

# Integrating Theory and Practice of Banking M&A: Towards a Composite IT Integration Framework

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## Abstract

This study integrates academic theory and extensive practitioner input to provide a comprehensive examination of post-merger IT integration practices within the banking sector. Leveraging the expertise of senior-level IT integration practitioners who collectively possess over 220 years of experience across 30 major banking M&A transactions, this dual approach offers a richer, more nuanced understanding of the complexities involved in IT integration during mergers and acquisitions within the industry. The research underscores the necessity for a flexible, risk-based approach to post-merger IT integrations that aligns business and IT objectives, ensuring that technology integration supports broader business transformations and synergies. It also delivers practical insights into prevalent technology-related issues and strategies to address them. The study identifies a critical gap: the absence of a publicly available comprehensive reference guide for post-merger IT integrations in banking and the prevailing preference in the practitioners' camp towards using elements of existing popular models or a comprehensive composite M&A IT integration framework built from such elements, tailored to specific integration scenarios. The study also lays the groundwork for developing this comprehensive composite M&A IT integration framework by identifying the overall approach, key specialist roles, decision-making areas and candidate popular models for reuse. This framework could serve as a valuable tool for both academic research and practical application, guiding senior decision-makers in the banking industry through successful post-merger IT integrations.

**Keywords:** M&A; mergers and acquisitions; banking; post-merger integration; IT integration; composite framework

## 1. Introduction

This study examines the role of information technology (IT) integration in the context of mergers and acquisitions (M&A), also known as post-merger IT integration or M&A IT integration, in banking. IT is a crucial element in the contemporary business landscape, enhancing business capabilities and aiding in the attainment of strategic objectives. However, it also carries the risk of precipitating operational failures and inflicting substantial collateral damage if not properly executed and managed (e.g., the recent case highlighted in Flinders (2024)). In the banking sector, the stakes are particularly high, as the integration of IT systems is foundational to the functioning of the merged entity, driving business transformation and the achievement of anticipated synergies, and yet delivering such integrations under pressure can be an incredibly complex task.

Despite its importance, the influence of IT integration practice on the strategic decision-making process in banking M&As has been minimally publicized in the academic press. Also, the sparse existing academic works in this space (e.g. Kovela & Skok (2012), Kovela (2015), Burke & Kovela (2017), and Kovela et al. (2023)), are based either on the academic theory alone or a relatively modest practitioner input and, hence, their practical value to senior-level decision-makers may be limited. To overcome this limitation, a more extensive study of the practitioner perspective on the post-merger IT integration in banking is required. Importantly, to lend it both comprehensiveness and academic rigour, any such study must be strongly aligned with the existing theory in the

field insofar that the core theory concepts and themes should provide the overall framework for the exploration, and the practitioner input validates and complement it with the implementation-level detail.

To achieve the above objective, the authoring team extracted core concepts and themes from the single existing comprehensive coverage of the academic and practitioner-oriented sources on post-merger IT integration in banking, a systematic literature review by Kovela et al. (2023), and used them as guidance while looking at an academically sound sample of first-hand accounts of senior-level practitioners with significant expertise in post-merger IT integrations in banking. The output presented in this paper is a rich picture of the prevailing contemporary practice in this domain today. It is the authors' aspiration that the findings of the study will inspire a broader dialogue within the academic community and the banking industry and lead to the creation of openly available practical tools instrumental in alleviating key M&A IT integration challenges the industry is facing today.

## 2. Research Design

This research is an in-depth exploration of the practitioner perspective on conducting M&A IT integrations in banking structured around the key theory themes and concepts extracted from the sole existing comprehensive review of academic and practitioner-oriented sources covering the field (Kovela et al., 2023). The authoring team surveyed a balanced selection of leading specialists to construct a rich picture of practice in high-profile banking M&A IT integrations spanning the last three decades. The output is a structured reference identifying prominent technology-related post-merger IT integration issues, the overall IT integration approach and method, special points of focus, key elements of planning, and potential approaches to constructing a robust and comprehensive framework that could be used by senior-level decision-makers across the industry. Where appropriate, the reference is complemented with key citations highlighting its core aspects and their key implications for decision-makers.

### 2.1 Paradigm, Approach, and Method

The authors chose interpretivism as the research paradigm for this study, as the focus was on “exploring the complexity of social phenomena with a view to gaining interpretive understanding” (Collis & Hussey, 2009). In terms of the approach, the authors employed induction by using the survey of practitioners to validate and expand on the key theory themes and concepts relevant to the post-merger IT integration in banking, as identified in the systematic review by Kovela et al. (2023). In terms of the method, a cross-sectional analysis of a selection of high-profile banking M&A IT integrations was used to produce a rich picture of the contemporary M&A IT integration practice in banking (Saunders et al., 2021).

