanted to go about their old ways, and that was a major challenge. Nobody wanted the new system, so how could we get them to? The focus was then on training sessions and town hall meetings to explain why the new system is better and how to use it, and on creating super-users (one super-user per so many users), and this and that. So, it was like a huge effort, trying to get people on board.

***Researcher:*** Did you underestimate the importance of IT, in the integration?

***Respondent:*** Yes. We certainly underestimated the impact and the difficulties that we would face. At that point in time, IT was not really of key importance, in Shipping. But looking back, things have changed, from then to now. At this point in time, IT is a major factor in shipping, and even more so, recently. So, therein, lies a little bit of a difference, in terms of the importance of IT. Nobody was really going through the acquisition or trying to calculate synergies that will come from IT. All those thoughts pretty much didn't even exist. So, there was no targeted synergy from IT and no targeted savings from IT. Later on, we realized that nobody wanted to use the new IT system, and we were now wondering how to function.

***Researcher:*** What do you think has changed, in the last ten years or so, that you now deem IT to be so important?

***Respondent:*** Back then, Shipping was always a capital-intensive business. This means that you invest your money, go and buy the assets, and then operate those assets. That is the basis for earning, and your profit basically comes from a return on the

investment that you make. This was true, almost forever. What has happened in the last five years, is that things have changed a lot. The component of returns has become even smaller, and the shipping business has now moved from being a capital-intensive industry to being a service-oriented industry. Gone are the days, where you can just say, "I have a ship, please give me cargo." It doesn't work like that anymore. Shipping is now trying to become like Logistics. What Shipping is trying to do now, is to integrate, by picking up cargo from the end customer, bringing it to the container freight station, stuffing it and then putting it on board the vessel. Previously, the customer would come to the shipping company and inquire about which ship is sailing, from where to where and whether he / she could book on that ship. That's no longer the case now. The customer doesn't care anymore. Nowadays, the customer says, "I want my specified cargo to move from this particular location to that particular location. So, tell me how much is the cost and what is the delivery time?" Since Shipping is now becoming a service industry, there is a huge change regarding the importance of IT. Nowadays, you can't move a single thing without IT. Everything is dependent on IT. The whole process is done on IT. We don't have people to go to every shop. Previously, we had people to man the big offices where customers would come to book their cargoes. But things have changed now, because Shipping has become more like a logistics company. It's moving towards that. And, the capital cost is no longer important. Whether you move the cargo on your own ship, or you move the cargo on a leased vessel, or you book it with somebody else -- nobody cares anymore. So, that's a big change.

***Researcher:*** So, is Shipping becoming more like end-to-end logistics?

***Respondent:*** Well, it is not becoming end-to-end. The shipping companies are doing whatever they can, to provide better service to the customer. But the focus is on, how to add value to services, because the capital is not returning anything at all.

***Researcher:*** What do you think, could have been done better with the integration?

***Respondent:*** Basically, people didn't want to accept the changes, so it is as simple as that. Everything was there, but nobody wanted it and, the mistake was that all this wasn't factored in. It shouldn't have come as a shock to people, but it did. So, the expectation was not set right. The processes that should have been created, were not created. Nobody was willing to acknowledge that the other side was not going to accept the changes. Had we planned around that, it would have been much better.

***Researcher:*** When you mentioned that the whole project was way behind schedule, what was the original schedule and what was the time you took, ultimately?

***Respondent:*** I think the original schedule for the full integration, was two years. But it didn't happen. Ultimately, it took more than five years.

***Researcher:*** Regarding IT due diligence, as a factor to be considered in merger integration, do you think there was enough due diligence done on IT?

***Respondent:*** No! Nothing was done, and we should have done more. There was an underlying assumption in everything, that we'll just say -- Here are the new systems and here is the due date. But it did not work like that. So, we should have made an

effort in due diligence, to try and understand what they were doing, what IT systems they were using, how it was interlinked between different offices and so on. We also should have mapped their IT process and ours. We would have then found out where the gaps were, and how to go about closing the same.

***Researcher:*** Was there any positive outcome, as a result of the integration?

***Respondent:*** No, it was a total failure. Everything was a total failure. None of the synergies worked out. The costs actually went up. The integration didn't happen, as per schedule. Whatever we had envisaged that we would gain in terms of cargo by integrating trade routes, didn't happen either. And, the price that was paid was too much. How else would we define a bad merger?

***Researcher:*** If you were to do it all over again, what would you do differently?

***Respondent:*** A lot more thought has to go into a merger integration process. I think the major takeaway was, that we should first map the existing processes of the target company in every which way, before we start to draw up our plans and calculate our own synergy. Only after that, can we decide, whether this integration is going to work, or not. So, there's a lot of planning to be done, before a merger integration.

## Insurance Company I

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| Respondent: | #14 |
| Industry: | Insurance |
| Company: | Global Co. (Headquarters - U.K.), 20,000+ employees |
| Integration effort: | Asian portion of integration, of two large global Insurance companies (merger of equals) |

***Researcher:*** Can you briefly share some information about the merger?

***Respondent:*** This was a merger of two very big British insurers. In fact, at that point in time, they would be individually considered as one of the largest insurance groups in the world. Both of them definitely would have ranked within the top 15 companies, globally. And when the two merged, that made them much more sizeable in the market, which basically was the intent of the merger. Each of the firms was focusing on a different customer segment. One organization was focusing very much on the consumer business and was very strong in the consumer space. The other organization was much stronger in the engineering space i.e. construction type of businesses and more of corporate commercial businesses. So, when they saw that the businesses were fairly different, coming together made a lot of sense. Both were British insurers with a hundred years of history, and both were very strong in Europe as well as Asia. Due to this, there was a lot of overlap in all the countries they were based in. So, they saw that there was a synergy to try and bring those operations together, from a cost savings perspective. The primary drivers for the merger were (1) customer growth, and (2) cost savings in terms of the country's operations.

***Researcher:*** Do you think the merger was successful? And, did you meet your merger objectives?

***Respondent:*** If you look at it in terms of the merger itself, I would say that there are two ways to do it, from the business angle: (1) where they bring the businesses together and now have a much larger customer base, and (2) where the sheer size of the merged entity, gives them a lot more firepower to be able to compete in the market. I think these definitely are success factors. Where I think it was a failure, was the way they went about the merger. I will explain, what I mean by that. When they decided to merge the two entities together, it was very clear-cut. They wanted this to be a merger of equals because both were equally big, in their own space. Each of the companies had a CEO. So, when they merged, both the CEOs became Co-CEOs, which was a recipe for disaster because nobody really knew who they needed to report to. Among the regions, Europe was made to report to one of the CEOs, while Asia was made to report to the other CEO, and as a result, they ended up competing with themselves internally because nobody was taking instructions from anybody. Since Company B's CEO had now taken over the Asia region, all those who belonged to Company A in Asia were asked to leave. In other words, he kept all his own people. Likewise, in Europe, it was just the reverse. The CEO in Europe kept all his own people within his own region, and let go of all the other people from the other camp. So, it became two camps in the new organization. That, to me, was a recipe for failure.

***Researcher:*** Do you think the synergy goals or objectives were achieved?

***Respondent:*** In the short term, the answer is 'No' because they had to sort out this mess. It went on for about one and a half year and finally they both realized that this was not working, as these two CEOs were just fighting among themselves. So, they sacked the two CEOs and brought in a totally brand-new person from outside the firm, to be the new CEO. This new CEO got everybody together, and we then began to see the synergy i.e. the savings coming through. There were a lot more savings and many more advantages, once the two organizations were merged. The new CEO was able to achieve the overall objectives of the merger.

***Researcher:*** You mentioned that cost saving was indeed a big component of this whole exercise, right?

***Respondent:*** Yes. As I mentioned earlier, there was a lot of overlap in every country. In Asia for example, both companies had offices in Singapore, Malaysia, Indonesia and Thailand. So, every country that you went to, there were two offices. The first thing they did was to bring the two organizations together, have one IT system, etc. There were a lot of savings in terms of headcount, people, and systems. So, there were a lot of cost savings, and that was a part of the reason they went in for the merger.

***Researcher:*** You rated the importance of *IT synergy savings*, at a '7'. Can you please share your thoughts, as to why you felt this way?

***Respondent:*** Yes. I thought it was very important because, in a way, the insurance business is very much driven by information. So, IT was definitely one of those key

drivers, as to how the whole process was being put together. They wanted cost savings in that area but whether they achieved that, was another matter altogether.

***Researcher:*** Regarding the question about how *information-intensive* your firm is, you rated it at a '4'. Can you explain?

***Respondent:*** Even though we know that Insurance is a very information-intensive business that is entirely dependent on IT, back then, the company wasn't really able to extract as much value as they should have from IT, and the reason is partly because of the legacy system. One of the biggest challenges for a lot of insurance companies is that they are stuck with legacy systems of the past, for many years. And, because the systems don't talk, when you try and put the two systems together, you find that you are not able to get the kind of value that you expect. Unlike some other businesses where you do not need to keep data for such a long time, in the Insurance business you have to keep the data, and that creates a bit of a problem.

***Researcher:*** Do you think the budget allocated for the overall integration process, was enough?

***Respondent:*** I would say it was sufficient, for the overall integration.

***Researcher:*** Was the budget allocated for the IT integration process, enough?

***Respondent:*** At that point in time, our assessment was that the IT budget was adequate for its purpose. That was because we were not going to go in and just replace the entire system. Basically, you could merge the two systems together and transfer as

much information as possible into one system, before you take away the other one. So, in terms of that, I think the IT budget was definitely sufficient. But if we had thought of replacing the entire system, the IT budget would certainly not have been enough.

***Researcher:*** This integration used the best-of-breed approach, am I right?

***Respondent:*** Yes, the approach taken was to choose the better of the two systems and migrate over. Later on, they would sunset the other system.

***Researcher:*** Did that approach work well?

***Respondent:*** That work was challenging because the systems were different, the data fields were different, the information that was captured in one system was different from that of the other system and so on. As a result, there were more technical problems that the technical people had to deal with. This was not an easy task because they had to build a lot of stuff in-between, to connect the information. But overall, I would consider this to be a reasonable success.

***Researcher:*** As a stakeholder from the business side, from the technology perspective, what was the most important thing to you, as far as the integration was concerned?

***Respondent:*** I think the most important things were to ensure that (1) we can get accurate data out of the system, and (2) the customer experience is not affected by it. Ultimately, we have to run the business. During that initial phase, there were many challenges -- either the system was slow and we couldn't produce documents fast

enough, or some of the information would come out as garbage, in the documents that were produced. Let me give you an example. It can be as simple as the renewal of a motor insurance. Prior to the merger, a customer had bought motor insurance from company A and is now trying to renew the insurance with this new entity, but the system is that of company B. Internally, we have to transfer the information from system A into system B, and as far as the customer is concerned, as long as we're transparent with him, it's okay. Then, the customer receives his renewal notice and it shows incorrect information. It can be as simple as, the premium calculation being wrong. This is because the premium table that sits in the system is different and the algorithm behind it can't be placed.

If the system calculates slightly differently and it shows as a dollar higher when the customer receives it, he asks, "Why do I have to pay a dollar more this year, as compared to last year?" He's going to call you up, start screaming and say, "There's something wrong with your system."

***Researcher:*** Did you come across a situation where you had to make a tough decision regarding customer service, in order to accommodate the IT integration requirements of the project?

***Respondent:*** I won't say that we weren't thinking along those lines. But we were thinking more about the fact that we wanted to be able to retain all the customers, because for us, every customer is precious. There definitely were frustrations in the process because all of a sudden you found that what was promised is not coming

through as fast, or is not as simple. People needed more time to get the systems together, and that definitely created a lot of frustration. But I would say that from the business angle, we tried and managed the customers as best as we could. Yes, there were some customers who got so frustrated, they decided to leave. But I would not say that was so significant as to be a cause for concern, or that it became a problem. There were some customers of course, whose attitude was, "Hey, look, this is enough. I'm just not going to go for this anymore." Typically, given the nature of this business, a lot of it is handled through intermediaries. So, our relationship is more with the intermediaries rather than with the customers. Since the intermediaries manage the customers, most of the time they have their own way to pacify their customers. I am sure they would blame the insurance companies, etc. But they knew that at the end of the day, there was only that much they could do, to retain customers.

***Researcher:*** You were on schedule, for this integration. Do you think this process could have been completed earlier?

***Respondent:*** I think in all fairness; a lot of the credit has to go to our Head of IT who was also our CFO. She managed the whole process and the expectations, very well. And, that sort of reduces or manages the frustration level. Would we have wished that this was done a lot quicker? Yes, we would. But in reality, we all know that in any major IT system change, there will be problems, especially when you are trying to put two completely different systems together. As I mentioned earlier, the nature of the business that both companies were into, was fairly different. One was a consumer business whereas the other was a corporate business. So, the way information is

captured, is also very different. For example, in the consumer business, we capture every individual customer's details including date of birth, address, etc. But in a corporate business, as they are dealing with thousands of employees, they don't capture the details of every individual in the organization. They just capture the company's name, and that's it. When we had to transfer the system over, we realized that the other system couldn't capture 'name' or it could capture 'name' but not 'date of birth', etc. And, that was not good for us because, on our side, we wanted to be able to know the customer's date of birth so that we could send a birthday card to the customer. Those were the kind of challenges that we had to grapple with. But it was managed well enough, so that people would understand that there were some things that they could have and some things that they couldn't have. There were some areas where we had in-between / interim solutions, while we fixed the other problems.

