

# ITMA - IT Integration in Mergers and Acquisitions

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## Abstract

This study aims to identify key information technology (IT) integration issues experienced during mergers and acquisitions (M&A) in the financial services sector. The study proposes an approach to increase the efficiency of such transactions. A comprehensive literature review and case study of a leading financial services organisation is undertaken, comprising of interviews with high ranking IT and business leaders. This research identifies the blueprint for a best practice framework, which Chief Information Officers (CIOs) and IT practitioners can employ to guide execution of their own M&A integration programme.

**Keywords:** CIO, merger, acquisition, demerger, IT strategy, leadership, governance, due diligence, synergy, framework, culture

## 1. Executive Summary

Global mergers and acquisitions (M&A) deals in the financial services sector increased 21% in 2014 to £214.9bn (Ernst & Young, 2014) representing one of the most challenging enterprise transformations in the corporate world. Typically, 25% of total M&A integration effort comes from IT (Gartner, 2015), this means that Chief Information Officers (CIOs) are now playing an increasingly important role in successfully and swiftly delivering the expected business benefits and shareholder value. Delivery at pace is a core capability and focus area of this study, as information technology (IT) integration is often a key dependency in terms of M&A business benefits realisation.

The objective of this study is to help CIOs manage the process of IT integration as quickly and efficiently as possible during an M&A event in the financial services sector. Based on key findings from the associated case study we conclude that delivery at pace is about doing the right things at the right time. A systematic literature review of industry publications and best practice frameworks is complemented by a case study of a leading Financial Services organisation, which completed a £250m acquisition in 2015. High-ranking IT leaders and subject matter experts are interviewed to identify critical success factors including; organisational alignment for delivery at pace, motivating teams, regulatory, technology and data considerations. This case study is useful as it represents a successful transaction within a large corporate environment and is reflective of a broader number of cases.

The tangible result of this study takes the shape of a refined IT integration framework, providing easily digestible guidance for those faced with rapid execution of this complex and challenging programme of work. The ITMA framework applies to a broad range of IT integration scenarios and can be adapted for immediate use.

M&A IT integration is a complex programme of work for which very few all-encompassing best practice frameworks or terms of reference exist. Due to the multi-faceted nature of M&A IT integration the findings of this study have been grouped into the following categories, which are believed to represent the most pertinent CIO level considerations:

- **Strategy.** Aligning the business and IT to turn boardroom discussions into operational and equitable reality.
- **People.** Embracing leadership and communication, whilst developing a holistic plan for cultural integration.
- **Control.** Navigating the numerous regulatory, information security and governance standards required when merging companies.
- **Delivery.** Delivering the benefits of M&A through effective due diligence, synergy realisation and post-merger integration.

M&A drives significant change and can create complex situations, especially when it comes to people, processes and technology. ITMA seeks to simplify the journey via a logical framework of activities and considerations to ensure the success of Day One and beyond.

## 2. Introduction

According to Deloitte's (2016) M&A Index over \$4 trillion worth of M&A deals were completed globally in 2015, making it the highest year for deal values since 2007. With \$321 billion worth of deals announced in the financial services sector, an investment trend in the burgeoning Fintech sector sees further threat of 'disruptive innovation' unsettling more traditional markets.

When a CEO looks for a catalyst for growth, increased profits or to boost their personal profile, the notion of acquiring another company can be very appealing. However, research studies show that somewhere between 50% and 70% of M&A deals fail (HBR, 2011) and 83% fail to achieve their goals (Weber et al., 2013). Despite these worrying statistics CEOs continue to pursue high-risk strategies, with CIOs being handed the challenging task of delivering the single biggest cost element and synergy enabler (see Figure 1).

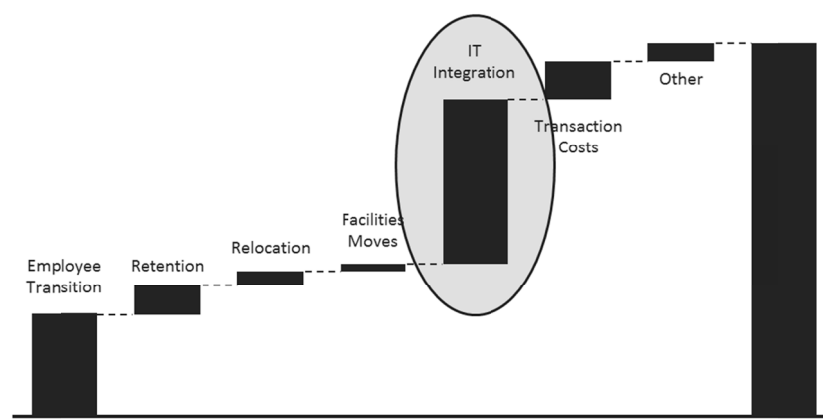


Figure 1. M&A Spend Distribution

*Note:* Adapted from: M&A Information Technology Best Practices, Copyright Deloitte (2013).

Successful M&A integration continues to dominate the boardroom agenda. As a primary enabler of synergies and deal value realisation, the pressure on CIOs could not be higher. According to Deloitte (2016) the complexity and cost of post-merger integration can be as much as 4-5% of the total deal value.

Based on the \$4 trillion worth of M&A deals completed globally in 2015, annualised publically announced cost synergies are estimated to be 2.9% in the financial service sector (£140bn). Businesses are therefore very keen to minimise cost overruns and maximise the speed in which they achieve related synergies.

Well-executed and successful integration programmes appear to focus on business IT strategic alignment, people aspects, governance and control, and expedited delivery of the IT infrastructure components. They appear to do 'the right things at the right time'. The question is; what are these key deliverables and what are the optimum timings? These questions are difficult to answer, especially when no one appears to have a specific reference guide or framework.

### 2.1 Trends in M&A

As CEOs strive to grow their businesses, regulators continue to apply pressure and technology continues to advance. The global M&A landscape has no choice but to evolve at a rapid pace. Prominent academics, and industry thought-leaders suggest the following key trends in M&A; larger organisations seeking to optimise their global footprint, regulatory pressures and technology disruption (Capgemini, 2015b; KPMG, 2016; CCG, 2016).

Appropriate utilisation of emerging technologies can increase the likelihood of achieving three critical goals of an M&A transaction: execution of a trouble free Day One; realisation of synergy targets; and establishment of future state platforms to support business growth (Roehl-Anderson, 2013). However, this disruptive trend presents CIOs with a broader set of challenges in terms of data migration, security and support and puts more emphasis on due-diligence and infrastructure planning. To maximise competitive advantage through new

technologies CIOs must get the basics right and build solid foundations on which to develop.

## 2.2 The Impact of Failure

The answer to the question ‘why do M&A deals fail?’ is the subject of extensive research. In the broadest sense it could be argued that it’s easy to buy but hard to perform an M&A (Weber et al., 2013) or one might question the leadership capability of the acquiring or target companies (K. Dunbar, 2015). At a more definitive level much of the supporting research points towards cultural integration issues, inadequate due diligence, theoretical valuations, limited or no involvement from the owners and post-merger integration (Investopedia 2014b). The latter indicates a lack of knowledge for management tools or best practices to guide senior managers through this complex programme of work.

Numerous case studies highlight how badly things can go wrong during an M&A transaction. The impact of failure is lasting; not only financially, but in terms of reputation and on-going regulatory scrutiny. In the case of RBS, they were fined £56 million for the 2012 system outage (BBC 2014), the bank set aside £125 million in compensation funds and docked £6 million in bonuses from staff. In a powerful statement from Andrew Tyrie (Conservative MP), these types of issues “erode the public’s trust in banks” (Guardian 2014). CIOs are becoming increasingly aware that their accountability, their actions and their diligence is paramount in protecting far more than their own personal brand.

## 2.3 Landmark M&A Case Studies

Success and failure is common place in the world of M&A and analysts are keen to put forward their synopsis of ‘why’ individual cases went well, or went so badly wrong. One thing that can be guaranteed however, is that no two cases are the same, each will vary in terms of scale, complexity and internal or external factors. In reviewing M&A case studies it’s often easy, with hindsight, to see how problems manifested themselves and suggest how risks could have been mitigated. However, in the absence of a framework or model for integration, it’s also easy to see how things were missed and costly mistakes were made. Below are just two examples of M&A transactions, in recent years:

*Deutsche Bank – Bankers Trust.* When Deutsche announced plans for a \$10.1bn takeover of the Bankers Trust (NY Times 1998) they had to act fast to integrate a combined workforce of 20,000 staff across two cities. A study from the Concordia University (Appelbaum et al. 2009) considers the acquisition a success due to an effective strategy. This is due in part to an integration team formed of key executives, in charge of closely monitoring the merger and keeping everyone well informed. The team consisted of division heads, human resources heads and the CEO.

*Bank of America – Merrill Lynch.* When Merrill Lynch was acquired by Bank of America in 2009 they were tasked with integrating two broker-dealers housing two separate investment banks. According to Kateri Zhu (2014) decisions relating to organisational structure and leadership languished for over 4 months, causing fear, doubt and divide. In this case, lowercase lack of consideration for people and communication cost the group significantly in terms of productivity, fiscal gains and subsequent lawsuits.

## 2.4 The Need for a Best Practice Framework

CIOs often find themselves in the challenging position of having to manage complex M&A related integration programmes with no reference point or model to guide them. Leading authors and industry specialists Dr. Michael McGrath (2011) and Jan Roehl-Anderson (2013) suggest the lack of a specific ‘best practice framework’ covering IT integration in M&A in the financial sector. This is concerning as structure and clarity are vital in managing the executive’s often-heightened expectations of time, cost, quality and risk.

The list of CIO level considerations is as vast as the number of stakeholders who need managing during this time. Including, but not limited to; the business will want to know how IT defines success and how they can best work together. IT leadership teams will want to understand the best approach to due-diligence and how technology can quickly enable the business. Programme management must be guided on how governance frameworks can be configured for optimum engagement and enablement. Finally, participation and morale must be positively influenced. This is a tall order for any CIO turning their hand to M&A integration for the first time. Whilst there is no such thing as a fool-proof checklist this research aims to arm CIOs with a toolkit for this challenging programme of work.