### 2.2 Data Collection and Analysis

#### 2.2.1 Secondary Research

The secondary research of the study involved analyzing core themes and concepts in the domain of post-merger IT integration in banking to inform and guide the primary research phase. A systematic literature review of the domain produced earlier by the same authoring team (Kovela et al., 2023) was identified as the sole existing work with a broad enough scope and comprehensive enough results to serve as a definitive source for the analysis. During the analysis, the authors identified key relevant outputs (e.g. lists of factors affecting the success of integration, integration strategies and methods, etc.), as well as key themes listed below:

- Prominent technology-related issues to look out for in post-merger IT integration in banking and the recommended strategies for addressing them.
- The overall IT integration approach, method, and the IT due diligence and risk management as special points of focus.
- Key aspects of planning for the post-merger IT integration: the guiding principles, target operating model design, and institutional changes and processes required.
- The perceived need for and potential approach to the design of comprehensive guidance for key decision-makers overseeing the M&A IT integration transactions in banking.

The authors utilized the above key outputs and themes to develop a survey instrument in the form of an in-depth semi-structured interview script. To enhance the instrument with implementation-level detail, the team conducted a comprehensive review of industry and academic literature, identified a broad array of tools, models, frameworks, and standards that could inform the design of a robust post-merger IT integration framework, and incorporated it into the script. The resultant script (see Appendix 1) was tested in a pilot interview with a respondent who had over ten years of experience overseeing multiple post-merger IT integration projects in the banking sector, both in the

UK and internationally. Feedback from this pilot interview, along with a retrospective analysis of the script's structure and content, enabled the authors to refine the instrument. This process confirmed the instrument's suitability for capturing the necessary data and facilitating the generation of the study's outcomes.

### 2.2.2 Primary Research

At the primary research stage, the instrument was administered to a selection of professionals from the authors' extensive professional network of London-based practitioners employed by or consulting for major banking institutions operating in the UK. The primary selection criterion was the respondents' involvement in high-calibre post-merger IT integration projects at a strategic planning and execution level, while the secondary was the specific role they performed in the transaction. Respondents with the following roles were included:

- Senior executive management/managing directors on the acquiring side (IT integration planning).
- Senior executive managers at a private equity (PE) investor firm (deal assessment).
- Regulators (senior position in the M&A deal approval).
- Senior executive management/managing directors on the acquired side (IT integration planning).
- Senior consultants (IT integration planning and facilitation).
- Senior level implementers (IT integration execution).

A combination of purposive maximum variation and quota sampling was employed to allow the collection of the widest variety of opinions while maintaining a balance of views between the different roles. By reconciling these varied and often contradictory perspectives on how post-merger IT integrations should be planned and executed, a rich picture of the contemporary M&A IT integration practice in the banking industry could be established. For confidentiality purposes, the results were anonymized, and actual respondent names were replaced with labels (Respondent 1 to 15), as further referred to in citations used in the summary and discussion of findings.

The interviews ran between 2018 and 2023, and the authoring team collected data on thirty major banking M&A transactions in the period spanning three decades to date. A balanced cross-sectional comparison analysis of the responses allowed the authors to generate outputs in two principal categories – 1) the most significant factors shaping the post-merger IT integration practice in banking, and 2) other noteworthy ones. The most significant factors would rank seven and above in more than 50% of all responses on a 1-10 Likert scale, suggesting they are broadly applicable and significant in a wide range of M&A IT integration scenarios in banking. The other noteworthy factors would rank seven and above in between 25% and 50% of all the responses. Such factors, while not universally applicable, may still carry high significance in niche M&A IT integration scenarios and should be acknowledged as such. The authors have also noted additional factors (or themes) brought up by the respondents as impactful in certain individual cases over and above the ones explicitly mentioned in the interview script. By acknowledging those, the authors have further enhanced the richness of the produced picture of the contemporary M&A IT integration practice in banking. Table 1 summarizes the primary research parameters.

Table 1. Primary research parameters.

<b>Type of interview</b>	Face-to-face, in-depth, semi-structured
<b>Number of interviews</b>	15
<b>Duration of interviews</b>	90 – 120 min
<b>Roles / number of respondents per role*</b>	<ul style="list-style-type: none"> <li>• Senior executive management/managing director on the acquiring side / 4*</li> <li>• Senior executive management/managing director on the acquired side / 4*</li> <li>• Senior level implementor / 4</li> <li>• Senior consultant (planning and facilitation) / 5*</li> <li>• Senior executive manager at a private equity investor firm (deal assessment) / 2</li> <li>• Regulator (senior position in deal approval) / 1</li> </ul>
<b>* Includes respondents with experience in more than one role (case-dependent)</b>	
<b>Banking transactions covered, in chronological order</b>	1988 – National Australia Bank Group acquisition of Clydesdale Bank, Northern Irish Bank and Northern Bank 1990 – National Australia Bank Group acquisition of Yorkshire Bank 1994 – PaineWebber acquisition of Kidder, Peabody & Co. 1997 – Prudential acquisition of Scottish Amicable 1999 – Prudential acquisition of M&G 1999 – Deutsche Bank acquisition of Bankers Trust 2000 – J.P. Morgan merger with Chase