***Researcher:*** Regarding the pitfalls, what do you think should not be done in an integration scenario like this (both from a business and IT perspective)?

***Respondent:*** Well, I would say that this particular merger would go down in history, as a classic case of 'How not to manage a merger.' Never have two CEOs trying to manage a merger. That to me, is a classic case of how mergers should never be done. It's just not possible. You appoint one CEO and let the other person go because once you have 2 CEOs, infighting begins right away as everybody's trying to protect their turf. What you have to do is, bring people in together very quickly, so that people work as one, rather than trying to fight internally. And, I've seen some other organizations where mergers were carried out very well. The minute they took over, it's one culture.

People start inculcating the same culture. If there's a need to let people go, let them step away with dignity. Then those who are remaining will feel, "This is a good company. It will take care of me." Also, the attitude should never be intimidating e.g. "Oh, because you're the acquired company, all of you will now be gone." It has to be fair. Both the companies should choose the best people to stay, and let the rest of the people go. That, to me, is very important.

***Researcher:*** Do you have any comments to share, on the technology aspects?

***Respondent:*** On the technology side, I would say the biggest challenge in any merger integration is -- how to put the two systems together. I've seen that this is a real challenge in so many organizations because technologically, it is extremely difficult to try to put two systems together and make decisions regarding whether to keep both systems running or do you put the information together? If you keep both systems running, it can work for a while with probably less disruption, but you can't get a consolidated view of what's happening in the organization. And, in the long run, that cannot happen. In the short run, you can probably do it for a couple of months or maybe a year. But in the end, you still need to put them together. Next, a decision has to be made, to integrate the two systems -- do you take one system out or do you basically go in for a totally brand-new system? Those are the type of challenges you will face. Even if you decide to migrate into one system -- how do you do that, when the data fields and the data in there, are different? To me, those are the biggest challenges. Another thing that I find in a lot of organizations, is that they tend to underestimate the amount of time and the work involved. People are under tremendous pressure to try

and get things done. From what I have observed, a lot of times, the business people are very rarely involved in the initial phase of integration. The consultants and the strategy guys are the ones involved. And to look good, these guys tend to set very optimistic objectives and timelines, etc., saying, “Oh, this can be done within a month.” But in reality, you can never put together systems in a month. When the deal is signed, you drop this on your IT guys, and they look at it and say, “No, this is not possible,” so the whole expectation is wrong. The business people then say, “Oh, this could have been done within a month, and everything would have been complete, but now after a year, you are telling me that you cannot fix it?” Then the whole blame game starts happening. And in my opinion, I don’t think that is healthy.

## Mass Media Company III

Respondent: #15

Industry: Mass Media (News & Financial Information Services)

Company: U.K. based financial and media company, 15,000+ employees

Integration effort: Acquisition and integration of U.S. based financial news and data provider.

***Researcher:*** Could you briefly summarize, what the integration was about?

***Respondent:*** I think the acquiring company was looking for a new way of doing business. At this point, the acquiring company was very de-centralized, with a lot of data centers everywhere and a lot of very hazy client-site deployed products. And, they were actually looking for some fixed models, which were data centers with more hosted services, with lighter deployed products. On the other hand, I think they were also desperately seeking an increase in their market share, especially in the U.S. And after a few attempts on their own with their products, I suspect they realized that a possible way to increase their market share, was to acquire a company. And, I think they were not looking just for technology and market share, but were also looking for people. People well-connected in the U.S. markets. People with real understanding and deep knowledge, of what the U.S. market is about. So, from my perspective, I think that's what mainly motivated this acquisition. But it is different from a number of industries, where IT is sort of a commodity or just a tool to run their proper business, whether it is clothes or cars or whatever, where they use the IT function just for supporting their actual business. I think, one of the key differences in the situation we are talking about

is that the IT function or IT, is really at the heart or the core of the business. So, it's far more than just a support function. It's a key differentiator, which actually helps in propelling the business. So consequently, it has to be managed differently -- I mean, as part of an acquisition or merger.

***Researcher:*** At what point in time, did a meaningful IT due diligence happen? Was it before the merger or after the merger was announced?

***Respondent:*** Well, I was not engaged during the pre-merger process, but I suspect that a certain level of due diligence happens, before the merger, of course. However, I do believe that the real one or the deep one, actually happened after the merger. We later discovered that the results of this merger were not so successful especially in terms of technology, although not in terms of market share. The real issue we faced was in terms of the potential of the company's ability to actually merge, reuse, consolidate or rationalize the technology of the acquiring and the target company. I think at the end; the real issue was a lot more different than what we initially thought. The due diligence was really a two-step thing. The real one or the deeper one, actually took place after the merger.

***Researcher:*** From your experience, do you think that it is rather difficult for an acquiring company to get detailed information about the other company's IT infrastructure and processes, before the deal is signed?

***Respondent:*** Yes. Well, I think it's true. It's certainly very difficult. That said, I have a couple of other examples, much smaller ones. For instance, when Company X

acquired another company, in the back office and risk management area, we were more engaged on this one. This was in France. We were actually able to get a much, much better understanding of what was happening behind the scenes. And I think in this instance, when the senior management of the company was about to acquire this company, they were able to get some insight and some real deep understanding of what was going on. However, with Company Y, I think it was a little more difficult, to be honest. However, I also think that sometimes you hear what you want to hear. There was a bit of 'smoke and mirrors', in the way a number of senior managers at Company Y, presented their story. And, I think that should have shown their equivalents in Company X, that things were 'too good to be true'. I remember this famous, very surprising discussion with some Company Y executive about whether they were able to deliver the network performance. I can't remember the exact details about what it was, but it was just about how they could deliver zillion updates in real-time, without using any time conflation and without missing any ticks, etc. There was a bit of 'magic' here. And, everybody was very skeptical. We have been doing this business for decades but we have never been able to source so much information through the pipes. And how was Company Y able to do that? They were not really able to explain how, and I think that we should have just been more insistent because, at some point, it's extremely difficult to get the nitty-gritties of the IT infrastructure, of the company you are acquiring. Just a bit of psychology, you know. There is certainly a way to appreciate or to put that back to something a little more realistic. Even if it is political, at least you can get a better estimation of what's going on. I think this is what we certainly overestimated or overlooked, when we heard all this 'beautiful fluff' about the end-

state infrastructure. In the end, they were facing the same physical constraints as us -- the speed of light, etc., and all these kinds of things that we all face. So, I think it's more of emotion and psychology, than anything else here. There was a point to what we just discussed -- the objective that the acquiring company sets itself in terms of return on investments and in terms of speed of actual merger and integration. And I think a way to possibly mitigate the impact of your lack of understanding and knowledge, is perhaps to have a much more realistic integration plan. On the one hand, you can be honest and admit that you don't know everything about the target company's IT, technology and the infrastructure, but you feel that you may be able to leverage that and get something positive out of it, although you don't know exactly how. However, on the other hand, you can't just say, "Oh! You have a return on investment of 2 years, and in 3 years from now, the entire product line and the entire technology of the merged company will follow one and actually be a brand-new combination, and here we go." So, if on the one hand, you feel that you are slightly overlooking the initial statements in terms of potential and so on, then on the other hand, you should be a bit more conservative in terms of the integration plan. And, I think that things really start going wrong, when you first overlook and then you are over-optimistic when it comes to the integration and return on investment projections.

***Researcher:*** Did you meet the anticipated *synergy savings* from this acquisition?

***Respondent:*** In the expected timeframe? No! All in all, maybe five years or ten years or after that -- I don't know. We didn't expect that, in the initial 2-3 years' timeframe. Certainly not! We were supposed to shut down a massive piece of infrastructure, and

replace a legacy piece of infrastructure with this brand-new infrastructure. We were supposed to deliver new products, and we were supposed to shut down a number of products and replace them with this new technology. All this never happened. All this eventually happened, but ten years later.

***Researcher:*** Despite a sufficient budget, what actually went wrong, that the integration did not deliver to expectations?

***Respondent:*** Two things, I think. The first one is related to what we mentioned earlier because we discovered after the fact, that the potential of the technology and the IT infrastructure was perhaps a little bit less shiny and less promising than what we initially thought. This required a sort of reset of all plans, so it wasn't a matter of money here. It was just about going back to the white board and starting the planning exercise from scratch. And, I think the second one was certainly the people aspect on both the acquiring and the acquired sides. I think that the change / clash of culture was underestimated and once again, based on the promises of the technology and the infrastructure, the company that we acquired, finally came to the table and started ruling the game. I also think that there was a lot of resistance from the IT committee of the acquiring company, and the dialogue here, started on the wrong foot with a lot of clashes, disputes, arrogance, etc., along those lines. And, I think we underestimated the proper management, the proper support, and the proper attention that was required to go through this change, to put together the teams. If I remember correctly, due to the inertia of the project, for the first 3-6 months we were exactly in the same mood for the merger, in terms of -- "Oh! We will tell you how things work." Nothing happened from

the acquiring company's side, because we were just waiting for 'the miracle' to happen. And the following 6-12 months, it was just a permanent fight where everybody on both sides was pushing back and basically, we were almost unable to deliver anything in 18 months. Change management and the attitude driving the cultural differences in management, had been completely underestimated, in my opinion.

***Researcher:*** If, as you're saying, you didn't achieve anything for 18 months, does it mean that something went wrong?

***Respondent:*** Absolutely! It was a mess -- a total waste of time, energy and money.

***Researcher:*** If you were to do this integration all over again, what would you do differently?

***Respondent:*** I think in that kind of scenario, which we discussed, one should find a way to get a better understanding of what's going on behind the scenes. If one is not able to get a better understanding and deeper knowledge of what's going on behind the scenes, then one should force oneself to evaluate what the difference is between the perception and the reality. And for that I suspect, one would need to bring the right people and not only technologists, to the table. I'm talking a bit more about the perception or the evaluation of things on the surface, just to decipher the actual statements made by the other parties and to get a real sense of whether one gets to the truth or to the bottom of the story, or whether one needs to plan for some margin of errors and unknowns, and how one would go about doing that.

I think the second one would be, for both sides to clarify what their business objective is. Do they really want to reuse the technology as it is, and are they ready to get rid of theirs? It's only a matter of having the two technologies, living together side by side if one only wants to increase one's market share, or does one plan to integrate products and technology? Then, so be it! Why not? But I think you have to make that clear. One of the points which was extremely difficult to manage during this acquisition, was to really understand what the business plan was, what the real business was and positioning ourselves for any possible difficulties on a day to day basis.

I think the third one is about paying more attention to the 'people' aspect of the story, to really be able to operate, manage and support the change, and not just leave the architect or the IT guys on their own, post-merger, by saying, "Hey guys! Now you have to manage". This actually leads me to the first one, that is leadership.

I think one of the missing points often is to jump from board level decision when you deal with the merger, to senior executive level when you start moving on with the actual merger. Most certainly, you have the ground level guys engaged on the actual stuff, and there is a lack of continuous leadership and support given to them, to really guide them to meet the business objectives. Then, all the complaints, issues and the lack of decisions come to the fore front. All in all, I suspect one requires more transparency or if one doesn't, then it is better to have a robust risk management with all the consequences and so on, as well a better ongoing support, at every level of the company.

## Information Technology Services Company II

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| Respondent: | #16 |
| Industry: | Information Technology Services |
| Company: | Singapore based regional company which provides customized voice automation solutions; 200 employees |
| Integration effort: | Application services IT company with presence across Asia and Australia, being acquired by a large Indian IT Services company, with a global footprint and operations. |

***Researcher:*** You filled in the survey regarding two companies in the Enterprise Voice segment, namely Company B and Company C, which were acquired by a much larger global IT services company (namely Company A) based out of India. What were the reasons for the acquisition and what was your role in it?

***Respondent:*** Company A (the acquiring company) had been having inorganic growth in different fields. It had started a Contact Centre practice a long time ago, but unfortunately, it was not able to acquire customers in the Enterprise Voice segment, maybe because of the sales or the geography or because their offering solution was a little bit different from the customer's point of view. An easy way for Company A to gain a larger customer base, was to acquire a company which was already serving customers in the Enterprise Voice segment. Company A had been trying to sell Enterprise Voice in different ways and through different media, hence they were looking for some companies which had a larger presence in India as well as in the global market, so that they could ride along with them and start offering the same

services or same solution in a different way. They felt that once they become a larger partner or a larger entity, they could then start offering solutions to acquire the market share. So, the first thing they did was focus on the customer acquisition part, the second thing was the sales acquisition part and the third was to expand into these different geographies. I think those were the reasons for the acquisition.

They acquired 2 companies – Company B and Company C (the company I worked for). At the time, Company C was an application services company for Company B. Company C was primarily focused on pure application services. Company A acquired this company so that it would have a larger customer base for application services, on the telecom side. I was heading Company C, for application services at a global level. Company A wanted to acquire both Company B and Company C, so I was a part of their acquisition team.

***Researcher:*** In terms of the footprint, were Companies B and C present in India, as well as other parts of the world?