## 3. Research Design

This study sets out to identify the key focus areas and best practices associated with fast and effective M&A related IT integration. As the authors have practical experience of this field, the study adopts pragmatism and

realism as its primary philosophical stance. With access to credible data and opinions emphasis is placed on quantifiable results, a secondary positivist approach uses existing theory to develop hypothesis.

*Approach.* Theory and practical experiences are reviewed, assimilated and applied into a framework, thereby deducing key recommendations for reader consumption. A deductive approach is synonymous with scientific principles, the application of controls to ensure validity of data and adequate sampling to avoid generalisation. The approach represents the most common view between theory, research and logical reasoning (Byrman & Bell, 2007).

*Strategy.* The research strategy includes a literature review, a case study and interviews. These mixed methods are chosen as they provide a multi-dimensional perspective, ranging from theoretical best practice through to 'proven by industry' application.

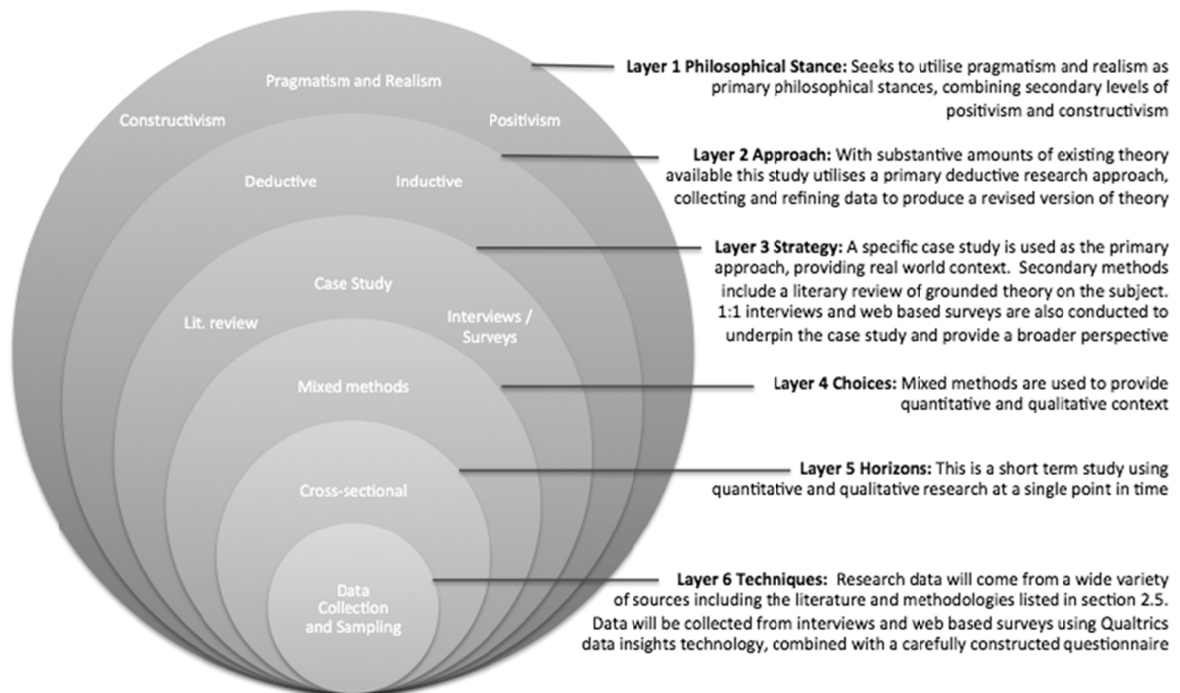


Figure 2. Research Design

*Note:* Adapted from Research Methods for Business Students (Saunders et al., 2009)

A review of literature allows for previous studies to be analysed, including theoretical frameworks, academic studies and industry best-practice methodologies. This allows for a breadth of knowledge and deep industry insights to be collated to form the foundations of the resultant product.

A case study from a leading financial services organisation was undertaken between January 2016 and May 2016 to identify practical considerations and lessons learned. In 2015 the organisation undertook a major post-M&A business transformation by consolidating and simplifying the technology used across the group, making it a unique study for CIOs delivering similar projects at pace.

### 3.1 Case Study Design

The case study draws on real-world experiences within a leading Financial Services organisation, which completed a £250m acquisition in 2015 with IT integration costs of circa £5m. Programme specialists and SMEs (figure 3) are interviewed to draw practical experiences from this M&A IT integration, with a view to learning from the successes and challenges.

For commercial and legal reasons, details such as names, companies or specific technologies have been anonymised. The following conventions apply:

The respondents are randomly referred to as respondent A, B, C, D, E and F. The acquiring organisation is referred to as Y, and the acquired as Z.

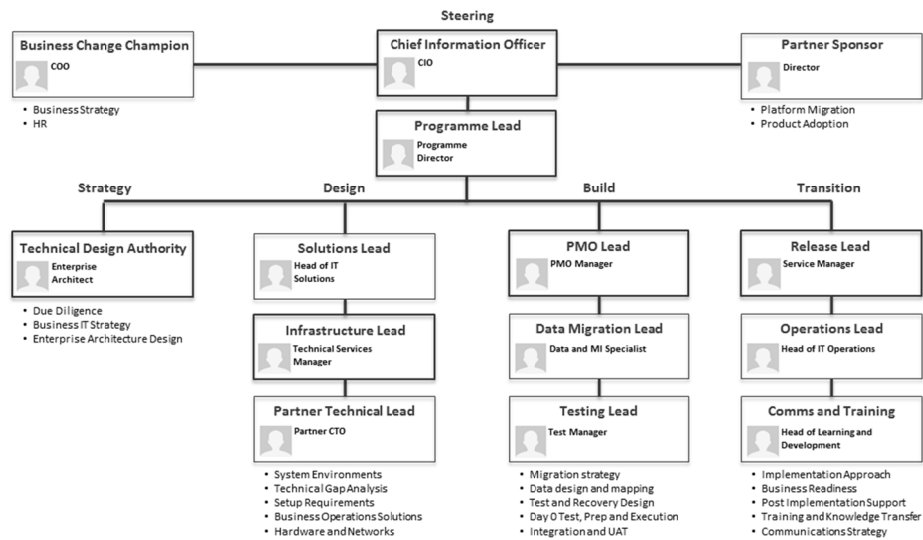


Figure 3. Case Study: Interview Respondents

Source: Proprietary to the corresponding author. Copyright Declan Burke (2016)

This case study is useful as it represents a successful transaction within a large corporate environment and is reflective of a broader number of cases. From a unique ‘insider’ position, the researcher conducts six 1:1 interviews with key members of the programme team, covering; directorship, programme leadership and SMEs from strategy, design, build and transition work streams. All of the respondents were integral to delivery and were still with the organisation at the time of writing. The literature review forms a basis for the questioning and a constant comparison method is used to analyse questions under the key ITMA headings.

### 3.2 Limitations

The authors recognise that this case study only represents views from a single transaction and does not allow for cross-case analysis. Another perceived limitation includes personal bias of the respondents and interviewer, who worked for the company at the time. Time constraints prevented completion of a broader analysis of comparable IT integration programmes and best practices. Measures have been taken to mitigate risks, including a review of the questions and advice from industry experts and the project supervisor.

## 4. Literature Review

### 4.1 Strategy

*Economic context.* Significant statistics continue to be reported in relation to M&A deals conducted across the world. Global M&A deals in the financial sector increased 21% in 2014 to £214.9bn (Ernst & Young, 2014) and according to Deloitte (2016) a further 4% to £223.5bn a year later (see figure 4). Deloitte goes on to report that holistically over \$4 trillion worth of M&A deals were completed globally in 2015, making it the highest year for deal values since 2007.

*Business IT context.* Modern day businesses are reliant on stable and efficient information systems to complete transactions, manage operations and gain competitive advantages in new markets. The role of technology in M&A has therefore never been more critical. Business leaders who understand the importance of IT integration can help their organisations gain an edge over their competitors (Hemmatfar, 2010) and CIOs who clearly articulate this opportunity to fellow senior executives should earn a more strategic role in M&A (Chandra & Satyam, 2009). Due to the inherent transformational nature of M&A, the opportunity for business IT-enabled synergies and efficiencies is therefore significant.

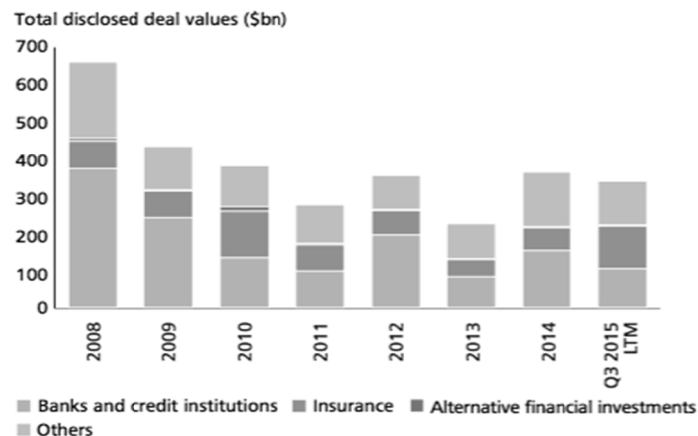


Figure 4. Global Disclosed Deal Values for FSI Subsectors as a Target (\$bn), 2008-Q3 2015 LTM

Source: Deloitte analysis based on data from Thomson One Banker (Deloitte, 2016)

*Integration context.* An M&A integration programme incorporates people, processes, products and partners and requires meticulous upfront planning and due diligence, combined with strong leadership, communication and programme management. The complexity and cost of post-merger integration are often underestimated by businesses; based on Deloitte's (2016) experience of this field, it can be as much as 4-5% of the total deal value. In summary intelligent integration represents a significant shift from current practices (Fernandes et al., 2010) and requires a very specific and considered approach.

*Risk context.* M&A deals often involve heated boardroom conversations centred around complex decisions. It is therefore not uncommon to see businesses purchased for the wrong reason, the wrong measures of value applied to pricing and the wrong elements integrated into the wrong business models (Alton et al., 2011). Often, IT integration projects over-run, do not deliver desired outcomes or are simply abandoned altogether (Polley, 2015).