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2000 – Formation of Hitachi Capital  
2000 – RBS acquisition of NatWest  
2005 – BAWAG merger with P.S.K.  
2006 – UBS acquisition of ABN AMRO's Futures and Options Business  
2007 – Barclays bid to acquire ABN AMRO  
2007 – RBS acquisition of ABN AMRO  
2007 – Nationwide merger with Portman Building Society  
2008 – Deutsche Bank separating Arrowgrass Capital Partners  
2008 – J.P. Morgan Chase's acquisition of Bear Stearns  
2009 – Lloyds Banking Group acquisition of HBOS  
2009 – TSB separation from Lloyds Banking Group  
2010 – Deutsche Bank acquisition of ABN AMRO commercial banking operations  
2010 – Worldpay separation from RBS  
2010 – A series of acquisitions by Paysafecard in the online payments services space  
2013 – Barclays African operations merger with Absa Group Limited  
2013 – Skrill acquisition of Paysafecard  
2014 – Tilney's separation from Deutsche Bank  
2015 – Formation of Paysafe  
2015 – Sabadell acquisition of TSB  
2017 – Williams & Glyn separation from RBS  
2017 – Lloyds acquisition of MBNA  
2017 – Deutsche Bank merger with Postbank  
2022 – BNP Paribas purchase of the Equities and Prime Brokerage Business from Deutsche Bank

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### *2.3 Validity, Reliability, and Limitations of the Adopted Approach*

#### *2.3.1 Validity and Reliability*

The primary research instrument, i.e. the interview script, was constructed based on the secondary research results, i.e. the systematic literature review, and tested in a pilot interview with a respondent with extensive subject matter expertise. The resulting rigorous design was applied to an academically sound number of respondents and followed by a comprehensive analysis (Corbin & Strauss, 2015). The authors employed a robust ranking and weighting method to systemically identify the most significant and noteworthy factors shaping the banking M&A IT integration practice. Relevant factors that were missed at the survey design stage but were brought up by respondents during the interviews were added to the findings as emergent themes. The approach has produced a rich and qualitatively sound picture of the contemporary post-merger IT integration practice in banking.

#### *2.3.2 Limitations*

The limitation of the secondary research phase lies in the reliance on the outputs of a systematic literature review of post-merger IT integration theory and practice in banking, as published earlier by the same authoring team (Kovela et al., 2023). As this review is currently the only work of its kind, its scope inherently constrains its use as a framework for developing a survey instrument for this study. Nonetheless, the work combines results from analyzing 230 sources extracted from a wide variety of mainstream scientific collections (e.g., ABI/INFORM Complete, ProQuest Science Journals, EBSCOhost Business Source Premier, KB+ JISC Collections Springer Compact, and IEEE Conference Publications) and multiple iterative searches on Google and Google Scholar, and its comprehensive results provide an academically sound initial platform from which the survey could be constructed. Despite the potential for future refinement and expansion of the results derived from this approach, it represents the most robust basis available to the academic community today and has been deemed an adequate starting point for this research.

For the primary research stage, the authors acknowledge the following factors as potentially limiting the comprehensiveness of the results:

1. A relatively small sample size resulting in the inability to generalize the findings.
2. Potential bias in selecting interviewees resulting in biased findings.

The authors took the following measures to address the above issues:

- In addressing the small sample size limitation, the following points were considered:
  1. The number of people with substantial experience in a niche knowledge area such as the IT integration in banking M&A at a level of meaningful seniority and impact (e.g. Chief Technology Officer, chief architect, chief end-user for the integrated IT solution, Chief Information Security Officer, chief IT and regulatory risk assessor, etc.) is relatively small, and surveying those individuals can be a challenge. Therefore, the authors judged the depth of experience of those individuals and their ability to paint a comprehensive picture of the subject to be of higher significance for the study than the high total number of respondents. To that end, the relevant professional experience of the respondents selected for the study ranged between 8 and 30 years in strategic-level management, implementation, or oversight of multiple cases of IT integration in high-calibre banking M&As.
  2. Mason (2010) suggests 15 sources as the smallest acceptable sample size for all qualitative research. This study meets this requirement with its 15 interviews and de facto exceeds it by covering double the number of cases, i.e. 30 unique major banking M&A transactions.
- The potential bias was eliminated by selecting a balanced number of respondents in the key relevant roles (see section 2.2.2), i.e. senior executives on the acquiring and acquired side, planning and facilitation consultants, implementors, and regulators.

Given the above parameters, the experience accumulated in the sample is considered sufficient for producing the study's projected outcomes.

### 2.3.3 Generalizability

The scope of this analysis encompasses a significant number of post-M&A IT integration cases involving some of the world's major banking institutions (e.g. Prudential, Deutsche Bank, Bankers Trust, RBS, Barclays, J.P. Morgan, Lloyds, TSB, Sabadell, etc.) and spans over three decades to date. The authors have also explored in-depth and integrated a broad range of perspectives on those projects from the key stakeholder groups on the IT integration side. This combination of breadth and depth suggests that the resulting rich picture of the IT integration practice in banking M&A is sufficiently comprehensive and adequately reflects the industry's state today, and its key elements could be used by a wide variety of decision-makers to plan and execute such transactions.