***Respondent:*** Company A acquired Company B in India and in the SAARC region per se. They also acquired Company C, globally. Company C had operations in India, Singapore, Malaysia, Thailand, Pakistan and Australia.

***Researcher:*** Was Company A's motivation for these acquisitions, basically to increase their market share and gain access to the Enterprise Voice world?

***Respondent:*** Yes, that's what I learned from this the whole thing. Company A had been in the enterprise services segment, for quite a long time. They were into the network part, hardware services, offered services etc. So, they started the Enterprise Voice division and wanted to see if they could acquire a larger footprint in that particular market. That was the main reason for these acquisitions.

***Researcher:*** Were you involved in the pre-merger discussions?

***Respondent:*** I was involved in the first phase, when Company A was discussing about which company to acquire and how to acquire it. It was also inquiring about what kind of skills the target companies had, what kind of market they were going to have, and what their next year's turnover was going to be. All these were basic questions that had to be answered, before starting to look into the companies' balance sheet and people. But when Company A was trying to decide whether it should acquire only the Indian sector of Company B or its SAARC sector as well, I was not a part of this discussion because I was not primarily involved in Company B. However, when it came to Company C (my company), I was a part of the merger discussions. Company A was aware that Company C had highly skilled people and that Company C was one of the first companies to be Company D's entry partner, so all the larger tickets and vendor tickets for Company D were being managed out of Company C. I was very much a part of the discussions when Company C's acquisition was being discussed. Just so you are aware, Company D was a multinational telecommunications and data networking equipment manufacturer.

***Researcher:*** During the pre-merger phase, was there a focus on the technology integration aspect of the deal?

***Respondent:*** I think in the first phase, there wasn't any focus on the technology integration aspect. Knowing the size and the footprint of Company A, acquiring people or a team was not a major task for them. As I said earlier, the entire focus was on what number we were going to have, post the acquisition.

***Researcher:*** Since you were from the acquired company (Company C), how comfortable were you in terms of sharing your company's confidential information with the acquiring company (Company A), prior to the acquisition?

***Respondent:*** Once the merger happens, I think it's just one organisation per se. So, there was no doubt in anybody`s mind -- neither from our side, nor from the acquiring team's side, to divulge information to each other. Handling a separate entity all put together, the understanding was that some of the basic information had to be shared with Company A so that Company A's team could work on it, or because we all have to work under 'the larger umbrella' so one just can't avoid it.

***Researcher:*** While the merger was being negotiated, did you feel that you had to withhold some confidential information, or was Company C fully transparent with Company A?

***Respondent:*** Prior to the merger announcement, the primary discussions were about the current team, the current growth, and the current accounts we had. Company A was aware of Company C's named accounts etc. but we also gave them information as to

whether the account was a high visible, low visible or medium-size visible one, and also what is the size of revenue it can generate in the next couple of years. However, we didn't mention all this at the granular level. For example, if we were talking about an account, we wouldn't reveal whether 'x' application would give us this particular number or 'y' application would give us that particular number. We never discussed that kind of granularity, during the pre-merger discussions. This was our IP (intellectual property), so we didn't want to disclose these things. But it was quite fortunate because although Company C was not forthcoming in some areas, Company A (the acquiring company) was not able to do anything about it. In fact, Company A was our competitor in the Indian market, so, from Company D's point of view, they were handling the same accounts that we were handling e.g. Company P and Company Q (both companies are Indian multinational conglomerates).

***Researcher:*** When do you think a meaningful IT due diligence happens? Is it during the pre-merger phase or after the deal has been signed?

***Respondent:*** I think the IT due diligence starts happening, only after the merger is completed. I personally feel that is the time because even if the acquiring company is an IT company, it wouldn't want to change some of the processes in the target company, unless necessary. But once the target company becomes a part of 'the larger umbrella', its processes must change and at times, one doesn't really have a choice. It becomes better for the acquiring company as well, because it doesn't have to deal with too many processes etc. and the business continuity as well as the business profits, can be managed properly.

***Researcher:*** You mentioned 'acquiring new technology or specialised resources' as a technology priority. However, you rated this objective as a '3' i.e. did not meet expectations. Could you elaborate a bit on that?

***Respondent:*** Basically, what happens is that in the case of a smaller company, the company's P&L is run within the company itself, so there is a better understanding of what kind of risks the company can take and whether these risks can be taken on the technology, on the resources or on the offerings. You understand what the market is like, you are going to grow in A, B, C locations and you start building teams based on that. So, for the next 6 months you know what your company is going to offer. But once you become part of the acquiring company, this projected revenue growth may or may not happen depending on the different companies' perspectives. For example, if we are talking about 'x' dollars revenue on a year to year basis and the company is then acquired, although the acquired company looks at this revenue from a 2x or 3x point of view, the acquiring company may be looking at the revenue of 2x or 3x from an overall global perspective. In the end, the acquired company may get 2x numbers or 3x numbers but not only from their side, as the acquiring company may consolidate this. As of today, the acquiring company may have 10 resources and the acquired company may have 20 resources. But the acquiring company may consolidate this and end up with something like 30 resources being offered globally, so basically the offering changes. In my personal opinion, the whole scenario can change because along with the changes in offerings, the area of focus also changes. So, it may happen that today Company C is getting a revenue from a customer, which is say 'x' dollars and because of Company A's offering that customer's offering can change and that can lead to

maybe 3x. Company A may be focused more on that. It may not focus on 'x' because it's not required as there's no compulsion to get more revenue. But in the previous organization, that 'x' gives them value, so they cannot move away from that part.

***Researcher:*** Your ratings for *synergy savings*, were quite high. Was there a lot of consolidation between Companies A, B and C? What were the *synergy savings* you were referring to, in this particular case?

***Respondent:*** We were just looking at the basic things. The laptops, the PCs, etc. were going to remain the same. The hardware was also going to be the same. It wasn't going to change. That's what was decided, from a legacy point of view. The application services were going to be the same because they had already been set up. It wasn't going to be like breaking down the setup and recreating the setup somewhere else, so the existing investment was going to carry on. The only benefit we would get, was the larger team coming in. For example, if I were to hire 20 or 30 people on the ground, we might have been offered a larger discount on that, since I was now working for the acquiring company. Or, we might have been provided with the hardware, which is already available to the acquiring company. In terms of the current system, it may have had to carry on as it was, but future expansions would have benefitted from being a part of the acquiring company. For instance, if I was working on a Microsoft Outlook client update which I may have had to change from Microsoft Outlook to something else, that licensing cost would now increase because we are talking about a larger team coming in. As I said earlier, to run the current show I don't think there would be any

change, but to run the enhancement or to increase the team size and everything else, there may have been a benefit of being a part of 'the larger umbrella'.

***Researcher:*** From the ratings assigned, it looks like this was a fairly successful integration. Would you like to comment on that?

***Respondent:*** The acquiring company (Company A) did not face any major challenges as such, either from a technology perspective or from a process point of view. It was a little challenging for us, because our offerings and Company A's offerings were completely different. Fortunately, Company A gave us a good amount of leeway in terms of letting us operate as a separate team while working as a part of the bigger team, at the same time. So, we were now part of 'the bigger umbrella' but were working as an independent team. It was a fairly decent working arrangement, and Company A's superiors and seniors were quite okay with us working independently, but as part of the larger team.

***Researcher:*** As a merger or integration progresses, the acquiring company allows the acquired company to operate as an independent entity for some time, but eventually they would want to bring in their own management structure etc. So, at what point in time did this happen, in this particular merger?

***Respondent:*** I think they did that about two years down the line. I wasn't a part of the organisation, then. I left before that but I think they took around almost 1 ½ - 2 years to cover up everything, on that front.

***Researcher:*** In terms of the *integration schedule*, you took much more time than the original planned schedule. Did this delay have any major impact on the *overall synergy savings*?

***Respondent:*** No! There were two reasons for this. One is because we were working independently although we were a part of the bigger organisation. The delay happened because the geography was like this -- there were no offices in Thailand and Pakistan, there was a small office in Malaysia and Company A had a small presence in Australia. There was a little bit of an issue in terms of market understanding, but otherwise everything was alright.

***Researcher:*** Was there any major technology integration that had to be carried out as part of this acquisition process? What were your key *technology priorities*?

***Respondent:*** The only key technology was the process point of view. The back-end part which is the customer management software, the overall invoicing and the PO (Purchase Order) software which the acquiring company was using, took a little bit of time to get adjusted to, because we never had that kind of software. We had our own home-grown software. Other than that, everything was okay.

***Researcher:*** What was your biggest learning from this acquisition?

***Respondent:*** The biggest learning from this acquisition was that both parties have to understand each other and both should realise that they have to meet midway to do everything. One can't just impose their views or their way of doing things on the other, unless it is necessary from a business point of view. I believe that when companies start

to understand this, the whole synergy works out properly. From what I have learned, the whole synergy fails when a company has its own legacy and they are afraid of letting go of this legacy. At the same time, when a larger company acquires a smaller company, the larger company sometimes forgets the 'comfort zone' aspect or the fact that the target company's employees are used to working in a limited market. If both these aspects are clearly understood, there will be no problems. Also, the employees of the acquired firm should know that their firm has been acquired because it has some value to offer, and when the acquiring firm understands and acknowledges the same, things become much easier for both parties.

***Researcher:*** From a managerial perspective, would you like to give any prescriptive advice, to people involved in future integrations?

***Respondent:*** I think it's a good learning curve. You have to believe that it's a learning process and the journey from a smaller organisation to a larger organisation, is a fantastic one. An acquisition helps both the companies' team members. I think you need to let go of some of the things which you've done in the past and accept newer things which you might never have come across or accepted before. Both these aspects can enhance your experience of life.

## Mining Company

Respondent: #17

Industry: Mining

Company: Global Mining operator, with mines in Asia, Australia, South America, the U.S., Canada, and Africa.

Integration effort: Internal transformative IT integration project, to reduce costs, improve capital outlay and improve customer experience.

***Researcher:*** Could you tell me a little bit about the integration project, and also your role in the same?

***Respondent:*** Ok. In the mining case, the company was a global mining operator with mines in Asia, Australia, South America, the U.S., Canada, and Africa. In a nutshell, they wanted to find ways to reduce cost, to improve capital outlay, and to serve their customers and investors in a more optimal manner. At the time, they were also exploring things along the lines of application modernization and virtual desk-topping, and they were also interested in cloud per se. But generally speaking, although they had an interest in cloud, much like many of my customers do, they had no real plan on what cloud would enable them to do and what it would be like, for the business. So, what was designed and framed out quickly, was the cloud environment. And, the type of linkages to the cloud environment, would help serve the different branches or divisions of the company. What became a bit more obvious then, was that utilizing such architecture, enabled them to share new information across the different divisions, expediting that information back and forth. That right there, was a major cost relief.

Now, there are challenges to that. There are challenges around security, and around privacy e.g. some of the data as in Human Resources, etc. But the real benefit of doing so, was what the business was now enabled to do because we took the cloud, as a central function. Once you start branching off into the specific divisions of the company, you could also create other clouds. And those clouds would then be able to branch off into the divisions, vendors, and who or which companies that particular division would work with. For instance, I may work in Procurement and there, I may have linkages to companies that manufacture iron and linkages to companies that manufacture hamburgers. If I know that a mining operation, say in Northeast Australia, is a thousand kilometers in the middle of nowhere, and if they are running short on steel or they are running short on hamburgers, then I could basically go into my cloud, go to the vendors attached to that cloud and request the fulfillment of an order for about a thousand hamburgers, which we mentioned as an example. And they would be able to get back to me within a few hours, as to when it will be delivered and what the optimal cost or bidding cost would be. Now this saves me time. It reduces the procurement cycle from several weeks or in some cases several months, to just a few hours. And, that's a big cost saver. I use this as an example because when a company is looking to utilize a cloud or an IoT, they really need to envision how that infrastructure is going to enable them to support some sort of marketing or cost reduction effort, most of the time both. And, that's very critical. Most companies that I've worked with, are encroaching into that area. Most vendors that I work with, refrain from getting into that area because it's far easier to sell the 'block and tackle' that goes into the cloud, than the reasons why cloud would be important.

***Researcher:*** What's the hesitation on the cloud service providers' part? Isn't it just another customer on the cloud, for them? Do they have to do any sort of customization in particular?

***Respondent:*** Yes. The cloud is basically an infrastructure. So, one of the things that you want to be looking at, with the cloud, especially as you're encroaching into the area of IoT, is the type of traffic, for instance. You want to be able to monitor the traffic going through the cloud, and to monitor applications and application utility. This can either prevent or can force, a potential DDOS attack. So, security becomes a very very important catalyst, to how you will continue to work within a cloud or IoT environment.

***Researcher:*** Was there any merger or integration activity involved, in this entire project? Or was it just doing something, for an existing customer?