#### 4.1.1 Types of M&A Deals

There are three basic types of changes within corporate ownership; a merger, an acquisition and a demerger. To enable effective business and IT strategic alignment, it's important to first understand the terminology being used in these types of deals. Whilst no single deal is the likely to be the same, the following basic principles generally apply.

- *Merger.* A merger is when two separate legal entities join forces to become one (Gallant, 2015). Ownership, assets and liabilities are shared
- *Acquisition.* An acquisition is when one organisation 'takes over' another. Cash or shares are exchanged with the acquiring company setting the integration strategy. It can sometimes be a 'hostile takeover' (Yang & Dolles, 2011)
- *Demerger.* A demerger is when an organisation sells off part of its business. This might be for cost reasons or when a business unit ceases to be of strategic importance. Sometimes referred to as a spinoff or carve out (Investopedia, 2014a).

Just as it is important to understand these basic M&A strategies, it is important for IT leaders to understand why businesses chose to engage in this type of deal activity. In fact, it is vital to understand these key economic drivers as teams align and become part of the venture.

#### 4.1.2 M&A Lifecycle

No two M&A deals are the same; however it is critically important for IT leaders to understand the basic steps that turn boardroom discussions into operational and equitable reality. Industry experts generally split the proceedings into three main phases to categorise key deliverables, transition timelines and major milestones.

Phase one is sometimes referred to as a *prelude* (McGrath, 2011) and involves analysing the deal ahead of signing a letter of intent (LOI). Phase two (Day Zero) marks the deal being signed and ensures the venture is approached in a risk adverse manner, completing due diligence to make sure the company is worth what it is thought to be worth. During this period the organisations obtain regulatory and shareholder approvals, whilst engaging in integration or separation planning. Phase three begins with possibly the most important milestone,

Day One; the day the two companies or organisations become one, which is usually the day the transaction is closed (Fernandes et al., 2010). Both McGrath goes and organizations go onto list the final major milestone, Day Two, which is effectively when both companies go live on their newly aligned platforms and operate as business as usual (BAU).

#### 4.1.3 The Role of IT

The importance of the information technology department during M&A integration sits alongside that of Finance and HR teams, in order of magnitude. The reason is that M&A is usually directly linked to anticipated synergies, including, but not limited to, shared overhead, economies of scale, cross-fertilisation, greater market access and operational integration (Roehl-Anderson, 2013). Adding further weight to the claim, IT issues can sink a perfectly good acquisition, cause post-deal crises, lead to acquisition aftershocks, and result in missed opportunities to innovate (Hughes et al., 2013). Given this huge responsibility and overwhelming level of expectation Ernst & Young (2011) was surprised to find out that only 38% of corporates and 22% of public enterprises placed a significant focus on IT as part of their approach to transactions. It is therefore no surprise that company executives are often left scratching their heads wondering why their projected deal value or expected synergies never came to fruition.

#### 4.1.4 Common Pitfalls

There are a number of alarming statistics relating to M&A failures, such as a research study that suggests somewhere between 50% and 70% of M&A deals fail entirely (HBR, 2011) or that 83% do not achieve their goals (Weber et al., 2013) or that in the first year following a merger, a company's market value can fall by as much as 10% (Mayes, 2013).

As well as fiscal damage to the business, CIOs risk significant reputational impact through leading M&A integration to failure. It is therefore of vital importance that IT leaders understand the common pitfalls and leverage a best practice framework to quickly identify and address the warning signs. Few reports highlight the key drivers of deal failure better than the 2011 Aon Hewitt study entitled Cultural Integration in M&A (Hewitt, 2011), a summary of which is shown in figure 5. It is not surprising to see that underestimated timeframes and cultural integration issues top the poll; both are therefore key aspects and focal areas of this study.

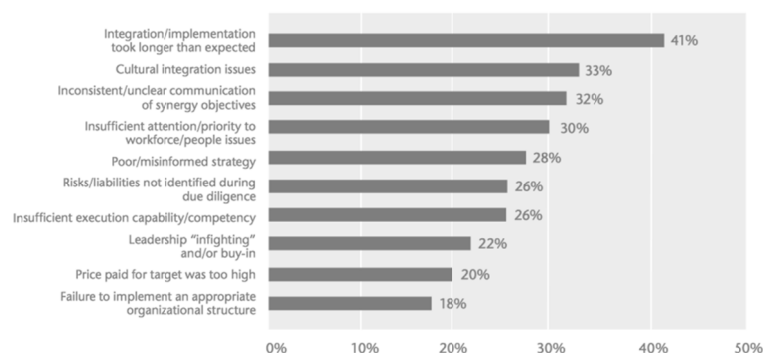


Figure 5. Top 10 Drivers of Deal Failure (% of Respondents)

Source: Cultural integration in M&A. Copyright Hewitt (2011)

#### 4.1.5 Strategic Options

The integration or separation approach can vary depending on the type of M&A deal and the strategic objectives of the business. CIOs need to answer questions such as; Do they fully integrate operations or leave them separate? Will one of the two IT systems be robust enough to be the target solution, or do they need to build an entirely new platform?

#### 4.1.6 Planning the Strategy

During the pre-deal planning stages it is important for CIOs to assess strategic options and build a plan (PWC, 2009; Fernandes et al., 2010). It is only a matter of time before the CPO or Head of Finance will begin to require some form of access, visibility or alignment with the acquired company's HR or financial application. If left unchecked the IT department risks stalling progress of the merger, being seen as a blocker or (in the worst case scenario) having staff creating 'shadow IT' organisations of their own in desperation to begin sharing data. According to Janice Roehl-Anderson (2013) CIOs must focus on two key phases in the blue print planning phase.

First, on Day One, what is absolutely essential in terms of getting the two businesses running? Second, the end-state, what ‘integrated IT’ will look like in 12-18 months’ time. The latter must include infrastructure and organisation.

#### 4.2 People

Mergers and acquisitions are complex beasts. Aside from the commercial and technical challenges, executives have the undeniably tough job of bringing together large groups of people with their own personalities, ambitions, behavioural traits and ways of working. The complexity ramps up when multiple offices, cross-border IT infrastructure and financial regulation are included (McMorris, 2015). Many M&A IT-specific studies focus on business IT strategic alignment or programme delivery and many overlook the people aspect. There are even suggestions that M&A research has ignored people and leadership issues (Sitkin & Pablo, 2004). Two academics who certainly have not ignored the people and leadership aspects include Dr. Michael McGrath and Dr. Keith Dunbar, who have achieved their doctorates in M&A risk and people management.

As covered in the next chapter, strong leadership, company culture, organisational management and communications are required to support the people journey, which can make or break an M&A IT integration programme. CIOs are implored to approach these requirements with just as much respect as the financial and technical elements.

##### 4.2.1 Leadership

In a worldwide survey of 190 senior stakeholders conducted by Watson Wyatt 73% of respondents cited leadership as the key reason for M&A success (Galpin & Herndon, 2000). Leadership is the essence of organisational viability, success, innovation, and vibrancy.

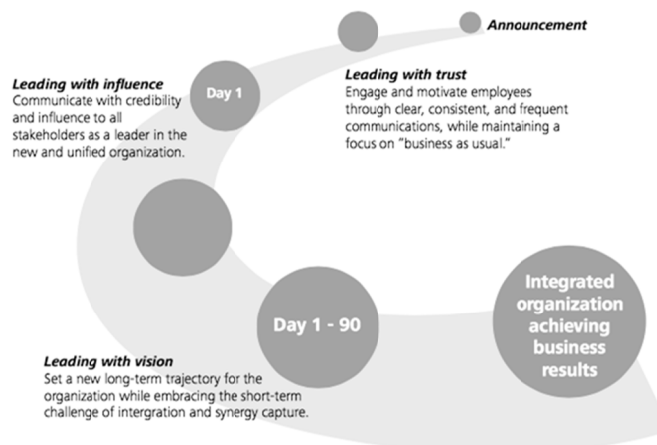


Figure 6. Preparing your Leadership Team to Navigate the Transition

*Note:* Re-printed from: Leading through transition, Copyright Fernandes et al. (2010).

As M&A deals are essentially people-driven activities it is highly likely that the effectiveness of the leadership team will have a bearing on the deal outcome. With significant deal value and associated risk, the stakes are high, and businesses are beginning to realise the importance of strong leadership to navigate the challenging terrain. According to Chandra & Satyam (2009) good leaders understand an acquisition’s business goals as well as the steps necessary to achieve them. This includes trust, influence and vision (see Figure 6). Good CIOs are not afraid to commit to project milestones and budgets to realise synergies; a move involving some career risk, given the churn rate for IT executives.

Dr. Keith Dunbar showcased his research in a Harvard Business Review whitepaper entitled ‘The leaders who make M&A work’ (Dunbar, 2014b) deriving some important conclusions. Dunbar established that whilst senior executives had a greater effect on acquirer M&A success, middle managers had a greater effect on target M&A success. He recognised that where acquisitions are made in certain industry sectors to gain access to innovative products and capabilities; innovation management was a predictor of M&A success for target companies. Dunbar also concluded that successful acquirers have leadership skills such as: leads change; shows adaptability; fosters teamwork; and builds relationships. All are critical for a successful M&A integration.



*The Neglected Importance of Leadership in Mergers and Acquisitions* by Dr. Sim Sitkin and Dr. Amy Pablo (Sitkin & Pablo, 2004) suggests that leadership in M&A deals is often ignored or even denied, possibly due to the lack of a credible framework or best practice to support the discipline. Sitkin & Pablo's research concurs with Dunbar's suggesting leadership implications are huge in terms of M&A success or failure, specifically the collective leadership capability of both the acquirer and target companies (see appendix Fig A3). They do, however, elaborate on the fact that little attention has been paid to theorising about or studying leadership. This position has changed somewhat since the paper was written in 2004 following the works of Dunbar, McGrath, Roehl-Anderson and AON Hewitt (Dunbar, 2014b; McGrath, 2011; Roehl-Anderson, 2013; Hewitt, 2011).