## 3. Summary and Discussion of Findings

### 3.1 Prominent Technology-Related Issues in Post-Merger Integration in Banking

Below are the technology-related issues significantly affecting the planning and implementation of post-merger integrations in banking (in order of importance):

1. *Siloed, inaccurate or incomplete data* – this has technical, project management and financial implications for the integration and, potentially, the entire M&A deal.
2. *Difficulty integrating/maintaining legacy systems* – there are, in fact, two points wrapped into one here: 1) the difficulty and cost of migration of legacy systems onto the new platform, and 2) the ongoing cost of preserving access to legacy data. Both requirements could pose a very substantial financial burden (4% to 5% of the overall combined technology costs, as indicated by the respondents). According to Respondent 2, "Legacy systems are a killer, and they are much more expensive than people will ever give them credit for".
3. *The complexity of existing landscapes / interdependencies in existing systems* – bigger banking institutions tend to have large IT portfolios and may be operating as a federation of businesses under the same brand name, each having their own systems and technology requirements. Connecting and rationalizing these portfolios would pose additional challenge for the IT integration project.
4. *Lack of documentation* – many banks operate on decades-old legacy systems with sparse information on how they should be maintained and modified to accommodate evolving business needs, including the post-merger IT integration. This issue is exacerbated by the loss of staff with tacit knowledge about those systems (see "Key person dependencies" below).
5. *Difficulty deciding on the Target Operating Model (TOM)* – TOM-related decisions are likely to be driven by the M&A business objectives and personal preferences of key decision-makers rather than what is economically feasible or technically possible under the existing constraints, causing difficulties during the implementation. According to Respondent 1, "A lot of value is lost due to political in-fighting... IT has to wait till the last minute for the selection of which senior manager is going to run the division will determine what are their favorite systems, which in turn will dictate the information flows that are going to exist in the final organization, and then determine who are the key players and key people. Then you can start seeing the full implementation".

6. *Key person dependencies* – the transitioning and release of staff due or losing them to competition to the merger, may lead to the loss of relevant expertise (including the tacit knowledge) at the time when it is required more than ever.

7. *Regulatory compliance at risk with no clear and consistent view of data across the organization* – complex organizations generally struggle to get a consolidated view of their data, and this situation is amplified during a period of radical change such as an M&A, although the regulatory environment is now more generally managed and accepted as critical aspects of the merger. As one respondent commented: “If you don’t get regulatory approvals, then there is no point to the whole thing. You all go to jail” (Respondent 4).

8. *The vested interest of staff* – IT staff whose jobs are directly affected by certain systems or functionality changing or being discontinued because of the IT integration would likely feel threatened and adopt a defensive stance or leave, which may lead to difficulties in implementing the integration. Generally, a certain amount of flexibility may be allowed for the key staff to adjust to the new reality, but only to a certain point (e.g. “we give them an opportunity to adopt new behaviours, or we put a bullet through them and get another one”, Respondent 3). Another practised approach is accommodating certain existing preferences to a point where full command of the entire IT portfolio may be practically assumed, then rooting out the unwanted elements (according to Respondent 6, “if people have interests in systems, you might need to play along with that in the short term even if you have plans on how you will circumvent those interests... When you are integrating, you are taking it all.”).

9. *Outsourced IT partners and suppliers* – the problem of handling and transitioning outsourced partners and suppliers is often overlooked, as there are significant risks and issues to manage both contractually and operationally.

10. *Poor performance / loss of key people* – the loss of key people at the exact point when their presence is most required presents a significant risk to the merged operation and its performance.

11. *IT integration a cause for security vulnerabilities* – complex integrations of diverse IT portfolios with the associated personnel changes may result in the loss of valuable data and vulnerabilities in the new security perimeter (e.g. “you have a risk of an employee on the losing side walking out with a client list” (Respondent 1)).

Other noteworthy factors include (in order of importance):

1. Key IT personnel not involved in due diligence/planning of the integration.
2. Lack of clarity for existing IT roadmaps.
3. Achieving synergies and growing the business being a challenge.
4. Large projects already active.
5. Hit on the bottom line due to poor IT integration.
6. Inadequate assessment of future merged systems capacity needs.
7. Software licenses, and
8. Cost escalation due to the lack of attention to IT integration during M&A execution.

Also, the following themes emerged as impactful in specific individual cases:

- Operational resilience.
- The extent of other mandatory changes taking place.
- Data migration strategy.

Finally, the summative list of recommended strategies for addressing the above issues follows below:

- Fully understand the complexity of the existing technology landscapes.
- Eliminate in-fighting.
- Get the right expertise around the systems to be integrated.
- Ensure the right quality of data and an appropriate migration approach.
- Manage key person dependencies and outsourced IT partners and suppliers.
- Keep performance and costs in check.
- Update documentation.

- Keep an eye out for potential security breaches.
- Balance the integration effort with BAU and other ongoing change.