***Respondent:*** I think the most critical merging that occurred and has occurred in other programs as well, is the merging of the strategic thinking and tactical planning, that now begins between the company's infrastructure layer, operations layer, and business layer. Many times, what we tend to focus on, is the infrastructure layer. Again, it's a 'block and tackle' sell. So, they'll want to sell bare metal servers or Gigamon or what not. I'm selling 'block and tackles' -- that's easy, it's a tangible item. If I'm looking at Operations -- Well, Operations is incredibly fun and incredibly interesting. It is also about 'as dry as the Sahara Desert' because you're doing basic monitoring and management. But you're also looking at a lot of forward planning. You're looking at different tools and different ways of managing the data that is traversing across the

network, and infrastructure, and the 'marketing piece' or the 'business pieces' because that's how you're going to make your money. That's where the bread and butter is made, within your company. Most times, and especially in the past, typically all three entities have been approached individually. But they make up the three vital and important areas of any business. And, as a vendor, if you are looking at deploying a cloud or IoT infrastructure, it is extremely important that you have a well-thought-out plan, on how this new infrastructure is to support each of those three areas. That way, you provide a 'value' solution. Otherwise, you're just selling a tangible piece that, to be frank, some elements could be sold at a lesser price.

***Researcher:*** This is a very interesting perspective and very unique, because you're basically looking at three divisions within the firm, and how you're introducing this new technology or platform, to enable these three groups to work together. Am I right in saying that?

***Respondent:*** Yes, you're right in saying that. I'll give you another example because Mining is a different industry. Healthcare -- I once worked with a telco that developed a cloud, basically to support healthcare. Now, they make much money out of it. They can return much profitability on it, because if they can generate the traffic, they basically don't, based on the general idea that -- "Hey, this would be a good idea. We understand healthcare is a big concern." What I was able to do is, go in and work with the carrier to understand (1) that the country in which they support the population, the government supplements the population by 20% of the cost of healthcare, (2) that pharmaceuticals like GlaxoSmithKline or Pfizer, are working to get their product into

customers' hands, and (3) that the people have a difficult time accessing medical services. So, taking the healthcare cloud and looking at the carrier's networks, you can establish a pattern that shows it was basically a 4G reach, and that the 4G reach covered most of the country. We then signed up a pharmacy that had the best reach and we told them that we were going to put a computer and a smart system in each of their retail outlets. This way people could come from anywhere they want, go to the pharmacy and speak to a doctor in a major city where all the hospitals are. Now, that's like Skype -- we have that today. But the pharmacy would also be connected to the cloud and to the pharmaceuticals that were in the country. So, if I had to get an antibiotic to a certain region in the country, I could do so. And, I could track the amount of, let's say, individual pills going out to a certain area. This would be great for the pharmaceutical because now it could plan and move its product forward. It also gives the pharmacy the ability to manage its own stock, in a better way. From the perspective of the government, which is providing these subsidies, they are now able to view the healthcare center that is connected to the data center, and are also able to track these cases across the country, which they couldn't do before. And, everybody could do all of this, real-time. So, as I mentioned before, you're taking a cloud that was basically developed for healthcare, but was defunct and not being used. And, by bringing in the right companies, that would now be enabled to improve and optimize their business, or how they do their business, etc. You know how the cloud actually works and supports 4 or 5 different lines, and channels the business.

***Researcher:*** So, does the same model that you mentioned in the healthcare example, apply to the mining industry as well? The difference being that, the IoT points would be the vendors of the mining company which could probably be a thousand miles away, is that correct?

***Respondent:*** It could be a thousand miles away or it could even be the stock exchange, because you use the cloud to understand real-time what you have coming out of the ground, so you know your inventory used on the trading block for commodities.

***Researcher:*** Is your role, more of a consultant, who is trying to design and implement this solution?

***Respondent:*** Today, it is. In the past, I've actually done the projects, the programs, and the architecture, or worked with the architects to get the program off the ground.

***Researcher:*** You rated *IT synergy savings* as a '6', i.e. high. Why do you think *IT synergy savings* was such a key component?

***Respondent:*** The reason is because most of the time you look at it, as a company's IT division and their procuring. They go through cycles of procurement, and it's becoming shorter cycles very often. And, there's always a capital outlay. We are on a cusp right now, with a technology that was properly planned, from an IT perspective. The large layouts, the funds to do investments, etc., really do not have to occur as often as they had, in the past. We can now plan for spot checks within the IT framework, which will improve or create a catalyst or a platform for the next generation, without

losing where we have to be, as a business support service. So, we tend to, and especially in the past, we put a lot of capital into IT and we never really saw the returns, to be honest. Today, you could take the IT and say, "How am I going to use this, in the grander scheme? What is it going to be used for? What's the benefit?" If you look at the medium to long-term benefits and you create the proper road map, your investments actually begin to decrease and your gains increase. Obviously, your idea is not to be swapping out technology every two years because something new comes along, but to create platforms that will sustain your business for the next 5-6 years, and then you can make a small change. If you're moving towards IoT, it becomes even easier because, with IT as a focus, you're creating the standards that your IoT will have. Then, any other company that you're dealing with and working with, will have to adhere to those standards.

***Researcher:*** You rated a '7' for *information intensity* of your firm. Why did you consider your firm to be so highly information-intensive?

***Respondent:*** It is. And again, that's part of that triad -- the infrastructure, the operations, and the business layers. As you build your IT infrastructure and your overall infrastructure, it has to support your business. All too often, the business stakes are off one way or you have some people in Marketing & Development, who go gangbusters for a certain goal that's not communicated to anybody else, and then the technology's playing a 'catch-up' game. Or, you have some very intelligent people on your IT and infrastructure side, who start to invest in technology that has no bearing on the direction in which your business is going. So, the question is -- why did you invest in this,

because we're not utilizing it. Finding usage for technology that you buy, is not logical from a business perspective. So, it's very important that the three work together. The technology is the platform, which the business supports so far. We have to always keep in mind that whether it's a mining company or a hospital or an airline or a shipping company, they don't make money on technology. The technology that they buy, enables them to make money. So, the importance of that technology is critical, especially in the planning phase.

***Researcher:*** You rated budget allocation as a '3'. Do you think allocating more budget, would help the process?

***Respondent:*** Well, first of all, every industry and every company in an industry allocates budget, at a different percentage. So, in a particular place, if you're at 15% in one bank, in the same place you could be at 25% in another bank. It all depends on the bank's strategy and where they are. Sometimes, they are playing 'catch-up' and hence, they need to allocate more budget. I think the business role is, to be supportive of IT budgeting. The business will also benefit from IT budgeting. But again, you also have to remember that if you're going to budget, and improve or increase the budget because you want new technology, you have to have the operational backbone, to support it as well. I've seen companies invest heavily, and I mean heavily, in security. And when I turn around, I look and say, "Wait a minute. You've invested so much to bring security and then you're outsourcing your security. Later on, you're bringing it back into your company, but that's where you've got the tools and what-not to do that. Do you have the operations to do that or do you have the operational processes to do that?" One

thing is about having people and the other thing, of course, is having people with skills. But you have to have the processes, not just internal to the operations but also the processes that are interfacing correctly with the business group and the technology. So, increasing your budget, doesn't necessarily mean that you are increasing your likelihood of success. Increasing your budget can actually mean, you are increasing your likelihood of failure, if you are not careful.

***Researcher:*** Are you of the opinion that, unless you've got the processes in place and the right people in place, investing more would only increase the chances of failure?

***Respondent:*** Well, you also have to have the right organization, to be honest. There are companies, which invest in organizations that are just too big. You see this whole thing happen where there's a lack of accountability because, to get a certain activity approved or agreed to, it's just delegated endlessly and before you know it, it's delegated to the lowest person who has no idea of the strategic impact that this one activity has. And of course, they don't want to take the responsibility because they may be starting out on their career, so it's a mash of things. Technology plays a role and more specifically, IT plays a role that's supposed to help you reduce your workforce. Unfortunately, it also increases the amount of information that your workforce now sees. The biggest problem that we have with cloud and IoT, is actually data. Security is security, and enabling business -- these are all things that you will walk into. But data is the biggest problem. The volume of data has increased, and there's just not enough time to sift through it all, to make sense of it.

***Researcher:*** *IT integration savings* seem to be lagging behind the *overall integration savings*. Is there any particular reason for this?

***Respondent:*** Well, actually, you would hope it does, because you're not investing in technology, for savings. But it's savings, to get operational cost savings. That's great! But you've now got more data to deal with. So, while your savings may go down in certain ways -- because your processing capabilities have improved, the data goes up. It kind of gets balanced out. The true savings would be -- to be able to be more efficient, at what your business is supposed to do. So, you're enabled to do more.

***Researcher:*** The original planned schedule is seven years, so doesn't that seem like a very long period?

***Respondent:*** Well, it's not too long, if you think about the amount of transition and asset transformation that has to take place. You're transforming many areas of your business, and then you're transitioning the existing, into the new. You've got to do that smoothly because it impacts the 'dows' that you make every day. You're not putting your business on hold, for a year. It's got to be planned, and the business units have different priorities.

***Researcher:*** How long are you into this process, already? How many years?

***Respondent:*** Well, I've left that role and I've left that company. I have something in a different company, but they are still working. I think they're in, what would probably be the 5th year now. The project actually became a 'half a billion-dollar' project. It is truly massive.

***Researcher:*** That's a significant investment. You mentioned having approximately 40 IT vendors. After the integration is complete, do you see a potential of reducing this by 50%?

***Respondent:*** Oh, yes! Easily.

***Researcher:*** Where do you think the biggest reduction would be, from the vendor perspective?

***Respondent:*** Well, I think it certainly would be some of the kit i.e. the actual equipment. That would definitely be a reduction, and not just because of the redundancy. The legacy equipment would now have been optimized, so you're getting a lot of legacy stuff. You've got new equipment out there and you're approaching problems in a more optimal manner, like virtual desk-topping. It's far more virtual and it's far more optimal, rather than dealing with individual desktops and having to maintain them. This has a trickle-down effect because now you don't need to have the same amount of people within an office that can service those individual desktops. You now have optimal planning for your organization, so you could lose some of your headcount there, and a lot of expenses which you had before, such as multi-year contracts for maintenance, servicing, etc. Sometimes, outsourcing and managed services for servicing equipment is no longer needed because the equipment is no longer there. So, you reduce a considerable amount of your outlay costs in that, and some of those get transferred to a different type of cost, because of the nature of the type of technology and how it's been supported. But yes, there is a substantial reduction.

***Researcher:*** Does your high rating of '7', for the top 5 *technology priorities*, indicate that overall, the project is going on quite well and delivering what it's supposed to?

***Respondent:*** Yes. It is a massive program, only because it stretches across multiple divisions of a company. And, it's transforming how the company's actually doing business now.

***Researcher:*** When does a meaningful IT due diligence happen?

***Respondent:*** Realistically, due diligence doesn't happen till after the merger, because that's when everybody is feeling a bit more comfortable about 'what's behind the door', and are willing to 'open the door' a little bit more. Not 'the whole door', but just a little bit more. In order to do the merger and in order to justify, you do need to do the due diligence, prior to the merger. That way, you will know what you're getting into -- the capital costs, the expenses, the headcounts and everything else. You will also get to know what will still remain and what will be gone, and what would now be your new profit coming out of the merger. Another thing is that, prior to the merger, companies are looking at it from a number of different perspectives. The person who is doing the merger is looking at -- "I'm taking assets over. I'm going to be able to expand my market and my capabilities." The one who is getting merged, is thinking -- "I'm probably going to lose everything, but I'm going to get a cash-out. I don't know what's going to happen to the infrastructure." That's the truth, on how these things work. Once the merger takes place, you do your due diligence and deep dive, and before you know it, you've gone from a 50,000-foot bubble bath to a 5-foot level, and you can now gain

access to a lot more information. Sometimes, you find 'skeletons in the closet', which is not good. You know it's too late, now. But you've got to deal with it.

But the most important part of the merger, especially when it comes down to IT, is -- "What's this new company? Where's the framework in the new company, going to go? Because, if you're merging and you are going to use the answers from that merger to decide what stays and what goes, you better make sure that what stays, is going to make your business go forward." Many times, companies that are being merged, provide the incoming people a bonus to stay on e.g. You stay here for the next 6 months or 12 months, and you get a special bonus to stay on. It's called a founders' bonus or something. But once that bonus is paid out, there's a mass exodus. So, you lose a lot of grey matter expertise that came with that technology, which was what you were seeking. The technology is only as good, as the people behind it.

***Researcher:*** Would you like to share any managerial advice, to someone embarking on a large-scale integration like this one?

***Respondent:*** The first thing would obviously be -- plan with your eyes wide open to the infrastructure, to the operations and the business requirements. That is, of utmost importance. The second thing I would advise them, is that no one ever evolved from a place of comfort. So, the upcoming tests are going to be increasingly important and increasingly difficult. If you only seek to do the things that are easy to do and with minimum risk, you will not get where you want to be. So, if you are stuck or saddled with difficult situations, and it seems like nothing is working your way, you're in the

best possible position. That's where you want to be. You want to seek that or 'embrace the suck', if you will. I mean, that's what's important, because, only then do you know that you, your group and your company will actually grow, because you're handling the correct situation.

## Insurance Company II

Respondent: #18

Industry: Insurance

Company: Global Insurance company with key operations across U.S., Europe, UK, Australasia and Asia.

Integration effort: Asian portion of the Insurance business and technology integration.

***Researcher:*** Was the survey you filled in, about the global merger of two insurers?

***Respondent:*** Yes.

***Researcher:*** As you rated a '7', in terms of the merger's success, would you say that the merger was fairly successful?