#### 4.2.2 Company Culture

According to many sources, an analysis of the cultural differences between the two integrating companies should be conducted during the due diligence phase (Hewitt, 2011; Capgemini, 2015; Sitkin & Pablo, 2004). Often this is not the case. In one of the most noteworthy research reports in this space, *Culture Integration in M&A* by AON Hewitt (2011) they suggested (from a study of 123 global organisations) that 58% of respondents did not have a specific approach to assessing and integrating culture in a deal. They go on to suggest that the consequences of poor cultural integration are direct drivers of deal failure.

Despite the worrying connection between culture and M&A success and potential consequences, many companies fail to track metrics relating to people or cultural integration factors. Similarly to the leadership aspect outlined by Sitkin & Pablo, cultural alignment appears to be an area that is either ignored or denied; none (0%) of the businesses responding to Hewitt's survey reported that their cultural integration practices were effective (Hewitt, 2011).

#### 4.2.3 People Management

McMorris (2015) suggests that employee engagement is critical during post-merger integration, "If staff are fully immersed in the changes they will have the knowledge to lead the united company in the new direction" and having advocates for the new organisation internally is likely to be highly advantageous to any leader wishing to cover the cultural integration challenges listed previously. A webinar hosted by US M&A specialists FirmEx (Sherman, 2013) outlines some of the key post-closing M&A employee issues, which include expectation management (what's expected of me?), rewards management (what's in it for me?) and job security (what's going to happen to me?) CIOs are wrong if they think even the most senior members of their teams are not thinking these thoughts, and it is their responsibility to fill these voids with clear and consistent information at all levels, even if some of the data shared is bad news.

#### 4.2.4 Dealing with Staff Reduction

Often two into one simply doesn't go. Just as the best employees need to be secured as part of the new organisation, staff reductions also need to be considered and managed professionally. The HR considerations are too vast to list here, but the process must be seen to be fair and reasonable (McGrath, 2011) and act fast to address employee concerns (Roehl-Anderson, 2013). CIOs might offer monetary bonuses to keep remaining employees happy and prevent a mass exodus that would impair the new organisation's ability to operate (Chandra & Satyam, 2009).

#### 4.2.5 Communications

"You cannot over-communicate when it comes to an M&A integration project" is a view expressed by Polley (2015), and one that is contested slightly by McGrath (2011) who advises CIOs to err on the side of caution and not swamp users with volumes of trivia and minutiae – 'clarity is the order of the day' and something he considers the most important section in his book. Poor communication is however likely to have an adverse impact on confidence levels expressed by the executive committee and confidence in the IT teams ability. This only serves to add pressure and increase chances of failure. Polley explains that keeping staff and users updated with progress and plans is critical during a potentially disruptive period for the business; if users are in the loop, they are much more likely to be understanding and co-operate.

Communication is not the most complex of post-merger integration deliverables, but very often it misses its target. Once the deal is closed the CIO should take the opportunity to communicate the deal objectives and company strategy; it is time to communicate and lead the change (Capgemini, 2015). According to McMorris (2015), leading this process successfully comes from carefully aligning employee engagement programmes with a multi-layered strategy built around communications. Intranet pages and collaboration portals can be used to share success stories and create a positive feedback loop (Hughes et al., 2013). Failure to communicate when a change occurs, or is about to occur, can result in anger or resistance (Schied, 2011).

According to AON Hewitt, high-performing M&A integrators rank communication and change management as their top two highest priorities, ahead of retention of leadership and key talent. This view is shared with Shernam (2013) who considers communication as 'hypercritical' and recommends that CIOs treat mergers as the beginning of a marriage; considering what is required to build a successful relationship.

#### 4.3 Control

##### 4.3.1 Establishing an M&A Change Programme

M&A change programmes must be set up for success. This means adopting the right approach from the start and managing a properly structured process through to the realisation of the envisaged benefits (Mayes, 2013). As discussed previously, senior management commitment is paramount as nobody can champion a great business alone; this is particularly evident during a merger or acquisition. It is therefore wise to establish an advisory board that includes major stakeholders, heads of department, internal staff and an outside specialist to guide the process (McMorris, 2015). Roehl-Anderson (2013) notes the importance of selecting the right members of the C-suite to engage in execution of the transaction, suggesting key executives who have been involved in due diligence and who will remain in place after the integration has completed.

##### 4.3.2 Effective Programme Management

*The importance of programme governance.* Once a coherent business IT strategy is defined CIOs must define how people and processes come together within a governance structure to deliver critical components on time and within budget. Failure to do so can be draining from a personnel and financial perspective and can quickly spiral out of control if the businesses have not outlined what they wish to achieve (McMorris, 2015). Many of the most noteworthy publications on M&A IT integration concur that programme governance is imperative to the objective and results of any merger or acquisition (Roehl-Anderson, 2013; McGrath, 2011; Deloitte, 2013). During these failure-intensive programmes of work, it is clear that project management controls are a mandatory component, helping prevent or reduce failures to an acceptable degree. CIOs need to take a firm lead in managing time, quality and costs constraints that pull on a project in various ways.

*Roles and responsibilities.* Clarity around who is accountable for specific tasks is key to any successful project, even more so when complexity is heightened or there is uncertainty about the future organisational structure. In a report entitled IT integration for M&A (2012), leading storage vendor EMC outlines two key work streams under the executive steering committee: an operations committee and an integration management unit (IMU). The former is responsible for resolution of issues and providing direction. The latter is responsible for coordination of activities and cross-functional problem solving and typically takes on responsibilities such as planning, monitoring progress, communications and on-going analysis and optimisation. Underpinning this fairly typical arrangement are functional integration teams from customer legal and HR etc.

*Keeping track.* M&A IT integration programmes can be long and challenging beasts. Due to the amount of upfront planning, design, build and testing activities, it can easily feel like little ground is being covered. Technologists with creative minds also need to feel like they are on a journey and get satisfaction from sense of achievement (Glen, 2003); this can be enabled by a clear and logical change agenda. Weekly project review meetings are imperative as it is almost inevitable that plans will stray if they are not being closely managed (Hughes et al., 2013).

*Live by lessons learned.* Each M&A integration programme is unique, but many share common themes and there is much to be learnt from previous experiences, both positive and negative. Examples of lessons learned include implementation of the incorrect strategy, unforeseen Day-100+ issues and the implications of poor cross-functional engagement.

##### 4.3.3 Regulatory Considerations

The compliance department within a brokerage firm, bank or financial institution has an obligation to ensure it complies with all applicable laws, rules and regulations (Investopedia, 2016; Protiviti, 2012). Financial services companies face rigorous scrutiny under legislations such as the Gramm-Leach-Bliley Act (GLBA), Fair Credit Reporting Act (FCRA), Payment Card Industry Data Security Standard (PCI-DSS), EU General Data Protection Regulation (GDPR) and Sarbanes-Oxley Act (SOX) or 'J-SOX' as it has been unofficially coined for Japanese businesses.

Using Sarbanes Oxley as a case in point, there are two types of IT controls: IT general controls and applications controls. IT general controls are key controls embedded in standard IT processes, which provide a reliable operating environment. IT general controls fall into the categories described in Figure 7 below and are subject to stringent annual audit and reporting requirements.

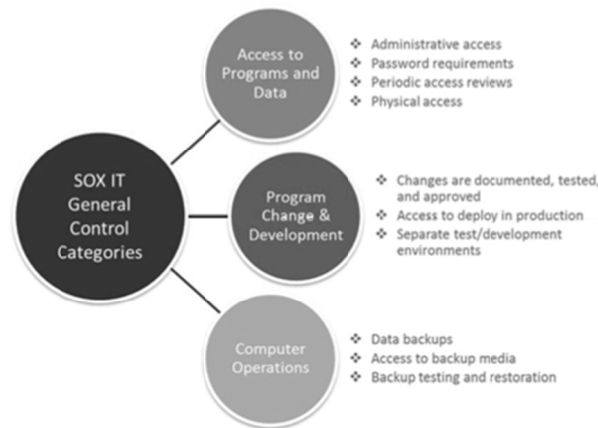


Figure 7. Sarbanes Oxley general control categories

Source: Proprietary to the author. Copyright Declan Burke (2016).

The requirement for compliance, quality and control becomes an even more important consideration when using outsourced IT services (as many organisations do during M&A integration) as senior executives are held accountable for non-compliance, with criminal penalties, fines or imprisonment for those who fail to comply (Sarbanes-Oxley-101.com, 2014).

The painful reality of regulatory non-compliance was recently experienced by Raphael's Bank, which was fined £1,278,165 by the Prudential Regulation Authority (PRA) for potentially putting its safety and soundness at risk by failing to properly manage its outsourcing arrangements. Andrew Bailey, Deputy Governor for Prudential Regulation and CEO of the PRA said: "You can delegate or outsource work but you cannot delegate or outsource responsibility" (Bank of England, 2015). This is a highly pertinent statement, which sets the tone for management of internal and external service operations in the often challenging financial sector.

#### 4.3.4 Information Security

Security issues are higher in financial services than in other sectors (Ernst&Young, 2011). A Freshfields survey (2014) of 214 global dealmakers found that 78% of respondents believe cyber security is not analysed in great depth or specifically quantified as part of the M&A process. The advice offered by Roehl-Anderson (2013) is to plan early for security and access requirements between the two organisations; planning that will need to include an assessment on the acquired companies compliance with policies and security practices.

The ISO27002 standard defines vulnerability as "a weakness of an asset or group of assets that can be exploited by one or more threats" (ISO, 2005) and 99% of intrusions result from exploitation of known vulnerabilities or configuration errors where countermeasures were available (CERT, 2001). Vulnerability management is the cyclical process of identifying, evaluating, and remediating vulnerabilities in the IT environment. Once planning begins to join primary networks an information security assessment must be conducted.