### 3.2 The Overall IT Integration Approach, Method, And Special Points of Focus

#### 3.2.1 Overall Approach and Method

Key elements of the overall IT integration approach have been identified as follows:

- *The choice must be supported by the business case* – it is critical to understand the amount of time and effort required for the selected basic integration strategy (e.g. complete integration, partial integration, or co-existence), together with related costs. It is also important to understand the distribution of benefits across the combined entity because political in-fighting between stakeholders can become a potentially serious impediment.
- *IT integration objectives must be delivered within business functions and driven by the business process design* – from an operational perspective, each IT integration objective and the corresponding integration method (e.g. take-over, standardization, synchronization, or renewal, see Table 2 for a complete mapping) represents a specific approach to achieving a specific business objective. Therefore, it is vital to understand the underlying business processes within each business unit and how the unified landscape will look.
- *The approach must be tailored* – even within the same sector, it is critical to tailor the approach to the specific technology parameters and business requirements of the merger.

Table 2. The mapping between M&A strategic objectives, IT integration objectives and IT integration methods, abridged (Kovela et al., 2023)

M&A strategic objective	Absorption	Symbiosis	Preservation	Transformation
IT integration objective	Complete integration	Partial integration	Co-existence	Partial integration (data only)
IT integration method	Take-over Standardization	Standardization	Synchronization	Renewal

When asked how the IT integration method would normally be decided upon, i.e. be guided by theory (existing popular academic or practitioner-focused guidance), recommendation of external experts, or the experience from previous integrations, the respondents’ answers overwhelmingly leaned on the "experience from previous integrations" side. To that effect, according to Respondent 4, "none of it is theory based", and using Respondent 8 words, "it is based on the practicalities of something that needs to be done, and then repeating what you know works, rather than trying to do something different".

The authors also asked respondents to comment on whether complete integration generally carried more weight among the IT integration objectives and, if achieving it was problematic, what compromises would likely be made. Somewhat surprisingly, most of the respondents considered complete integration generally unnecessary for two reasons:

- *The cost of integrating certain legacy functions may outweigh the value accrued as a result* – in such cases, it is acceptable that certain parts of the infrastructure are preserved, while supporting the core functionality becomes the main priority.
- *It may be important to preserve certain acquired systems, processes, and staff, especially when the transaction’s objective was the acquisition of specific capability (e.g. trading platform, product line, etc.)* – in those cases, the acquirer would deliberately choose the co-existence scenario.

#### 3.2.3 Focus on IT Due Diligence

IT due diligence is an essential element of M&A in banking, as it provides critically important information underpinning the decision to go through with the transaction (Kovela et al., 2023). In terms of the most prominent aspects of pre-merger IT due diligence, the survey has identified the following (in order of importance):

1. *Managing contract and regulatory requirements* – failing to do so would jeopardize the viability of the M&A and potentially result in legal infractions. According to Respondent 4, “contacts could kill the integration”.

2. *Getting clarity on the integrated business processes* – failing to produce a comprehensive target map of the integrated business processes, both within and across the consolidated business units, may lead to costly mistakes in integrating the IT systems supporting these processes (Respondent 1).

3. *Securing the IT asset use rights and ownership of source code* – certain vendors restrict the freedom of use of their respective IT assets (e.g. software applications) in the integration, which often means additional difficulty in certain integration scenarios (e.g. “I always ask this as one of the first things – whether they have all the rights and licenses “Respondent 11).

4. *Ensuring there is sufficient scale-up potential in the existing platforms* – depending on whether the IT integration objective is to convert all the IT systems and related processes from one of the merging entities to the ones of the other (absorption) or to choose best IT systems and processes from either side to form an optimized TOM of the merged entity (symbiosis), one or both merging entities must have a solution that could scale up to the capacity requirements of the merged organization.

Other noteworthy aspects include (in order of importance):

1. Network design, application, and information architecture.
2. Internal software development processes and staff skills.
3. Data centres, premises, and facilities, and
4. IT tools and methodologies.

Also, the following themes emerged as impactful in specific cases:

- Assessment of legacy systems, existing business solutions and associated investment requirements (cost of upkeep vs short/long-term benefits).
- Data governance and management.
- Key person dependency.
- Cybersecurity.

In terms of key constraints shaping the IT due diligence process, the following have been identified:

- *Deal parameters of the merger* – these include the nature of the entities being merged (including size), how the transaction has been structured, the timeline, whether it is a hostile takeover (this influences the degree of cooperation between entities), and structure of the overall management of the merger on the business side.
- *Urgency and the deliverables vs risk balance* – limited time for the IT due diligence means a limit to what is achievable, which in turn means the scope of work and deliverables must be prioritized. Furthermore, the prioritized deliverables must be balanced against high-level risks and managed so that the organization can continue to function while the integration takes place. High-level risks include licensing, systems interoperability, gaps in staff skillset and training, access to the right staff, system documentation, and the selection of IT systems within the overall architecture. Ignoring this complexity can potentially result in unresolvable issues later in the integration.
- *Communication approach* – unless the preservation integration scenario is enacted, there will inevitably be people whose role or position may no longer exist in the merged entity. Still, securing their cooperation is crucial, as their expertise and knowledge might be required for the integration and process redesign. Respondent 1 used the term “immediate honesty”, i.e. an open discussion and constructive negotiation, to describe the communication approach in such circumstances.