***Respondent:*** Yes. Well, that answer would actually depend on which side of the merger you were on. This is because, as it turned out, we actually ended up choosing the incumbent solution from one of the vendors, and then imposed it on the other one. So, if you were from the first vendor, it was a raging success. If you were from the second one, especially like some on that site (I would say Thailand was one of them), they had literally just implemented a new solution and then they were told -- "That's no longer going to be the standard. It's going to be solution X." So, I'm sure from their perspective, the merger's success rating would have been a '2'. Also, don't forget that as a Management Consultant, I wasn't taking sides. So, from a client perspective, it

was a success. Obviously, it was a success from our point of view as well, because we achieved the goal of client satisfaction, etc. So, in my opinion, it was a double success.

***Researcher:*** Could you describe the integration, what it was about and what was your role?

***Respondent:*** In terms of numbers, that will be quite difficult, as I didn't have particular sight over the implementation and integration fees. The client was doing all of that. As a global consulting firm, the role that we were given was an advisory one on the front end, and the work involved making decisions such as which systems we should choose, etc. Once they chose system X, we moved off the project, and I don't know who then did the full integration, change management, the HR stuff, etc. I haven't got sight of the overall 'dollars', but it was big. In 'dollars', it was very big -- it was multiple millions of US dollars. They got the key insurance and technology from the major regions around the world, into one team. We had USA, Europe, UK, Australasia and Asia, as the key markets for this set of insurance companies. They expected us to not only have the independence of a global firm, but also the localized knowledge of the individual regions. So, one of us was appointed for each region. I looked after Asia. Although I had an 'IT' hat on, I also had many years of insurance experience which I could lean on and understand certain aspects regarding change management and all that stuff. But the principle here was -- we don't need to 'sledgehammer in' a single solution if it's not the best fit, but let's try and rationalize. We had 13 countries in Asia, but you obviously don't want to have 26 different solutions. So, eventually, we ended up with four different solutions, globally. For instance, Asia had one solution, but it might not

have been the same one as the UK. Therefore, the solutions that we ultimately chose were the best fit for purpose, for each region. There wasn't one single global solution, so we got down to 4. We used the methodologies partly based on the PwC development methodology, package selection and so on, with a lot of weighting and scoring criteria, etc. I got to do a grand tour of Asia, going to every country and taking assessments. So, it wasn't just a bunch of guys sitting here and saying, "We'll choose solution A or solution B." We actually went down and did a lot of work, as we didn't know the stake in the gains, and the answers were fair and unbiased.

***Researcher:*** What were the key aspects you were looking at, when you say it was a success?

***Respondent:*** Again, from a consultant's perspective, I think it was the client satisfaction of the results that you could use. That manifested itself in a global conference call with the global CIO, who literally looked us in the eye (as did every other region) and said, "Do you believe in your answer?" For us, client satisfaction one thing, but our personal reputation and corporate reputation were also on the line, for making this choice. The other thing we had to bear in mind, especially in Asia where you have so many different countries, was that the merger's success was dependent on other factors as well. In Asia, there was the 'people' aspect i.e. there were two organizations which had different corporate cultures. If you consider a country like Thailand or Malaysia or any other Asian country, the authorities there don't want to see two foreign companies squabbling, bickering and firing a lot of locals just because it's convenient for them. So, we had to be very cognizant of the local cultural success

factors, as well as how to minimize the disruption, and how to maximize the change management and communications. Some people who had literally just gone from paper to Solution X after training, familiarization and change management, were then told -- "Oh! It's no longer system X. We're going to have to use system Y." So, we had to be very conscious of that cultural change success factor as well. And in the final analysis, business had to continue, regardless of which platform was being used, so it wasn't just a matter of 'unplug X and plug in Y'.

***Researcher:*** Going by your rating of '5', would it be correct to say that the firm overachieved its IT integration savings?

***Respondent:*** I can't really remember, but I would pretty much say that I had my 'Consulting' hat on. And when we did overachieve, we did a good job. Ultimately, whether the two companies felt that we overachieved, was in the financial aspect, I think. In my opinion, we overachieved the change but I don't really know, as I wasn't around at that point in time.

***Researcher:*** One of the comments you made was that 'top-down strategic approach, centrally driven across 13 countries', was one of the factors, which contributed to the overachievement. Could you elaborate a little bit on that?

***Respondent:*** Yes, because both of the companies had a presence in most of the countries in Asia. It wasn't one company in each country but between the companies, there was a bit of overlap in 8 or 9 countries. To add to that, there were two separate cultures and two separate teams but people were essentially doing the same things. A

lot of insurance companies still have a federal approach as in, 'the rich countries like Hong Kong and Singapore can do this, and the poor countries like Cambodia and Vietnam have to use Excel.' If you decide to box them up, you basically wouldn't have moved forward more than an inch, in terms of the global plan to standardize, to use best practices and operations, and so on. I liked the fact that this was controlled by the CIO of the merged companies' firm, from London. He was cognizant of their vested interests in the different countries, but he wasn't going to leave the work to accommodate every single nuance. He couldn't, right? Those companies had regional CIOs and regional CEOs, and again they would fiercely protect their own interests. The fact that it was 'top-down global' actually put those guys on board, in the region. And then for each region, that would translate down into individual countries' CEOs, CIOs, etc. When you have that level of buy-in (and I don't mean sentimental ability because we as external consultants weren't going to be swayed one way or the other), we looked at the hard facts but that sort of inevitable feeling that 'I'm going to lose my empire', wasn't there. The general feeling was -- This is a new company, it's a joint company, it's merged, and this is for the future, so get on board. That level of communication buy-in actually helped us in two senses. It facilitated us in our studies because people weren't seeing us as 'a guy with a machete cutting jobs.' Secondly, it also made the people more willing and able, to listen and help because they knew that what came out of this would eventually end up being better for everyone. We wouldn't have had that, with a federal approach. Too often you see, that approach doesn't work and you end up with a mish-mash of diversity, which doesn't help. That's why the 'top-down strategic approach', was a really sensible one.

***Researcher:*** Are you suggesting that the message was well bought-in, by the regional teams?

***Respondent:*** It was. Our appointment wasn't the precursor, to discussions of the country. It wasn't like 'The Grim Reaper's on the next plane.' Essentially, strategically and business-wise, it's just what we do. And, once that was embedded in the communications, people had a chance to think about the ramifications. A little bit later, they brought in the IT guys because they wouldn't want to lead with that. And, I think quite rightly, they adopted a good approach in terms of a soft approach. So, the choice of IT was more of an internal corporate decision, for the purpose of standardization, reusing and minimizing duplication.

***Researcher:*** Can you recall what the planned schedule was for this integration, how long did it ultimately take?

***Respondent:*** Our portion in terms of the IT study, took about three months. I am not sure about how long they took to manage the initial business aspects and all the other stuff. We weren't appointed to be the integrators, but we had looked at about 6 or 9 months as the duration for the completion of the integration process. And that was aggressive, because the longer this would go on, the more the destruction is. You end up having a lot of duplication, with two separate IT systems and two separate insurance systems, and this increases the opportunity for a customer to go to one and say, "Give me a quote of 100 bucks", then go to the other one for 110. That is a PR disaster. Obviously, those countries where they were normally using system X, and system X was retained, the issues were faced by half of the company only, because the other half

was already on system X. So, the aggression was justified, and I think the key to that was as much 'a vanilla out of the box' implementation on the first round, for the second company. I would say "Don't try and change the entire universe in phase one because it's a hard task getting the transits on to this. But get them to the basic level we are now, and the 'bells and whistles' can come later on, as a joint entity." Overall, it was pretty well thought out. Sometimes we thought, it would be helter-skelter and everyone would just power on but I must say, it really was well thought out.

***Researcher:*** The top 3 considerations that you mentioned as reasons for success, were -- communication, change management, HR aspects. Could you please elaborate?

***Respondent:*** Sure. The thing was this wasn't just an IT-led project. That would be a wrong approach. It was a business project where businesses decided to merge, and everything would have to follow. So, communication and change management on the business side were done quite well, even though, as a person who's based in the country, you'd have to be worried about losing your job because there's a lot of key people doing the same job in the other company. The other company may well be bigger, so that explains the communication bit and change management bit. The groundwork was laid before the IT guys came in, so we weren't distracted from our pure technical mission. We didn't have to answer those kinds of questions. I think they handled that very well. They let us focus on, what we had to focus on. So, like I said earlier, you had corporate communication through the region and through the country, and the change management aspect of that was -- "Don't worry, you're not going to be fired", that kind of stuff. And, it was kind of a buyback. Inevitably, in a merger, there

are some casualties, but they avoided that. What they didn't want to have at the time, was mass stampedes or people leaving because 'the minnow was getting swallowed by the whale.' And in every given country, there is one. The minnow didn't want to abandon ship, so that bit was handled well. So was the HR bit that came later. Inevitably, we had to liaise with HR because you have teams of users, teams of business users plus large IT shops in every country. We're skilled and tooled up in system X, and of course, if you chose system Y, there wasn't necessarily an automatic transfer of skills. For the more generic roles, you could probably move people across, but if you had specific technical stuff which was unique to that company, you couldn't just transfer it from the Thailand operations to the Singapore operations because they would be in the same boat. So, the HR bit about that was downstream, there would be inevitable casualties. And obviously, it wasn't going to be just IT. Although from my perspective, we had to look at the IT people and do a resourcing plan as to what are the essentials or must-haves for business continuity. So, we passed HR but on the business side I didn't get involved, but it was the same process there, as I didn't need to have 65+ staff doing 35 jobs. The thing that we found in Asia, was the fact that it wasn't over-encumbered by unionism, and that was a big thing for us. We didn't go charging in and just bulldoze everything. In the final decisions we made, we weren't hindered by any other external factors like unionism. I've done work in India where we were doing something similar. And the whole of the back-office replacement was almost scuffered by the fact that we couldn't get rid of anyone. But, we didn't really encounter those other change and HR barriers in the Asian context, which was good for all concerned. It made the process, kind of like going to a dentist. You know it's not a

pleasant experience, but you make the best of it. Therefore, this external stuff not being a hurdle, made the whole thing easier for everyone.

***Researcher:*** In terms of the pitfalls, you mentioned three things: (1) pandering to local requests, (2) imposing a big brother attitude, and (3) not devoting significant time and effort to the success items. Could you please elaborate?

***Respondent:*** Pitfall 1 - The first one's obviously very simple. You've got 13 countries. In almost every case, you've got two companies within each country. So, if you chose system X, only one side got affected, whereas the side using system X carries on business as usual. The other side will be directly affected, but it's kind of -- we had a lot of effort hinging on that. The other solution works as it's the same jurisdiction, the same regulatory environment, the same market and so on. It doesn't do what you do because you customized it to the last 20 years. So, this is the way it's going to be -- and that 'bells and whistles stuff' well, it was nice to have in your old regime. But the new regime says, we're doing it this way. The fact was that it wasn't as if you were trying to impose something from another regulatory authority into a country, and that too doesn't work here. The management felt "Don't try to pull the wool over my eyes, with all that stuff. That's just 'bells and whistles'. That's not mandatory business stuff. We've already got that."

Pitfall 2 - I came to Singapore in 1997, and I've been here for 20 years. I can tell you that for the first 2 or 3 years, I thought I was localized. I thought I understood it, but I really didn't. And what we had, was a bunch of consultants parachuting into individual

countries saying, “Right. You know that system we used for 20 years? We’re no longer doing that. We’re now doing this.” You had to be culturally aware, especially as you’ve got two companies merged and they don’t even know or like each other. And then you bring in a third party of guys, parachuting in from Sydney or London or wherever else. You’ve got to tread very carefully. That was why I said in my previous answers about the communication and change management bit -- if that part hadn’t been laid out before us, it would have been a heck of a lot more difficult. They’ve already been warned, and they’ve already been told that this is for the best. This is for the future. So, the big brother ‘you know it all’ stuff, was something that we all had to be wary of. You sometimes had to get the big stick out. But generally, no. It was only once in a while.

Pitfall 3 - It was the fact that you impose such a huge change and you’re not cognizant of individual needs, your country’s needs, group needs and so on. You can just assume that everyone’s going to be on board and the awareness factor was very important for us all. It was one of those projects, which could have failed because it was too business-like or which could have failed because it was too IT-like. But I must say that the guys in London, in the head office of the merged entity, thought this out quite well, and it was politically and carefully timed. I also think it was pre-planned, quite well. That’s the key to anticipating downstream damage, and turn it off.

***Researcher:*** Do you think that the due diligence was quite thorough and the planning phase was quite good?

***Respondent:*** Absolutely. We had a manual that was used as a guide. It contained all of the strategic information that we needed to do our job in our key site, and it contained our methodology criteria, so that wasn't something we did in just 5 minutes. We really planned it, and we looked up -- if you do this, what happens then? And we tried to preplan answers, solutions, options, etc., so it wasn't just going off to Thailand and turning off all the systems.

***Researcher:*** Am I right in saying that technology or IT, was considered as an important factor of this entire integration process?