#### 4.3.5 Financial Management

A number of literature resources warn about paying too much during a deal (Roehl-Anderson, 2013; McGrath, 2011; Hughes et al., 2013), and for good reason. As an executive board member with a share and interest in business prosperity, the CIO will want to know they are paying the right price; and the right price can be determined only by the buyer, since it depends on what purpose the acquisition will serve (HBR, 2011). Other mandatory outcomes in this space include financial system harmonisation and transparency (Gartner, 2015) and synergy capture (PWC, 2009). The above suggests that financial alignment and support, including consolidation of systems, processes and reporting play a significant part in M&A integration and should appear high up in the CIOs top-10 list of priorities.

#### 4.3.6 Risk Management

Described as change management in the 'Major League' by Michael McGrath (2011). IT integration in M&A is failure-intensive and must include a firm understanding of the various risks, ways to prevent failures, or ways to reduce risks to an acceptable level. With significant overarching M&A failure rates of 60%-90% (Kovela & Skok, 2012; Hewitt, 2011; D. J. K. Dunbar, 2015) it is understandable why CIOs place such emphasis on risk

management.

All effective M&A integration programmes start with a strategy and foundation based on risks. Typical risk based frameworks include ISO27002 (ISO 2005) and The Risk IT Framework (ISACA, 2012), which builds on COBIT's existing risk-related components. Risk assessments are performed to support a variety of business objectives including identifying new or changed levels of risk, clarifying ownership over risk and risk mitigation activities, uncovering areas with inadequate controls, and quantifying and communicating risk levels to IT and business partners (CEB, 2014). Risk management must be performed in parallel with robust change management disciplines, similar to those outlined by ITIL (Axelos, 2015a).

#### 4.4 Delivery

##### 4.4.1 Due Diligence

At its most basic, due diligence is the methodical and measured evaluation of every aspect of a business' corporate life (MerrillCorp, 2016; Ernst & Young, 2011); a process that involves exchanging and reviewing sensitive information, including legal and commercial documentation, personnel files and company accounts. From an IT perspective this could mean infrastructure design documents, historical service reporting or details of the application portfolio.

Too often, however, key information and the opportunity to learn from it is missed. A McKinsey study on post-merger management found that 50% to 60% of the initiatives intended to capture synergies were strongly related to IT, but critical IT issues are not fully addressed or understood during the due diligence phase (Chandra & Satyam, 2009).

##### 4.4.2 Critical Pre-Deal Steps

The most successful M&A IT integrations have one thing in common; detailed planning. To deliver a programme of work, at pace, it is imperative that CIOs and senior IT leaders prepare as best they can, with a strong focus on the following eight areas.

- 1) *Know your systems.* IT leaders must have an explicit knowledge of system architecture and what the most important systems are. With this information a detailed map of both companies infrastructure can be produced to begin planning the integration and making pragmatic decisions. The process must be transparent, realistic and involve all areas of management (McMorris, 2015)
- 2) *Rationalise and prioritise.* In a classic CIO.com report, Stephen N. David (Procter & Gamble and CIO-100 honouree) was quoted as saying that "75% of IT integration effort is determining which systems to keep, what data is important and how much integration is actually needed" (Worthen, 2002). This links critically to planning and communication of the integration strategy
- 3) *Communicate the synergy case.* As well as understanding the strategic rationale for the deal, IT teams needs to understand the desired synergies and the expected level of IT enablement. At this stage the technical detail is not important, however it is imperative to understand the approach for driving out synergies
- 4) *Decide on a dominant side.* It is not uncommon for executives from acquiring / acquired companies to form a new C-suite to help bridge the cultural gap. It is crucial however that one of the two entities emerge as the driving force behind the integration with a single person ultimately accountable (Worthen, 2002)
- 5) *Prepare a migration strategy.* Legacy systems can add significant complexity and cost to an integration programme. IT leaders must quickly understand the constraints, risks, compliance factors and skills required in migrating data to a new platform
- 6) *Transitional Service Agreement (TSA).* Continuity of business is critically important during the integration. It is therefore imperative that the level of support needed post-deal is understood, negotiated and agreed via a formal TSA.

From this it can be seen that knowledge, direction, communication and leadership appear to underpin successful IT integration programmes. Less obvious considerations, such as longer term planning and commercial formalisation, should also receive comparative focus at this time. This is where a programme is effectively set up for success or failure.

##### 4.4.3 Integration Planning

According to Chandra & Satyam (2009), overachieving organisations demonstrate three critical success factors (CSF) in achieving fast-paced IT integration. First, they address any issues within their own IT infrastructure before initiating any deals. Second, they adopt service-orientated architecture (SOA) to enable simplified and

standardised integration of a wide range of business applications. Third, these organisations have also reduced the number of systems (e.g., one core trading platform system rather than multiple instances) and utilised a migration framework to manage new data gained through the acquisition. In what is referred to as ‘accelerated planning’ (figure 8) Fernandes et al. (2010) recommend comprehensive operational analysis during the due diligence phase to enable the deal architects to anticipate, identify, and mitigate people, process, and technology risks. It is vital that all the executives understand the impact that IT architecture will have on the M&A and it is up to the CIO to ensure that that information is part of the business discussions and planning up front (Worthen, 2002).

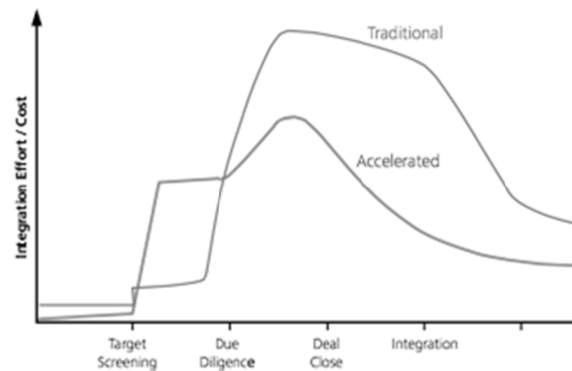


Figure 8. Traditional vs. Accelerated Integration Approach

Note: Re-printed from: Leading through transition, Copyright Fernandes et al. (2010)

When planning an accelerated integration approach CIOs should:

*Do it quick.* In the interest of delivery at pace it is strongly recommended that CIOs adopt an ITMA framework and use a proven-by-industry playbook approach to enable the journey. Using this approach (depending on complexity) it is possible to complete due diligence in two weeks, integrate in four weeks and decommission in four months (Hughes et al., 2013).

*Do it right.* Standalone integration offers the quickest route to market, with very little infrastructure or operational process reconfiguration. Absorption-style integrations require significant change to the acquired companies business processes and data. A merger of equals or transformational integration may involve adding additional functionality (Mayes, 2013). Choosing the right type of integration is key and it is of paramount important that CIOs adopt the right approach, in line with the time-and-benefits expectations of the c-suite.

*Keep IT going.* IT integrations can be highly disruptive on staff, in-flight projects and normal levels of (expected) service quality. It is therefore important to be able to distinguish system migration or application cutover related issues from other, unrelated IT service failures (Gartner, 2015). In doing so, CIOs should look to bolster their existing IT service management functions and enterprise monitoring platforms.

#### 4.4.4 Absorption Strategy

Forward-thinking CIOs, or those leading organisations frequenting in M&A activity, will have already looked to address the high-risk issue of fragmented back-end infrastructure. In order to keep up with best-in-class organisations that successfully integrate acquisitions in a six to twelve month timeframe (Capgemini, 2015) CIOs must think ahead and prepare their own IT infrastructures to be agile and flexible. Many credible resources explain how IT architecture goes beyond basic integration and strengthens the value created through the deal; this philosophy should become a key part of the IT value stream. Organisations frequenting in M&A activity are now simplifying and aligning their own infrastructures by employing an ‘absorption strategy’, using standardised toolsets, process and data management practices.

Hughes et al. (2013) refers to this type of infrastructure configuration as ‘connectors that provide a plug-and-play approach to help manage the overall M&A’. It is believed this approach shortens the integration lifecycle, hastens the capture of synergies and is imperative for M&A success (Capgemini, 2015). As the team expands and gains M&A expertise, it should move up the scale in effectiveness and ability to handle more complex transactions. The use of standardisation principles also removes uncertainty and ambiguity from the integration process. The conclusive recommendation is that companies frequenting in M&A should make special

investments upfront to build an IT platform agile and robust enough to support future M&A operations.

#### 4.4.5 Synergy Capture

Referred to as the concept that the value and performance of two companies combined will be greater than the sum of the separate individual parts (Investopedia, 2015; Deloitte, 2013), synergy gains stemming from operational improvements are often the reason to justify a merger. Based on the \$4 trillion worth of M&A deals completed globally in 2015, annualised publically announced cost synergies are estimated to be 2.9% in the financial service sector (£140bn). Further estimates suggest that if all of the global costs synergies were to be realised and sustained, this could add an estimated \$1.5-\$1.9 trillion to the value of these companies (Deloitte, 2016). In an example outlined by Capgemini (2015), this could be realised as a 35% reduction in application maintenance costs, 25% datacentre costs, with a further 20% desktop savings to be made. CIOs are therefore under increased pressure to think strategically and dispassionately about how they can realise the 50%+ of synergy savings enabled by IT, which include lower infrastructure costs, reduced IT headcount and increased volume discounts for IT procurement (Sarrazin & West, 2011).

### 5. Summary of Findings

Below is a selection of case study interview responses. For full list see appendix B.

#### 5.1 Strategy – The Bedrock of Successful Integration

Business/IT strategic alignment	Q2. Please score the following corporate metrics to indicate the perceived levels of success and achievement during the M&A? (100% is equal to full benefit realisation)	Achievement of revenue synergies Customer Satisfaction Achievement in cost synergies Increased innovation Speed of integration
Result (average score of all respondents):		
Speed of integration (93%)		
Customer Satisfaction (65%)		
Increased innovation (40%)		
Achievement of revenue synergies (3%)		
Achievement in cost synergies (2%)		

Respondent D. *“...we really were flat out. In terms of synergies we were more concerned with building enterprise class solutions as opposed to rationalising kit”*

Respondent F. *“It was nice to be in a position where the focus was on integration and growth, rather than consolidation and cost reduction”*

Summary. ‘Speed of integration’ received the highest average score for perceived level of success and achievement, followed by customer satisfaction and increased innovation. This reinforces the importance of ‘delivery at pace’ and its relationship with the other listed success factors. In this case, the absence of a strong focus on cost appears to have allowed the integration team to focus on timeliness of delivery without impacting the customer experience; scoring for ‘increased innovation’ further supports how this was achieved.