When asked about the use of comprehensive IT due diligence frameworks (e.g. Information Technology Assessment Due Diligence, ITADD (Sundberg et al., 2006) and Framework for Information System Due Diligence, FISDD (Delak & Bajec, 2014)) to guide their work, the respondents unanimously stated that they had never applied a formal approach based on a single framework, industry or academic one. Instead, a variety of frameworks and practices would be employed based on the specific preferences of the specialists in charge and the requirements of the deal. The respondents in operational roles indicated they would rely on a variety of tools and practices developed in-house, whereas the ones in management roles would rely on specialized advisory services (e.g., regulatory, operational risk management, or cybersecurity) employing proprietary methodologies and relevant established industry frameworks. The majority would, however, refrain from using any visibly academic theory-based guidance, with only a few indicating a willingness to “use everything and anything that does the job”, including internally developed tools, industry best practices, and relevant academic theories. Despite this, it is evident that respondents are implicitly utilizing frameworks, external or internal, which often closely align with



formal ones (or blocks thereof) available in the field. However, there is a notable reluctance to formally adopt a single, comprehensive framework.

### 3.2.4 Focus on Managing Risk

Earlier work by Kovela et al. (2023) has flagged up risk management as another element potentially having a disproportionately high impact on the success of the post-merger IT integration in banking and noted the key relevant types of risk:

- Technical-level
- Application user-level
- Business-level, and
- Financial.

In this study, the respondents were asked to indicate which of those risks had to be actively managed and prioritized and whether there was an awareness of or usage of any theory or practice-based risk management approach specifically geared towards the M&A IT integration. The key findings are below:

1. *Risk type importance* – all respondents identified every risk type in the list as critical and such that could not be compromised even in time-pressured scenarios. According to Respondent 1, “...all of them are important. They cannot be avoided as it is a complex issue”.
2. *Priorities in managing risks* – these would depend on the preferences of the key decision-makers. For instance, while consultant respondents identified business and financial-level risks as a higher priority, the implementors prioritized technical and application user-level risks over the others. At the same time, some of the executive respondents regarded every type of risk as a top priority, e.g. “it is very difficult to put them in order because they are all tens (on a 1-10 scale, ed.)” (Respondent 4).
3. *Reliance on practice vs theory* – none of the respondents indicated any knowledge or use of risk management-specific frameworks, industry or academic. Instead, they reported relying on their own practical experience and drawing on their professional networks and advisory services for particular skill sets. According to Respondent 8, “Theory is great, but when you come down to it, is all your cost-benefit analysis... To make those judgements, you need back-end practical situations where it should have worked, and it didn’t...”.
4. *Models aren’t all irrelevant* – some respondents supported a hybrid approach that acknowledged the usefulness of popular frameworks such as ITIL and COBIT alongside field expertise and own proprietary IT risk frameworks. E.g., according to Respondent 5, “I don’t remember framework specifically for M&A, but there are lots of (relevant) frameworks for IT management, IT controls, etc.”.

## 3.3 Planning the Post-Merger IT Integration

### 3.3.1 Guiding Principles

When planning the post-merger IT integration, the survey has identified the following principles (in order of importance):

1. *Having a dedicated team where both business and IT professionals are engaged in the approval, planning and execution* – the team should comprise domain specialists from business and technology departments and be led by the business to ensure that the right technology is applied at each stage. The team must also be working “in” the business to ensure that it is focused on the right issues. According to Respondent 2, “...because business does not understand technology and technology doesn’t understand business, and the two don’t talk to one another, and they don’t speak the same language... we have had to incorporate IT into the business front office in a far greater way than the original business model had proposed. Which is probably the right model...”.
2. *Aligning strategic business and IT integration objectives* – unless there is a strong alignment between the business and IT integration objectives the M&A objectives would be impossible to deliver. In Respondent 3 words, “...the IT guys need to respect that the business are in charge of the organization and business need to respect that IT can’t just turn, they are running a tanker...”.
3. *Gaining regulatory approvals* – regulatory approvals and the efficient management of legal requirements are critical, as they can significantly slow down the integration or outright stop it from happening. According to Respondent 4, “If you don’t get regulatory approvals, then there is no point to the whole thing. You all go to jail.”

4. *Ensuring a smooth customer journey* – it is essential that the customer experience is not disrupted throughout the integration, as the business objectives may be significantly impacted by shrunk customer base. "...if you compromise it... you won't have a business, it's fundamental" (Respondent 3).

5. *Maintaining clear communications with internal and external stakeholders* – ensuring there is a clear communication approach applied consistently across essential stakeholders within and outside the merging entities (e.g. key business and IT specialists, senior executives, sponsorship, regulators, etc.) is key to successful integration. In Respondent 1 words, "I have not been in a single merger where the comms have been adequate... You have a lot of people thinking that they are not going to have an organization in the next ninety days, so check out and start interviewing elsewhere. It is very hard trying to get new processes to work without them."