***Respondent:*** Very much so. It was a business merger for the right reasons, but IT is your enabler, and you could really mess things up if you got that wrong. Certainly, we wouldn't want to have two systems in one country due to constraints, potential customer journey, issues of wrong policies, wrong quotes, and all the other stuff. The cost was one aspect. It wasn't the only aspect but so was the standardization and single approach -- "We no longer want to be seen as two insurance companies since we are one company, so would somebody please explain why we have two separate insurance systems here?"

If you do your due diligence based on single factors such as -- I want to reduce cost, then I think that's a big mistake. I think you have to have a basket of success factors so that your due diligence is balanced. But I also think that one of the success factors is, the ability to make some really tough and maybe not 'outwardly sensible looking' decisions, and I'll give you the perfect example. I think it was in Thailand. Company

X had literally gone live with a new solution, and when we came along, we found that every single factor on the study indicated that the merged entity would be better off with the other company's solution. You can imagine the noise from the local company -- "This doesn't make sense. We spent millions on this." We know, we get it. However, we have to look at the bigger picture. So, though it seems senseless, making tough decisions is one of the key success factors. You can't be swayed by local sentiments. It may be tough and may not seem sensible at times, but strategically, this is the way you have to do it.

## Banking Financial Services Company III

Respondent: #19

Industry: Banking Financial Services

Company: Global banking group with worldwide operations

Integration effort: Integration of human resource acquisition of another global bank.

***Researcher:*** Can you share some information regarding this integration, and what was your role in it?

***Respondent:*** Sure. I'll give you a quick differentiation. It's a curious differentiation, which you can appreciate, once I explain it. So, with Company A and the primary factor, what took place was that, we (Company A) acquired a human resource component, without acquiring any technology. And, that's an interesting kind of key development because, usually when companies merge, the technology infrastructure merges -- whether it's the computers on a desktop or data centers or networks, etc. One of the easy ways of looking at it is, most external networks are outsourced, right? If you think of the top 5 banks, they don't outsource anything. But if you think of everybody else, it's outsourced to British Telecom or Verizon and so on. So, what would be the integration story there? Verizon would simply flick a switch, and both companies would be connected, right? It'd be pure simplicity. So, you could think of those things taking place -- mergers of PCs and what the challenges are in doing that. The Company XY merger created a situation, where even the virus scanning mechanism and the security standards were different between both firms, so Company

X had a challenge of how to accommodate 4500 PCs that had a different standard, and how to pull them onto the network. And, we're talking a different standard in terms of security, primarily. What do you do with that? How do you take other assets and make them perform, till you get the right value out of them? It turned out that Company Y had tremendously more advanced and extensive equipment, when it came to things like network switching or routing. It was a huge blessing for Company X, because it was an immediate value add. They got a set of equipment that could now make their network perform better and in a larger capacity, and they got it for cheap. They still got it as a part of a package, and it wasn't transparent, because as you know, people don't look at the brick and mortar of technology resources and facilities. When a merger is priced, it means that there is some ability to get the good stuff, and to get more than what one pays for, when it comes to technology. This can especially be found, at a data center space. Every once in a while, one gets a data center where one gets more than what one pays for, if the data center wasn't leased -- and the bigger companies would never do that. So, those were the kind of dynamics that were present and quite prevalent, throughout the structure of the Company XY merger. With the Company XY merger, there was something that was absent in the Company AB merger. In the Company AB merger, 90% of that was not present at all, because all we did was invite people to come into the company. So, there was that much less of a merger of technology, and that needs to be appreciated. Of course, there were parts of the merger that took on outsourced facilities and other countries' offshore facilities. You could generally expect that to be two things. It's expected to be low key, so the really high technology than the offshore entity, and the other thing you can expect is that, it is hardware only,

so that the application of value, would never make it into that part of the deal. Therefore, those are gaps in their resource transfer.

***Researcher:*** You mentioned 'improving free cash flow' as one of the top 5 priorities for the merger. However, you rated it at a '1' (lowest on the Likert scale). Can you explain why?

***Respondent:*** Yes. There's a rationale for that. I suppose that (underachievement of free cash flow) becomes an outlier. The reason I rated it that way was that, in terms of when and how Company A priced that merger versus what actually merged, were two different things. This happens sometimes, but it doesn't happen often. It happens when there are multiple bidders, as was the case here (Company P was bidding too) and it happens when the target company decides to split up and merge only one portion which is kind of similar in this space, but not so much. Basically, what happened was that Company A priced a very broad outlook of what they could possibly get. But at the end of it, what they did get after Company B's bankruptcy, wasn't exactly what they had priced or what they thought was in the full realm of possibilities that could have come their way. There are different reasons for that. Bankruptcy complicates matters because you now have creditors who are laying claim to different assets. So, Company A had to just drop down the price and pick up all the assets and resources. That was a complicating factor. Other complicating factors were that there were other bidders around the globe, including those in London and New York. That's why there was a huge discrepancy in whether cash flows were met and whether value adds were met.

They were met -- because the bankruptcy event had so many impacts. It could not have been priced beforehand, that's why those goals were met.

***Researcher:*** Was the merger announced much before the bankruptcy or did it happen very close to it? How did it line up, timing-wise?

***Respondent:*** What happens is that normally in any situation, whether it is a bank or company, when one party's facing a merger or bankruptcy, you would have to wait. You don't have to. But in that close situation, in the interest of the shareholders, you would want to wait until the bankruptcy has taken place because you could get assets for cheap. And, if you have experienced dealers and creditors or some of them are the same creditors, then it's a no-brainer. The actual merger did take place after the bankruptcy, but the reality is that there were two mergers. One merger was of the people, and the other merger was of the assets -- information driven assets. So, Company P conducted the assets merger, whereas the people side of the merger was conducted by Company A.

***Researcher:*** When do you think a meaningful IT due diligence happens?

***Respondent:*** I think it meaningfully takes place, way after the merger because usually before the merger, there are so many constraints. But during the merger process, there are legal constraints about how you get in, to look at the IT resources if they weren't listed. The merger is usually done and dusted, before the CIO, community, other corporations or the bank can actually go in and really do a clear or meaningful assessment. It's generally IT resources, and the banking community is usually not what

the company's trying to buy. The company is usually trying to buy products, maybe market segment or intellectual capital, and maybe intellectual property, once in a while. So, the whole range of things there, are usually considered way, way more valuable. If you think of market share or opening up a market or if you think of buying an entire product segment, those things are massive in terms of strategy and a long-term view. One of the interesting things that used to happen in the old days was that when you do an acquisition, the accountant would come into the room and remind you that all the IT equipment is standing to be written down because IT equipment depreciates so fast. So, don't try to overpay for IT resources that two years from now will either be replaced or will be worthless. And, it's a valid argument, isn't it? No one wants to put a huge value tag on IT resources and the amount of due diligence that you want to do for it, when you know in the near future the value drops sharply.

***Researcher:*** IT refers not only to fixed assets but also to intangible assets like intellectual capital, intellectual property, etc. How would you estimate the value of these?

***Respondent:*** In a banking industry, there are two levels of IT framework that you want to look at. Primarily though, I'm sure there are others out there. One is whether or not the other company has a particular piece of intellectual property which is IT or which is IT structured. Either it's with their programmers or with their software. And, if it's particular and nobody else has it, then that itself is intellectual property. So, we've definitely seen that and sometimes, that's the main player. Sometimes, that's the core of the merger. There's very little stuff out there, that isn't competitive or comparable.

The next one is the networks -- in terms of the basic structure of how IT is used in the market. It's about price discovery and, trade and settlement. Those three things in the banking community, are linked and networked by either the same or similar applications. So, if you think of settlements, Broadridge and Intellimatch are two very big pieces of software, which are shared by all the banking communities. That's how they get their stuff settled. If you think of the trade level for equity securities - Fidessa is one, leading the application desk. So, if I bought a company and they said, "Okay, we won't deliver any IT resources", in a banking community you're not at a loss. You haven't lost much, and that's kind of why Company A survived through that -- because they had their resources they were operating on, and that was usable. Some of them would have helped, but it's difficult to say exactly how gigantic the threshold would have been. It still boils down to people, every time.

***Researcher:*** Why do you think the IT integration project was under-budgeted and how do you think the additional money would have helped?

***Respondent:*** I think basically the systems needed a capacity upgrade and it wasn't feasible at first, at least to the finance department or the senior management. But the capacity upgrade was crucial, and it could have helped deliver an extra 10%. Our spending was an extra 10%. Naturally, 45% or so spending would have made a huge difference in terms of the capacity and the ability to handle complexity. The Company AB merger saw an increase in complex products. So, that's really what was going on. We didn't inherit the technology, but the current technology needed beefing up.

***Researcher:*** Could you elaborate a little more, regarding why you thought the integration did not meet its *overall integration savings*?

***Respondent:*** I think, knowing your context, I would narrow it down to some of the offshore captive entities like outsourced data centers and so on, that became necessary. That somewhat dented the cost -- not outrageously so, but it certainly was not in the original cost projections. So, this made a big difference in the amount of cost savings, the firm had. Additionally, not getting all the technology was something that the firm probably thought would have added a lot of value. But it didn't.

***Researcher:*** What prescriptive advice would you give to somebody, who is involved in a merger integration project?

***Respondent:*** I think the big thing to do is to get the CIO team involved, so that they could tell you what the challenges are. Some of these challenges are actually prohibitive. The next thing is, to probe the full list of information assets on the other side -- whether it's intellectual capital, whether its application resource down to the licensing structure and so on. That's actually very important. It should not be underestimated, and you know to find out the hardware infrastructure, connectivity infrastructure, the outsourcing relationships and so on. Actually, a lot of times, more than 50%, you find very boring information and all that, but there are other times when you're going to find either gold or the realization that there are some cost prohibitive issues. But that's something that isn't done now. It's very rare that the merger committee or the merger working group would actually go out and try to get a list of information assets. I think those are the do's.

I don’t have any specific don’ts because the do’s would take care of them. If you manage those do’s in terms of ‘who’s using what’ rather than ‘who owns what,’ sometimes the answer surprises you. Not every piece of information resource that is used by a company, is owned by them. And this is the largest assumption, that needs to be brought in, when you’re doing a merger.

# APPENDIX 2: ONLINE SURVEY RESULTS

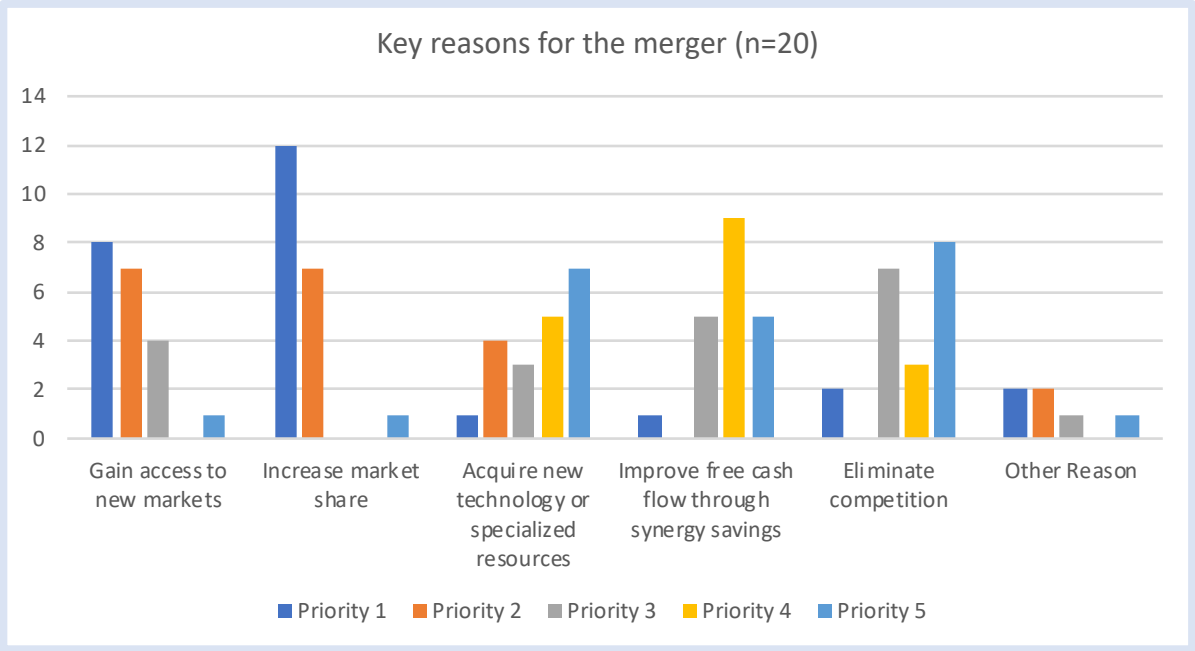


*Figure 3: Key reasons for the merger*

*Note: Other reasons include: (i) become a universal MNC bank (ii) overall synergy savings (iii) integration of workforce legal entities (iv) widening service portfolio (v) new business model (vi) global merger leading to Asian portion of the merger*