#### 5.2 People – The Power of Motivation

Supporting the people journey	Q12. What techniques were used to incentivise staff, boost morale and increase retention during the transition?	Promise of promotion if objectives met Financial bonus if objectives met Recognition and management feedback Team building event Other (please specific)
Result: 100% agree on bonus, recognition and team building event		

Respondent D. *“A carefully crafted bonus structure was implemented for key members of the integration team, it basically worked out as an extra months pay just in time for Christmas... it's amazing how these types of incentives focus the mind!”*

Respondent B. *“We put on Pizza Fridays and had a 'track day' for those involved in the migration, this was great fun and brought a real sense of team spirit and achievement!”*

Summary. All respondents spoke highly of the incentives used by management to increase motivation and ensure

on-going commitment to the long and demanding work schedule. Whilst none mentioned (or were prepared to mention) any promises of promotion, a bonus structure and ‘track day’ was used to boost morale and increase retention to great effect.

### 5.3 Control – Remaining Agile and Compliant

Governance and compliance	Q9. Which best practice frameworks were employed during the M&A IT integration programme, use the comments field to state how and why?	ITIL (IT service management framework) COBIT (IT governance framework) TOGAF (IT enterprise architecture framework) Prince2 (Project management framework) Agile (Project management framework) Other (please specify)
Result: 100% of respondents confirmed that ITIL and Agile best practices were used		

Respondent A. *“It was important for us to adopt an Agile methodology as we needed to deliver short and sharp benefits, it was important for the exec to see immediate progress and that we didn't become bogged down with business cases and planning etc.”*

Respondent F. *“We've matured our use of ITIL considerably over the past couple of years, so this formed the basis for release and service operations. The benefits were obvious as it offered a commonly understood platform for contractors to integrate with”.*

Summary. With the exception of ITIL, which had been matured within the ITSM space, it was clear that neither Company Y nor Z had a great depth of exposure to best practice methods. However, Agile was introduced to great effect, providing fast and effective benefits realisation; making it well suited to M&A IT integration.

### 5.4 Delivery – Getting The Job Done at Pace

Delivery at pace	Q5. What emphasis was put on 'delivery at pace' and to what extent did this affect integration quality? (Please select and comment)	Delivery at pace was of paramount importance, integration was delivered quickly with high levels of quality Delivery at pace was of paramount importance, integration was delivered quickly with certain quality compromises Delivery at pace was of paramount importance, integration lead times were delayed due to quality issues Delivery at pace was not a primary driver, integration was delivered in normal timeframes with high levels of quality
Result: 100% of respondents agreed Delivery at pace was of paramount importance, integration was delivered quickly with certain quality compromises		

Respondent F. *“There must however be a trade-off for certain aspects of quality or maturity, and a realisation that in some cases it may not be perfect”*

Respondent D. *“Delivery at pace is about doing the right things at the right time. There are a number of moving parts so the chances of getting something wrong increase. You work on the basis that you might not get everything 100%”*

Summary. 100% of the respondents agreed that ‘delivery at pace’ inevitably comes with risk and associated trade-offs in terms of quality. Respondent A clarified how risks were mitigated via use of an operational readiness tracker, which served as a checklist for business preparedness, testing, comms and documentation etc.; the basis on which go/no-go decisions was made.

## 6. Conclusion: A Framework for IT Integration in M&A

Businesses with a clear strategy for growth and a desire to ‘deliver at pace’ can achieve rapid operational efficiencies and costs synergies through M&A, if IT integration is properly planned and executed. With limited experienced resources available in the market place, CIOs continue to rely on expensive subject matter experts and specialist consultancies to help navigate the challenging terrain. ITMA offers a cost-effective solution in the form of a logical framework for IT integration in M&A, which can be used to guide the programme of work and develop teams.



Figure 9. Brand Concept and Core Capabilities

Source: Proprietary to the authors. Copyright Declan Burke (2016)

The ITMA case study further validates these points as it represents a successful transaction within a large corporate environment and is reflective of a broader number of cases. It can be seen that the four key ITMA capabilities provide well-aligned coverage of the key programme deliverables and competencies, confirming a framework that can be applied by IT leaders.

It is believed that ‘delivery at pace’ is paramount during M&A due to realisation of business benefits, preservation of business as usual (BAU) productivity and retention of key employees. The consequences of failing to deliver quickly and effectively can be damaging to shareholder value and to the CIOs personal reputation.

While every M&A IT integration will differ, CIOs are encouraged to focus on the four basic capabilities listed above, in doing so they will stand the best chance of delivering at pace and surpassing expectations in terms of business benefits and shareholder value.

## References

- Accenture (2014). Making Transitional Service Agreements Work Leading Practices for Sellers.
- AllenOvery (2015). Insights, Q4 2015. Retrieved from [http://www.allenovery.com/SiteCollectionDocuments/MA Insights Q4 2015.pdf](http://www.allenovery.com/SiteCollectionDocuments/MA%20Insights%20Q4%202015.pdf)
- Alton, R. et al. (2011). The Big Idea: The New M&A Playbook. Retrieved from <https://hbr.org/2011/03/the-big-idea-the-new-ma-playbook>.
- APMG. (2015). Agile Project Management Certification APMG-International. Retrieved from <http://www.apmg-international.com/en/qualifications/agile-pm/agile-pm.aspx> [Accessed February 20, 2016].
- Appelbaum, S. H., Roberts, J., & Shapiro, B. T. (2009). Cultural Strategies in M&As: Investigating Ten Case Studies. *Journal of Executive Education*, 8(1). Retrieved from <http://digitalcommons.kennesaw.edu/jee>
- Axelos. (2015a). ITIL® - IT Service Management. Retrieved from <https://www.axelos.com/best-practice-solutions/itil>
- Axelos. (2015b). What is PRINCE2? PRINCE2AXELOS. Retrieved from <https://www.axelos.com/best-practice-solutions/prince2/what-is-prince2>
- Bank of England. (2015). News Release - PRA fines Raphaels Bank £1,278,165 for outsourcing failures Bank of England. Retrieved from <http://www.bankofengland.co.uk/publications/Pages/news/2015/093.aspx>
- Bartek, P. (2015). 5 types of a successful startup M&A; A Bartek Pucek Pulse LinkedIn. Retrieved from <https://www.linkedin.com/pulse/5-types-successful-startup-ma-bartek-pucek?forceNoSplash=true>
- Bauer, H., Patel, M., & Veira, J. (2014). The Internet of Things: Sizing up the opportunity. Retrieved from <http://www.mckinsey.com/industries/high-tech/our-insights/the-internet-of-things-sizing-up-the-opportunity>
- BBC. (2014). RBS fined £56m over “unacceptable” computer failure - BBC News. Retrieved from <http://www.bbc.co.uk/news/business-30125728>
- British Council for Offices. (2014). Wellbeing at Work Study. Retrieved from <http://www.morganlovell.co.uk/uploads/whitepapers/morgan-lovell-making-the-business-case-for-wellbeing.pdf>
- Budiman, A., Lin, D. Y., & Singham, S. (2009). Improving performance at state-owned enterprises McKinsey & Company. Retrieved from



- <http://www.mckinsey.com/industries/public-sector/our-insights/improving-performance-at-state-owned-enterprises>
- Byrman, A., & Bell, E. (2007). *Business research methods*. Oxford: Oxford University Press.
- Capgemini. (2015a). IT in M&A: The way we see it.
- Capgemini. (2015b). Mergers & Acquisitions in Banking: How to Steer Through the Turbulence.
- Cartledge, A. et al. (2011). ITSMF: An Introductory Overview of ITIL 2011.
- CCG. (2016). Bank Merger and Acquisition: Current Trends.
- CEB, 2014. Rethink Your Risk Assessment Lifecycle. Retrieved from <http://www.executiveboard.com>
- Chandra, S., & Satyam, M. (2009). Role of Enterprise Architecture in Mergers & Acquisitions. Retrieved from [http://www.opengroup.org/india2011/presentations/Role of Enterprise Architecture in M&A--v1.1.pdf](http://www.opengroup.org/india2011/presentations/Role%20of%20Enterprise%20Architecture%20in%20M&A--v1.1.pdf).
- Consultants Mind. (2015). The Pyramid Principle in Consulting | Consultant's Mind. Retrieved from <http://www.consultantsmind.com/2012/06/21/pyramid-principle>
- Deloitte (2015). 2015 Banking M&A Outlook Poised for a rebound.
- Deloitte. (2013). Mergers and Acquisitions Operational Synergies Perspectives on the Winning Approach.
- Deloitte. (2014). Top 10 Issues for Banking M & A in 2014 Searching for growth and scale Contents.
- Deloitte. (2016). The Deloitte M & A Index 2016: Opportunities amidst divergence Contacts. Retrieved from <http://www2.deloitte.com/content/dam/Deloitte/uk/Documents/corporate-finance/deloitte-uk-m-and-a-index-q4-2015.pdf>
- Dunbar, D. J. K. (2014a). Impact of Leadership on Mergers & Acquisitions by Dr. J. Keith Dunbar — Kickstarter. Retrieved from <https://www.kickstarter.com/projects/1627028676/impact-of-leadership-on-mergers-and-acquisitions>
- Dunbar, D.J.K., 2014b. The Leaders Who Make M&A Work. Retrieved from <https://hbr.org/2014/09/the-leaders-who-make-ma-work>
- Dunbar, D.J.K., 2015. M&A Blog. Retrieved from <http://www.businessrevieweurope.eu/finance/390/Why-do-up-to-90-of-Mergers-and-Acquisitions-Fail>
- Dunbar, K., 2015. Why do up to 90% of Mergers and Acquisitions Fail? Finance Business Review Europe. Retrieved from <http://www.businessrevieweurope.eu/finance/390/Why-do-up-to-90-of-Mergers-and-Acquisitions-Fail>
- Economist Intelligence Unit (2004). Strategy execution: Achieving operational excellence. New directions for youth development, (137), 1–13. Retrieved from [http://www.eiu.com/site\\_info.asp?info\\_name=eiu\\_Celerant\\_Achieving\\_Operational\\_Efficiency](http://www.eiu.com/site_info.asp?info_name=eiu_Celerant_Achieving_Operational_Efficiency)
- EMC. (2012). IT Integration For Mergers And Acquisitions.
- English and Hammond. (2015). Cost of Compliance Survey. Retrieved from <https://risk.thomsonreuters.com/special-report/cost-compliance-2015>
- Ernst & Young. (2011). IT as a driver of M & A success. Ernst & Young, p.22. Retrieved from <http://www.ey.com/GL/en/Services/Transactions/IT-as-a-driver-of-M-A-success---IT-is-an-enabler--not-a-cost-center>.
- Ernst & Young. (2014). EY Global financial services M&A themes 2015 - EY - Global. Retrieved from <http://www.ey.com/GL/en/Services/Transactions/EY-global-financial-services-m-a-themes-2015>
- Fernandes, E., Fiore, J., & Lipkin, G. (2010). Leading through transition; Perspectives on the people side of M&A.
- Franklin, M. (2014). Aligning PRINCE2 with Agile PM. Retrieved from <http://www.apmg-international.com/nmsruntime/saveasdialog.aspx?IID=8099&sID=7848>
- Freshfields. (2014). Cybersecurity in M&A. Retrieved from [http://www.freshfields.com/uploadedFiles/SiteWide/News\\_Room/Insight/Campaigns/Cyber\\_security\\_in\\_MandA/01214\\_BS\\_MBD\\_Media\\_MA\\_Cyber\\_Security\\_Report\\_WEB\\_AW.PDF](http://www.freshfields.com/uploadedFiles/SiteWide/News_Room/Insight/Campaigns/Cyber_security_in_MandA/01214_BS_MBD_Media_MA_Cyber_Security_Report_WEB_AW.PDF)
- Gallant, C. (2015). What is the difference between a merger and a takeover? Investopedia. Retrieved from <http://www.investopedia.com/ask/answers/05/mergervstakeover.asp>