6. *Having a formal plan* – this is a very important element of the integration that must include sufficient flexibility to ensure that significant changes (e.g. changes in the business objectives of the merger, changes in the integration team, new data about the state of the IT estates to be merged becoming available, etc.) and differences between the merging organizations can be efficiently accommodated. According to Respondent 1, "In this sort of complex environment, waterfall methodologies fail, as the problem space is too big. You need to cascade it down and let units merge themselves, especially with how banks are. This is not Amazon with warehouses that are all the same. There has to be flexibility at the macro level."

7. *Accountability and measurement criteria* – another important principle, however significant concerns were voiced over its practical application due to the difficulty of tracking performance and reporting progress in a dynamically changing situation. For instance, some argued that quantifying progress against any measure could be highly subjective and, therefore, potentially misleading (Respondent 4), while others noted that tracking things too frequently would add a significant overhead while still failing to present a meaningful picture (Respondent 3).

Other noteworthy factors include (in order of importance):

1. *Blending cultures of the merging organizations* – this factor was identified as very important, but only insofar as the result of the blending would strongly support the merger objectives. Such a culture could be based predominantly or even entirely on the culture of one of the merging entities or a combination of those respective cultures. To that effect, while it was broadly asserted that blending the merging entities' cultures would be essential (e.g. "if you don't address the people issues very early on in the process, then forget it", Respondent 3), some respondents cautioned that blending could be counter-productive in some cases (e.g. "you need a cultural identity. If you blend, you should be confident in your own code of conduct value statement, (and) if the business that you are thinking of acquiring might not get there, you shouldn't buy it", Respondent 6).

### 3.3.2 Structuring the M&A IT Integration Process

When asked about the structure of the M&A IT integration process (as identified in Kovala and Skok (2012), see Figure 1), the respondents confirmed the stages and broadly agreed on their respective durations. Specific important points made are below:

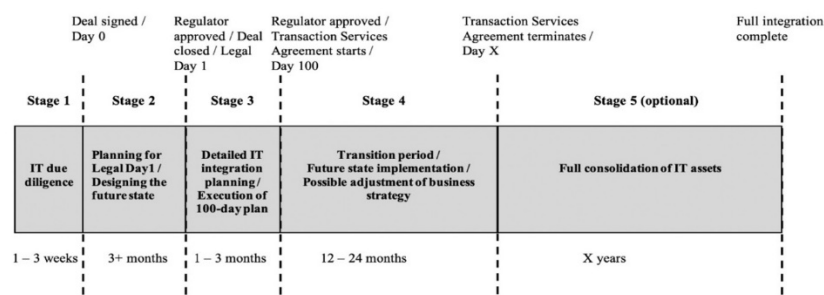


Figure 1. M&A IT integration in banking – the timeline (Kovala and Skok, 2012)

- The initial focus of the IT due diligence is financial, it then shifts to operational, and then switches back to financial analysis.
- The actual duration of phases may vary substantially with the deal size.

- Achieving the IT integration objectives may take years, but beyond the 3-years' mark the possibility of successful completion will diminish substantially.

### 3.3.3 Designing the Target Operating Model (TOM)

The ultimate objective of TOM is to deliver the business strategy of the merged entity, financially and operationally, and there was a consensus among the respondents that the measures of Validity and efficiency of the TOM design should be the ones that the business measures its performance on normally. In Respondent 9 words, "...you don't do IT for the sake of doing IT, you do it because it actually supports the business". To that effect, the following categories of the measures were identified:

- *Alignment with the group strategy of the acquirer* – the primary measure is the extent to which the TOM implements decisions about which of the acquired capabilities are to be retained and how they are to be leveraged. In Respondent 6 words, "We would want to meet key people... you get at what they are planning, and what they are doing, and what you need to change".
- *Competitive advantage* – this measure is focused on how the TOM enhances or creates the merged entity's competitive advantage, the ultimate indicator being higher return on equity. This may be achieved either via the improvement of net revenues or reduction of costs (e.g. re-engineering one of the major back-office processes reducing the headcount and costs by over 30%).
- *Achievement of other objectives and synergies targeted* – the TOM should enable the achievement of both primary integration objectives and synergies and additional opportunities that present themselves, e.g. rationalization of the IT asset portfolio, reducing third-party licenses or reliance on proprietary architecture from specific vendors, reducing dependence on staff with very specific skill sets, etc.

With the above categories of measures in mind, the significant TOM design aspects have been identified as follows (in order of importance):

1. *Consolidation of core services and operations / exploitation of internal synergies* – this is possibly the most important design aspect which most respondents assigned the highest score. In Respondent 4 words, "it is the whole point of the thing". It also tends to be more prominent in a retail bank environment because of the existence of standardized products and services.
2. *Back-office process transformation* – here, respondents highlighted the importance of consolidation and rationalization of processes rather than their straightforward transition in some altered form (e.g., automated) onto the new platform. According to Respondent 3, "...back-office consolidation can be key because there are a lot of back-office costs that can be saved in both institutional and retail, but it doesn't need to be transformational; it just needs to be consolidation".
3. *Delivery model optimization / De-duplication of services* – this aspect is closely linked to the back-office transformation in that it is its precursor. "Back-office transformation ... is a Stage 2. You need to get there first (with) process optimization..." (Respondent 1).
4. *Governance and performance management transparency* – most respondents considered this aspect essential for the proper oversight of the TOM delivery. In Respondent 8 words "It is like a hygiene factor – it must be built into the design of it".
5. *Customer journey & retention* – unanimously acknowledged as critical, this aspect was also noted as not an IT-exclusive issue.