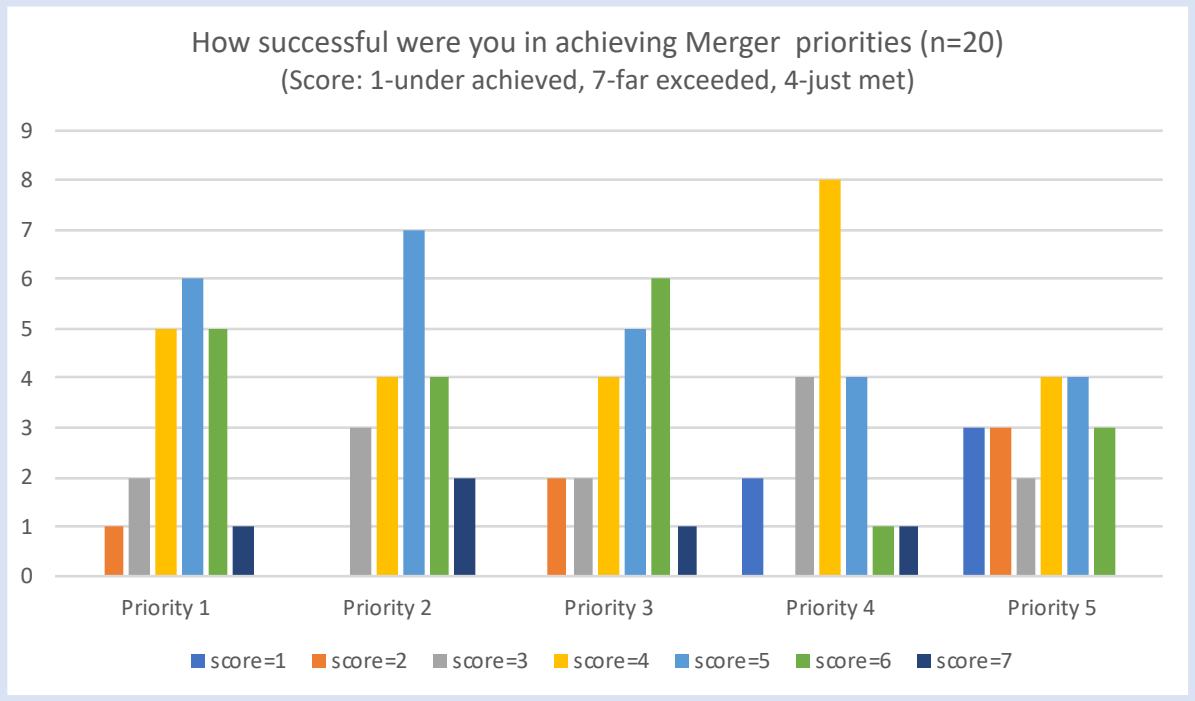


*Figure 4: How successful were you in achieving the merger priorities?*

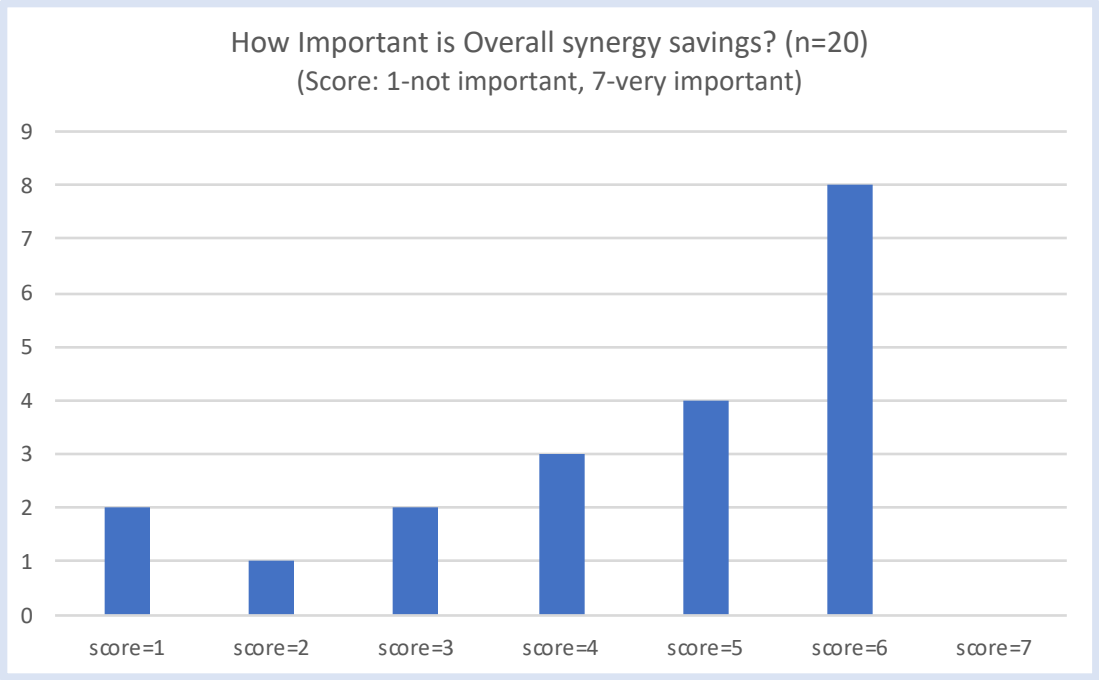


*Figure 5: How important is Overall synergy savings?*

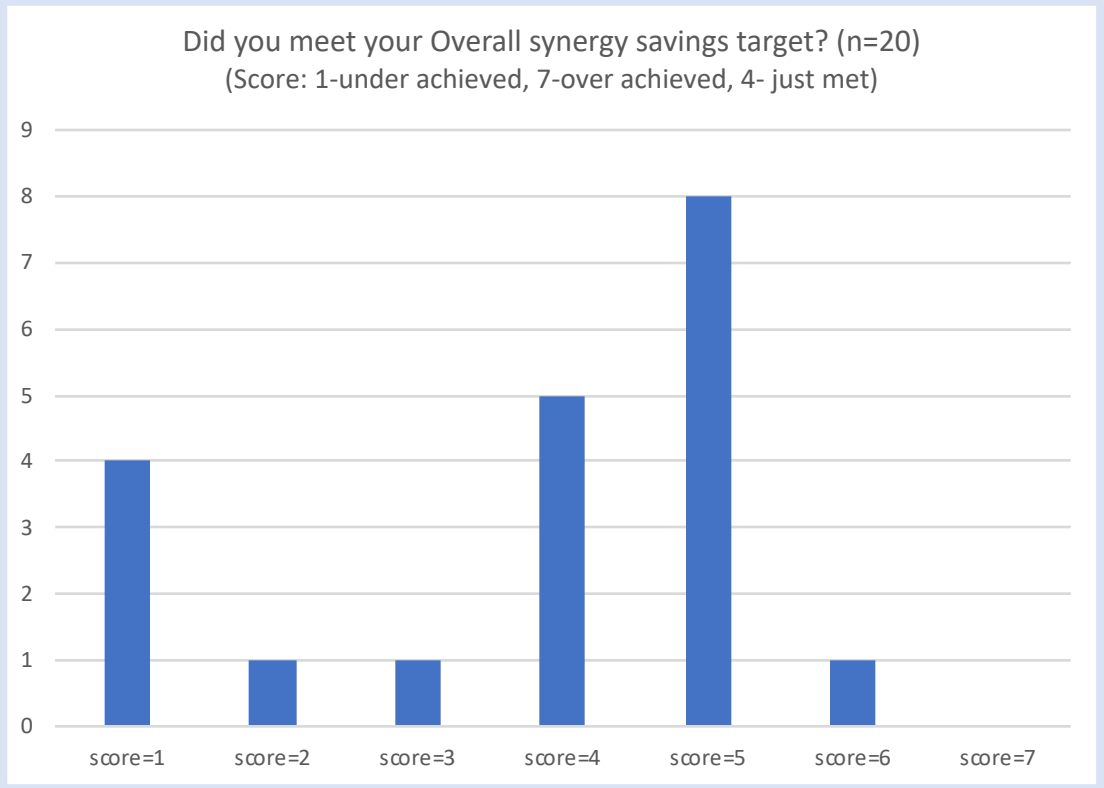


*Figure 6: Did you meet your Overall synergy savings target?*

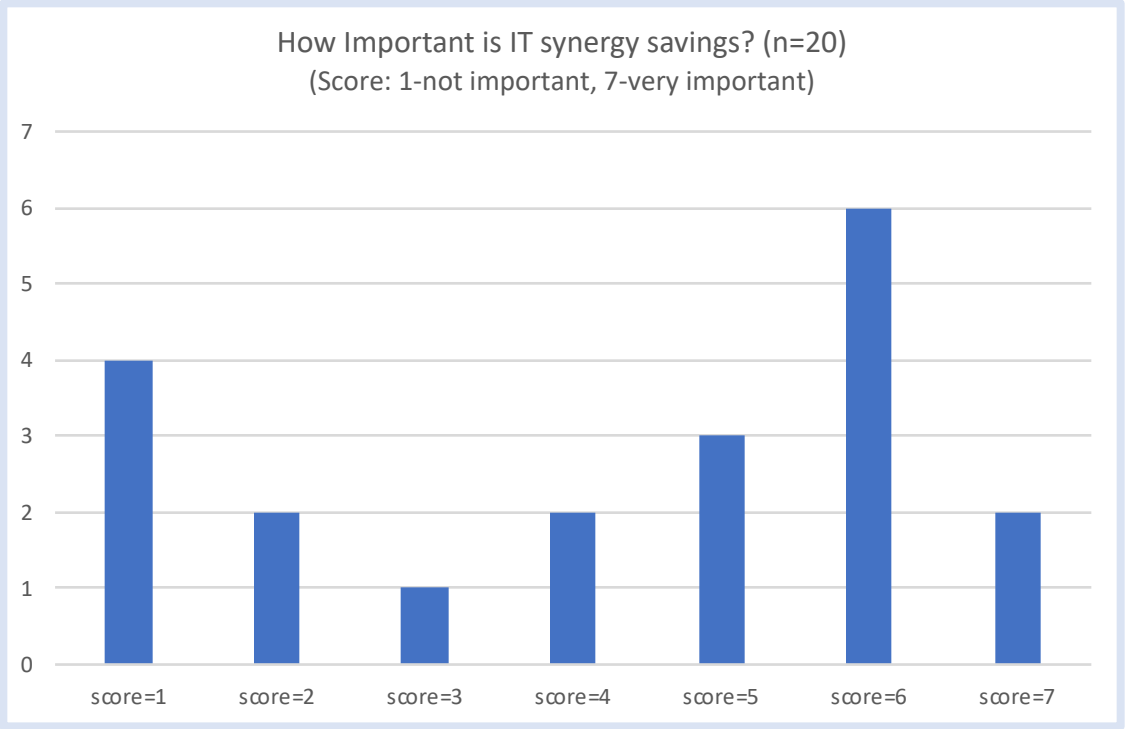


*Figure 7: How important is IT synergy savings?*

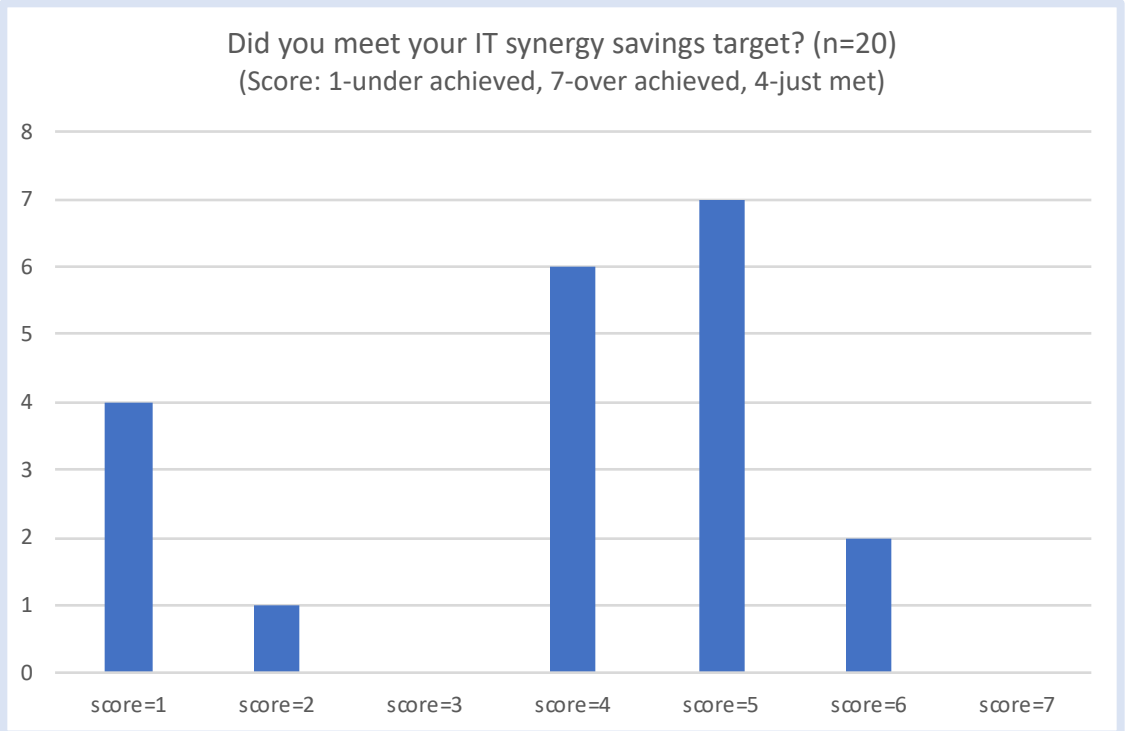


*Figure 8: Did you meet your IT synergy savings target?*

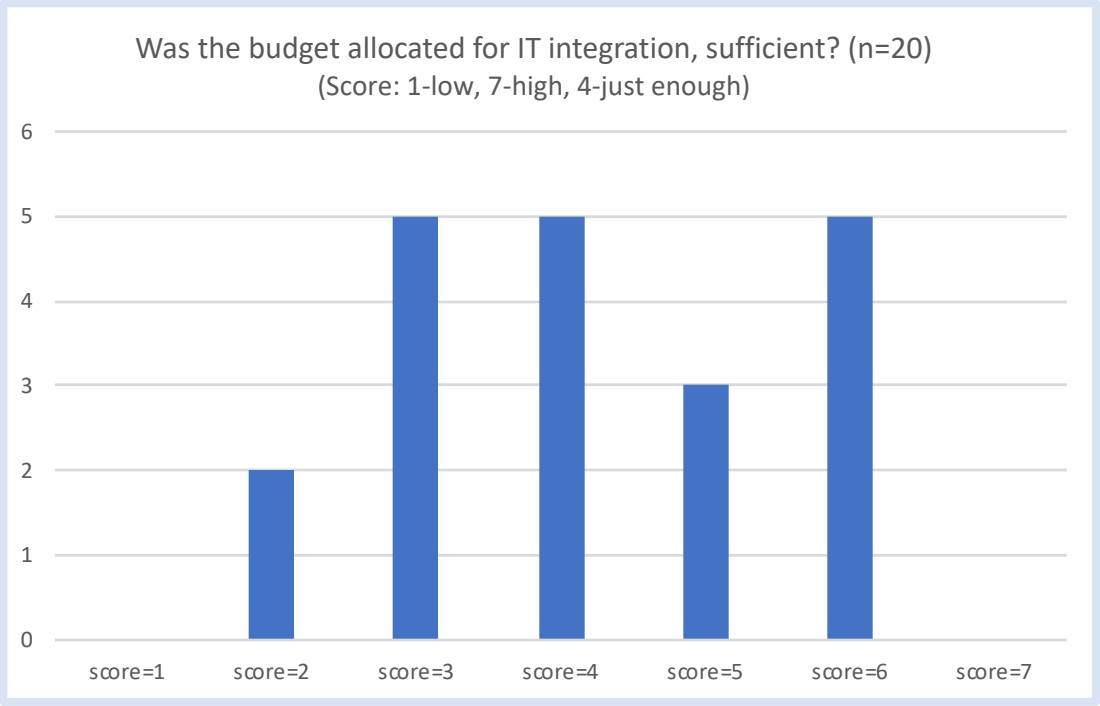


*Figure 9: Was the budget allocated for IT integration, sufficient?*

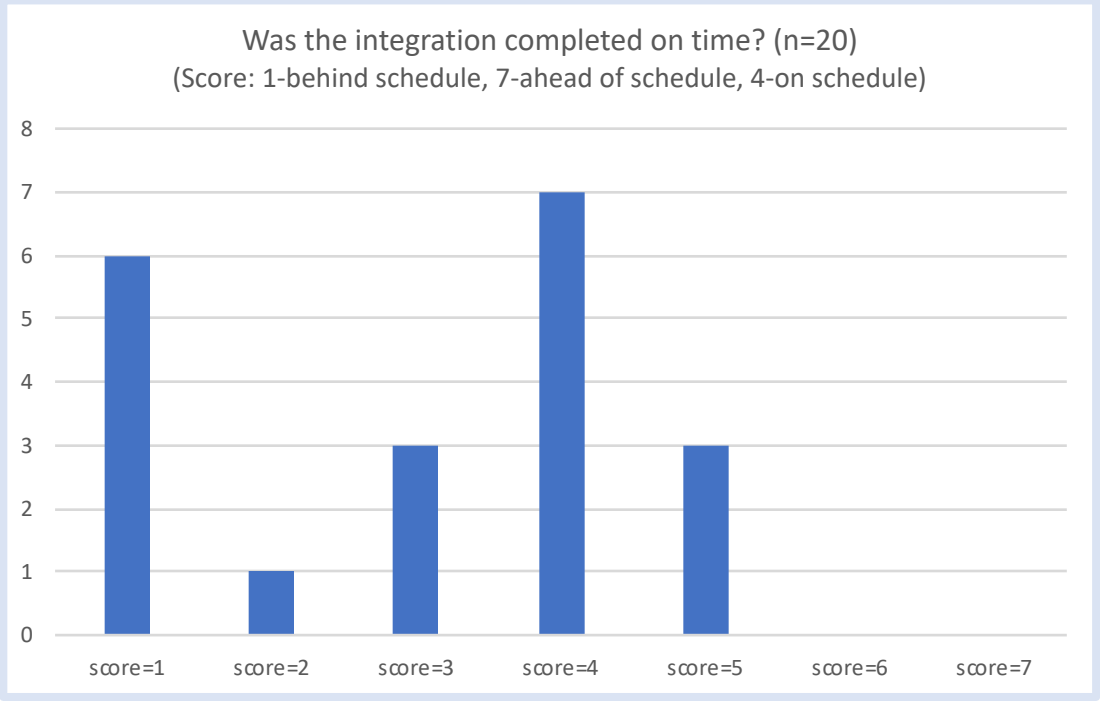


*Figure 10: Was the integration completed on time?*

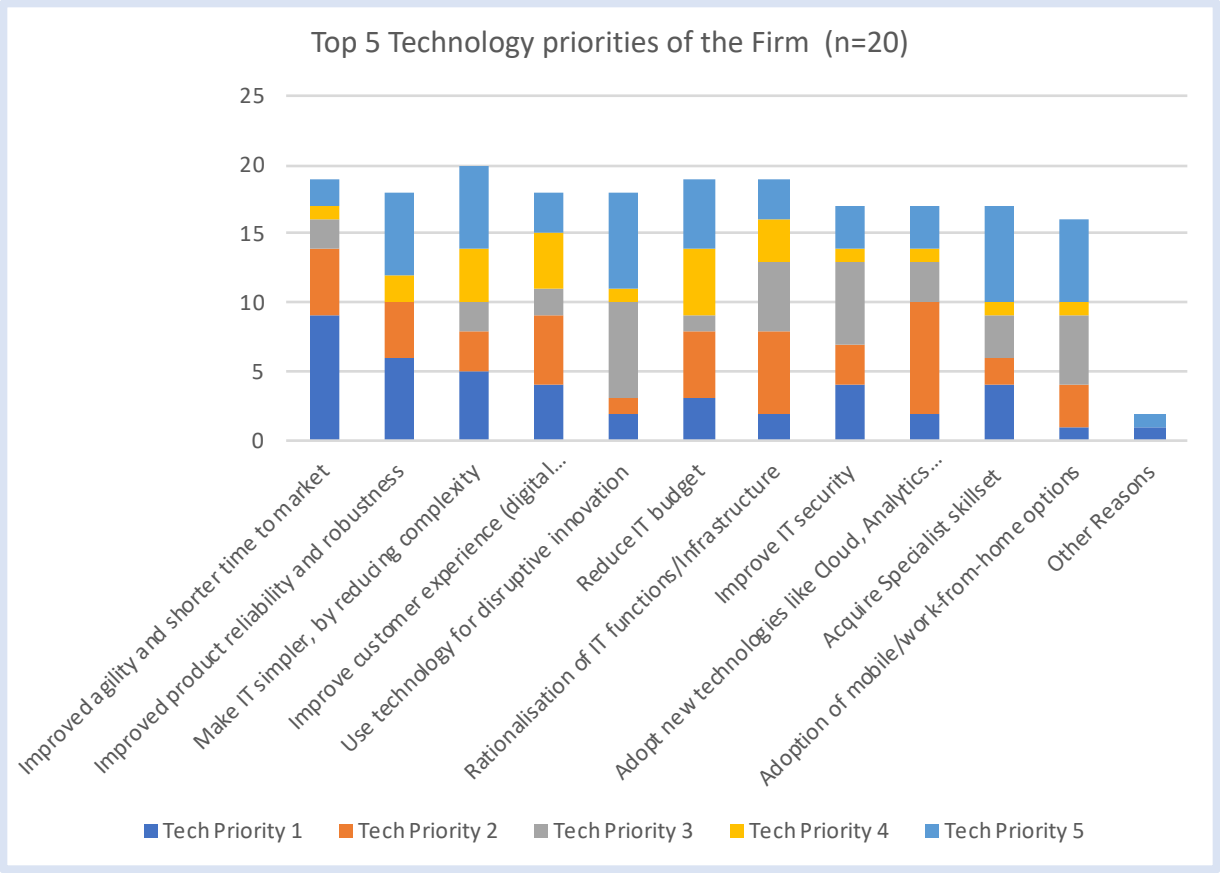


*Figure 11: Top 5 Technology priorities of the firm*

*Note: Other reasons include: (i) digital transformation (ii) to research future of automation*

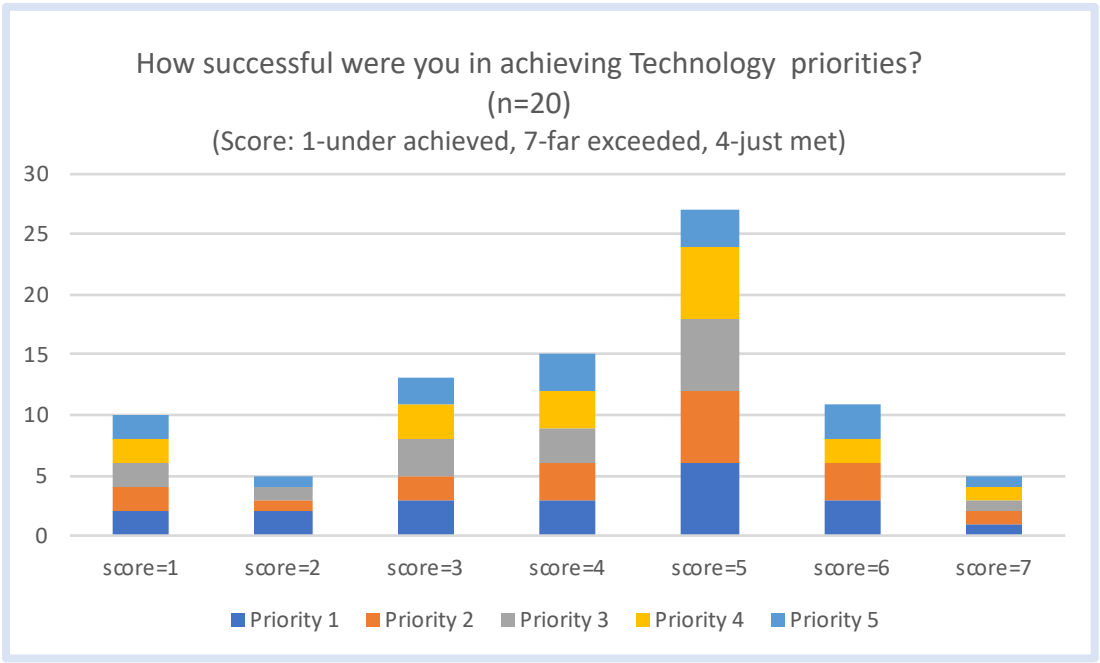


*Figure 12: How successful were you in achieving Technology priorities of the firm?*

## Top considerations, for ensuring merger integration success (Survey responses)

Following were some of the inputs from the respondents, on how to ensure a successful merger integration outcome:

- A business case that includes both business and technology (application and operation) risks, costs and return on investment
- A timeline that allows for comprehensive IT discovery and planning
- Communication and transparency between all stakeholder groups
- Well-aligned plans, between business and service / IT
- Clarity of vision for the merged enterprise