- Galpin, T. J., & Herndon, M. (2000). *The Complete Guide to Mergers & Acquisitions: Process Tools and Templates for Merger Integration at Every Level*. San Francisco: Jossey-Bass.
- Gartner (2002). Mizuho Teaches Critical Lessons in System Integration. Retrieved from <https://www.gartner.com/doc/354719/mizuho-teaches-critical-lessons-integration>
- Gartner (2015). IT Primer on Mergers and Acquisitions.
- Gartner. (2011). Introduction to Virtual Data Rooms. Retrieved from <https://www.gartner.com/doc/1595422/introduction-virtual-data-rooms>
- Glen, P. (2003). *Leading Geeks: How to Manage and Lead the People Who Deliver Technology*, John Wiley & Sons. Retrieved from [https://books.google.com/books?id=MGF\\_0ewWMDAC&pgis=1](https://books.google.com/books?id=MGF_0ewWMDAC&pgis=1)
- Goedhart, M., Koller, T., & Wessels, D. (2010). The five types of successful acquisitions. Retrieved from <http://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/the-five-types-of-successful-acquisitions>
- Guardian (2014). RBS fined £56m for IT breakdown Business the Guardian. Retrieved from <https://www.theguardian.com/business/2014/nov/20/royal-bank-of-scotland-it-breakdown-56m-pounds-fine>
- HBR. (2011). The Big Idea: The New M&A Playbook. Retrieved from <https://hbr.org/2011/03/the-big-idea-the-new-ma-playbook>
- Headwaters. (2015). FinTech M & A update Innovation and Changing Consumer Behaviors Driving. Retrieved from [https://www.headwatersmb.com/rsrc/research/FinTech M&A Update.pdf](https://www.headwatersmb.com/rsrc/research/FinTech%20M&A%20Update.pdf)
- Hemmatfar, M. (2010). Competitive Advantages and Strategic Information Systems. *International Journal of Business and Management*, 5(7), 158-170.
- Hewitt, A. (2011). Culture Integration in M&A Survey Findings. Retrieved from [http://www.aon.com/attachments/thought-leadership/M\\_A\\_Survey.pdf](http://www.aon.com/attachments/thought-leadership/M_A_Survey.pdf)
- Honigman, B. (2014). 33 Entrepreneurs Share Their Biggest Lessons Learned from Failure Huffington Post. Retrieved from [http://www.huffingtonpost.com/brian-honigman/35-tech-entrepreneurs-failure\\_b\\_5529254.html](http://www.huffingtonpost.com/brian-honigman/35-tech-entrepreneurs-failure_b_5529254.html)
- Hughes, C., Mirza, F., & Ghosh, S. (2013). Winning with an IT M&A Playbook. AT Kearney Ideas and Insights, pp.1-9. Retrieved from <https://www.atkearney.com/documents/10192/1255198/Winning+with+an+IT+MandA+Playbook.pdf/001b9e76-73fe-425e-8365-98a860c90f48>
- Hunt, C. (2015). Mergers and Acquisitions. Retrieved from <http://www.huntlawgrp.com/sec-law/mergers-and-acquisitions>
- IMF. (2014). Global Financial Stability Report, International Monetary Fund.
- Independent. (2009). Was ABN the worst takeover deal ever? | The Independent. Retrieved from <http://www.independent.co.uk/news/business/analysis-and-features/was-abn-the-worst-takeover-deal-ever-1451520.html>
- Investopedia (2014b). The Top Reasons Why M&A Deals Fail Investopedia. Retrieved from <http://www.investopedia.com/articles/investing/111014/top-reasons-why-ma-deals-fail.asp>
- Investopedia (2015). What is "Synergy". Retrieved from <http://www.investopedia.com/terms/s/synergy.asp>
- Investopedia (2016). Investopedia-Compliance Department. Retrieved from <http://www.investopedia.com/terms/c/compliancedepartment.asp>
- Investopedia. (2014a). Mergers and Acquisitions: Break Ups Investopedia. Retrieved from <http://www.investopedia.com/university/mergers/mergers4.asp>
- ISACA. (2012). The Risk IT Framework. Retrieved from <http://www.isaca.org/Knowledge-Center/Research/ResearchDeliverables/Pages/The-Risk-IT-Framework.aspx>
- ISO, 2005. ISO/IEC 27002:2005(en). Available at: <https://www.iso.org/obp/ui/#iso:std:iso-iec:27002:ed-1:v1:en>.
- Jowitt, T. (2016). Cisco Buys IoT Specialist Jasper For £960m TechWeekEurope UK. Retrieved from <http://www.techweekeurope.co.uk/e-enterprise/merger-acquisition/cisco-iot-jasper-185351>
- Keizer, G., 2015. Microsoft writes off \$7.6B, admits failure of Nokia acquisition Computerworld. Retrieved

- from  
<http://www.computerworld.com/article/2945371/smartphones/microsoft-writes-off-76b-admits-failure-of-no-kia-acquisition.html>
- Kovela, S. & Skok, W., 2012. Mergers and acquisitions in banking: understanding the IT integration perspective. <http://dx.doi.org/10.5539/ijbm.v7n118p69>
- Kovela, S., & Skok, W. (2015). Mergers and Acquisitions in Banking: A Framework for Effective IT Integration. *International Journal of Business and Management*, 10(3), 279-294. Retrieved from <http://www.ccsenet.org/journal/index.php/ijbm/article/view/43823>
- Mayes, C. (2013). How to get IT right in mergers and acquisitions. Retrieved from <http://www.computerweekly.com/opinion/How-to-get-IT-right-in-mergers-and-acquisitions>.
- McGrath, M. (2008). *The Banking M&A Integration Handbook*.
- McGrath, M. (2011). *Practical M&A Execution and Integration*, Wiley.
- McLeod, S. (2007). Maslow's Hierarchy of Needs Simply Psychology. Retrieved from <http://www.simplypsychology.org/maslow.html>
- McMorris, E. (2015). Why do up to 90% of Mergers and Acquisitions Fail? Retrieved from <http://www.businessrevieweurope.eu/finance/390/Why-do-up-to-90-of-Mergers-and-Acquisitions-Fail>
- MerrillCorp (2016). Executing Effective M & A Critical Steps from Day. Retrieved from <https://www.merrillcorp.com>
- Minto, B. (2016). The Minto Pyramid Principle: A powerful and compelling process for producing everyday business documents. Retrieved from <http://www.barbaraminto.com/>
- Nakao, M. (2003). Failure Knowledge Database / 100 Selected Cases Mizuho Financial Group Banking System Failure April 1 through early May in 2002 at Mizuho Bank. Retrieved from <http://www.sozogaku.com/fkd/en/hfen/HA1000623.pdf>
- NCC. (2005). A Best Practice guide for decision makers in IT. Retrieved from <https://www.isaca.org/Certification/CGEIT-Certified-in-the-Governance-of-Enterprise-IT/Prepare-for-the-Exam/Study-Materials/Documents/Developing-a-Successful-Governance-Strategy.pdf>
- NY Times. (1998). BANK GIANT: THE OVERVIEW; Deutsche Gets Bankers Trust for \$10 Billion - The New York Times. Retrieved from <http://www.nytimes.com/1998/12/01/business/bank-giant-the-overview-deutsche-gets-bankers-trust-for-10-billion.html>
- Polley, A. (2015). The latest news from plan-net.
- Protiviti. (2012). Guide to the Sarbanes-Oxley Act: Second Edition. Retrieved from <http://www.protiviti.co.uk/en-US/Documents/Resource-Guides/Guide-to-SOX-IT-Risks-Controls-Protiviti.pdf>
- PWC. (2009). The Issues Our Clients Face, The Actions We Help Them Take Phase II Phase III Execute 100 Day Plan Create Detailed Integration Plan Plan for Day One Set The Course.
- Rasmusson, J. (2015). AGILE Scrum. Retrieved from <http://www.agilenutshell.com/scrum>
- Reuters. (2013). RBS admits decades of IT neglect after systems crash Reuters. Retrieved from <http://uk.reuters.com/article/uk-rbs-technology-idUKBRE9B10YB20131203>
- Ritchie, J., & Spencer, L. (1994). *Qualitative Data Analysis for Applied Policy Research*. In *The Qualitative Researcher's Companion*. 2455 Teller Road, Thousand Oaks California 91320 United States of America: SAGE Publications.
- Roehl-Anderson, J. (2013). *M&A Information Technology Best Practices*.
- Rudd, C., & Sansbury, J. (2013). *ITIL® Maturity Model and Self-assessment Service: user guide*.
- Sarrazin, H., & West, A. (2011). Understanding the strategic value of IT in M&A. Retrieved from <http://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/understanding-the-strategic-value-of-it-in-m-and-38a>
- Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students fifth edition*. Retrieved from