- Empower the business integration team, allowing support services to follow. Don't try to use IT to force convergence of business processes.
- Ruthless commitment to the 'enterprise way', with no scope for exceptions
- Great leadership
- Great post-merger Integration Program Capabilities and rigorous project management
- Early Involvement of Technology in Due Diligence Process
- Good Communication / Change Management / HR management
- Acquiring specialized skills to improve productivity
- Ability to optimize business value, operational value and technical value

## Top pitfalls to avoid, during a merger integration process (Survey responses)

Following were some of the inputs from the respondents, on pitfalls to avoid during merger integration:

- Overspending, weak control, loose governance
- Failure to identify and mitigate risks
- Inadequate IT due diligence
- Underspend of *IT integration budget*
- Overestimation of integration *synergy savings*
- Underestimating the complexity of IT integration
- Not running a deeper due diligence exercise 'as soon as possible' to re-assess pre-integration assumptions and confirm (or not) the integration plan
- Refusing to consider the need for ongoing adjustment of the plan and / or not clearly communicating about those required adjustments
- Keep selling / pushing a plan nobody believes in anymore
- Assuming teams on both sides will immediately buy into the plan and execute it blindly at the expected pace. People usually don't like change and the associated risks and unknowns
- Over-reliance on internal feedback, no proper responsibility matrix