[https://is.vsfz.cz/el/6410/leto2014/BA\\_BSeBM/um/Research\\_Methods\\_for\\_Business\\_Students\\_\\_5th\\_Edition.pdf](https://is.vsfz.cz/el/6410/leto2014/BA_BSeBM/um/Research_Methods_for_Business_Students__5th_Edition.pdf)

Schied, J. (2011). A List of the Top 10 Change Management Issues: Part One. Retrieved from <http://www.brighthubpm.com/change-management/80049-top-ten-change-management-issues-and-how-to-handle-them/>

Sherman, A. J. (2013). Ensuring Success in Post-Close Integration. Retrieved from <http://www.slideshare.net/FirmexVirtualDataRoom/firmex-rubber-hits-the-road-ensuring-success-in-postclose-integration>

Sherman, A. J. (2013). Ensuring Success in Post-Close Integration. Retrieved from <http://www.slideshare.net/FirmexVirtualDataRoom/firmex-rubber-hits-the-road-ensuring-success-in-postclose-integration>

Sitkin, S. B., & Pablo, A. L. (2004). Leadership and the M&A Process.

Storey, L., & Helft, M. (2007). Google Buys DoubleClick for \$3.1 Billion - The New York Times. Retrieved from <http://www.nytimes.com/2007/04/14/technology/14DoubleClick.html>

Tanaka, H. (2002). A Mega Bank Reveals Its Vulnerability. Retrieved from [http://www.yuiyuidori.net/soken/jour/j\\_38.html](http://www.yuiyuidori.net/soken/jour/j_38.html)

UCISA. (2013). ITIL – Introducing the Service Desk. Ucisa.

Weber, Y., Oberg, C., & Tarba, S. (2013). A Comprehensive Guide to Mergers & Acquisitions: Managing the Critical Success Factors Across Every Stage of the M&A Process, FTpress.

Worthen, B. (2002). Success Factors for Integrating IT Systems after a Merger.

Yang, E., & Dolles, H. (2011). Mergers & Acquisitions : Hostile takeovers and defense strategies against them. *School of Business, Economics and Law, 25*(3), 1-45.

**Appendix A**

Levels of M&A Team Capabilities



Figure A1. Levels of M&A Team Capabilities

Note: Re-printed from: Leading through transition, Copyright Fernandes et al. (2010)

Example IT Risk Management Framework



Fig A2. IT Risk Management Framework

Source: Authors proprietary source. Copyright Unknown

Leadership in the M&A Process

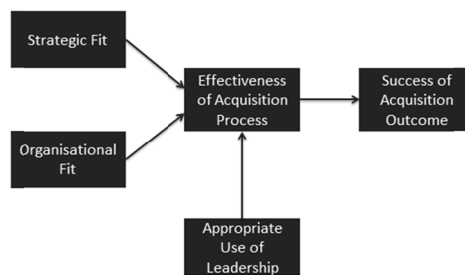


Fig A3. Application of Leadership to M&A Process

Note: Sourced from: Leadership and the M&A Process, Copyright Sitkin & Pablo (2004)

Prince2 Processes

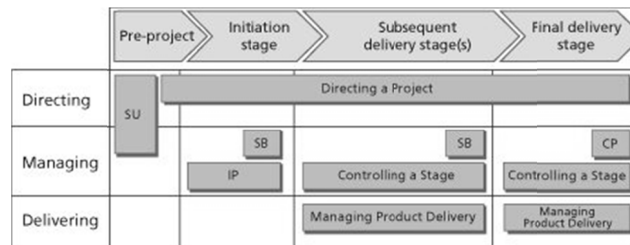


Fig A4. Use of the PRINCE2 processes through the project lifecycle

Note. Reprinted from Axelos – What is Prince2. Copyright Axelos (2015b)

AGILE Scrum Structure



Fig A5. AGILE Scrum

Note. Reprinted from AGILE in a Nutshell. Copyright Rasmusson (2015)

## Appendix B

### Case Study Interview Questions

Case Study Interview Questions			
1	Strategy	What do you believe were the key business objectives of the M&A? Please rank in order	Growth Market positioning Costs savings Other, please specify
2	Strategy	Please score the following corporate metrics to indicate the perceived levels of success and achievement during the M&A? (100 is equal to full benefit realisation)	Achievement of revenue synergies Customer Satisfaction Achievement in cost synergies Increased innovation Speed of integration
3	Strategy	Please score the following people metrics to indicate the perceived levels of success and achievement during the M&A? (100 is equal to full benefit realisation)	Retention of key employees Increased productivity Culture alignment Employee engagement Increased attraction of key talent
4	Strategy	12 months after completion of the M&A IT integration, how satisfied are you that the amalgamation of both companies IT systems has improved the effectiveness of group operations?	Extremely satisfied - The M&A IT integration was a success, we are much more effective as a business Moderately satisfied - The M&A IT integration has helped us grow, but we still have some way to go Neither satisfied nor dissatisfied - I am not in a position to comment on the effectiveness of this M&A IT integration programme Moderately dissatisfied - It doesn't seem that the investment and effort has made us any more effective Extremely dissatisfied - The M&A IT integration was poorly managed and left the business in a worse position
5	Delivery	What emphasis was put on 'delivery at pace' and to what extent did this affect integration quality? (Please select and comment)	Delivery at pace was of paramount importance, integration was delivered quickly with high levels of quality Delivery at pace was of paramount importance, integration was delivered quickly with certain quality compromises Delivery at pace was of paramount importance, integration lead times were delayed due to quality issues Delivery at pace was not a primary driver, integration was delivered in normal timeframes with normal/high levels of quality
6	Delivery	In your experience, were the timeframes and expectations set by the business realistic or unrealistic? Please state why	Realistic Unrealistic
7	Delivery	Did the analysis performed in the due diligence phase prepare design teams adequately for IT integration?	Yes Might or might not

			No
8	Delivery	What were the biggest challenges during the M&A IT integration transition period? Please rank in order	<p>Access Management - getting access to new environments</p> <p>Change Management - getting changes approved at CAB</p> <p>Capacity Management - managing increased and unexpected demand</p> <p>Resource Availability - managing non-M&amp;A IT activities during transition period</p> <p>Other (Please Specify)</p>
9	Control	Which best practice frameworks were employed during the M&A IT integration programme, use the comments field to state how and why?	<p>ITIL (IT service management framework)</p> <p>COBIT (IT governance framework)</p> <p>TOGAF (IT enterprise architecture framework)</p> <p>Prince2 (Project management framework)</p> <p>Agile (Project management framework)</p> <p>Other (please specify)</p>
10	Control	What mix of internal vs. external resources were utilised during the IT integration build phase?	Rate from 0% (internal) to 100% (external contractor)
11	Control	If you were involved with another M&A IT integration, what would be your target mix of internal vs. external resources?	Rate from 0% (internal) to 100% (external contractor)
12	Control	Who were the key members of the transition steering committee? Please rank in order of importance to the proceedings	<p>Data Team</p> <p>PMO</p> <p>Business and Functional Owners</p> <p>IT Operations</p> <p>Legal</p> <p>HR</p> <p>Enterprise Architect</p> <p>CIO Office</p> <p>Other (please state)</p>
13	People	What techniques were used to incentivise staff, boost morale and increase retention during the transition?	<p>Promise of promotion if objectives met</p> <p>Financial bonus if objectives met</p> <p>Recognition and management feedback</p> <p>Team building event</p> <p>Other (please specific)</p>
14	People	How would you best describe the capabilities and experience of the internal IT team in the build stages of the integration activity? (Please expand by adding comments)	<p>Highly experienced and capable - internal teams were the driving force, supported by external parties and contractors where applicable</p> <p>Suitably experienced and capable - internal teams were equally effective in working with external parties and contractors</p> <p>Inexperienced and in some case incapable - external parties and contractors were the driving force behind the IT integration build phase</p>

15	People	How effective were communications managed during the IT integration? Comment on how they might have been improved	Extremely effective Very effective Moderately effective Slightly effective Not effective at all
16	People	Overall, how effective do you feel the leadership was during the 2015 M&A IT integration? (e.g. provided direction, ensured everyone knew their role, ensured everyone understood their objectives, ensured everyone acted with integrity and ensured everyone was motivated) Please comment	Extremely effective Very effective Moderately effective Slightly effective Not effective at all

Glossary

BAU	Business As Usual
CAB	Change Advisory Board
CIO	Chief Information Officer
COBIT	Control OBJECTives in Information Technology environments
CSF	Critical Success Factor
EA	Enterprise Architecture
EVM	Enterprise Value Map
FCRA	Fair Credit Reporting Act
FinTech	Financial Technology
FS	Financial Sector
GDPR	EU General Data Protection Regulation
GLBA	Gramm-Leach-Bliley Act
HBR	Harvard Business Review
IMU	Integration Management Unit
InfoSec	Information Security
IoT	Internet of Things
IT	Information Technology
ITIL	IT Infrastructure Library
ITSM	IT Service Management
itSMF	IT Service Management Foundation
KPI	Key Performance Indicator
LOI	Letter of Intent
M&A	Mergers and Acquisitions
PCI-DSS	Payment Card Industry Data Security Standard
PRINCE 2	PRojects IN Controlled Environments
SOX or SOA	Sarbanes-Oxley Act
TOGAF	The Open Groups Architecture Framework
TSA	Transition Service Agreement
VDR	Virtual Data Room



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