Other noteworthy factors include (in order of importance):

1. Human resources.
2. IT infrastructure.
3. Resilience and continuity, and
4. The "winners" selection process (i.e. which systems and processes are included in one form or another in the TOM and which are not).

### 3.3.4 Institutional Changes/Processes Required to Complete the Transformation

Significant changes required to complete the transformation have been identified as follows (in order of importance):

1. *Create and empower the Information Management Office (IMO)* – this should represent both senior and operational staff who are business subject matter experts in banking as well as experts in processes and integration.
2. *Identify, prioritize, and implement value driver and synergy initiatives through a centralized process* – while the process could be difficult to implement in a complex transformation environment (e.g. according to Respondent 1, "with the complexity there is no way that someone at the managing director level is going to understand the impact of what happens downstream"), the process is considered an imperative for successful post-merger integration.
3. *Establish a governance model requiring substantial executive participation* – this process is focused on the sponsorship of the merging organizations (or, in some cases, just the sponsorship of the acquiring organization), where their firm buy-in into the objectives and process of the post-merger integration creates a support framework for the efficient execution of the transaction. In Respondent 3 words, "It has got to be at the top of the tree, by somebody who is trusted".
4. *Get the right leadership team with representation from both sides* – this process is focused on getting the leadership team to represent both merging entities, but being meaningfully involved is also very important. It also supports the transformation process of becoming a new organization with a new brand, emotionally detaching from the old brand, and creating loyalty to the new entity as soon as possible (e.g. according to Respondent 4, "you have to remove the 'us and them' brand").
5. *Plan for key staff retention* – the process is important to the integration process, with the caveat of true or alleged favouritism towards certain staff members over others having a detrimental effect on the overall morale and impacting the integration.

Other noteworthy factors include (in order of importance):

1. Develop business and integration strategy by line of business to provide clarity early in the integration (e.g. grow and expand, harmonize customer segments and products, divest).
2. Plan the degree of integration across all functions and geographies.
3. Develop integration readiness assessments for each line of business.
4. Put the right team/resourcing model.
5. Ensure customer impact/retention focus is embedded into each workstream.

Also, the following themes emerged as impactful in specific individual cases:

- The decision between the central and federated approach to integration.

### 3.4 *Quest for Openly Available Comprehensive Guidance for Key Decision-Makers in Post-Merger IT Integration In Banking*

#### 3.4.1 Does It Exist, and Is It Needed?

One of the key objectives of the study was to establish the existence of openly available practical tools instrumental in alleviating key M&A IT integration challenges the industry is facing today, specifically in the form of a comprehensive framework that would inform and guide senior decision-makers overseeing post-merger IT integrations. If such a resource existed, the authoring team would analyze it to determine whether the earlier findings from this study could complement and expand it. Alternatively, the authoring team would identify the optimal approach to creating the framework, either by designing it from scratch or by combining elements of popular models from relevant fields, such as business strategy, IT strategy, IT architecture, operations, risk, governance, and others. Furthermore, they would specify the decision-making areas the resulting guidance should cover, identify candidate models for reuse, and determine the integration team roles to be involved in the selection process.

None of the respondents indicated any knowledge of openly available comprehensive guidance for senior-level decision-makers in post-merger IT integration in banking. The respondents also strongly posited that organizations mostly utilize proprietary instruments developed with a specific focus on selected aspects of the integration rather than relying on an industry-wide unified approach. The major reasons for that would be high variability in post-merger IT integration scenarios and the existing expertise and preferences within the integration teams. This finding corroborates the authoring team's earlier analysis of literature sources in the academic and practitioner-oriented press. Nevertheless, most respondents did indicate that openly available comprehensive guidance for key decision-makers in post-merger IT integration in banking would be useful as a common

foundation for efficient practice in the industry, e.g. in Respondent 5 words, “yes, if there is a standard framework with best practices, it can only help”.

### 3.4.2 Creating the Framework

#### 3.4.2.1 The Overall Approach

According to the survey results, a comprehensive framework that could serve as a foundation for efficient industry-wide post-merger IT integration practice in banking would have to adhere to the following core principles:

- *Practical, yet generic enough* – all essential areas of the IT integration must be covered, but not in too much prescriptive detail, so that the guidance does not become a straight-jacket.
- *Customizable and risk-based* – a wide range of scenarios should be accommodated and each of them must ensure a good balance between the benefits and cost of implementation.
- *Open and driven by the collaborative community of professionals* – the guidance should be a live product of an ongoing collaboration of professionals, who would use it to exchange knowledge and experience from previous deals and to enhance their domain expertise.

On the application side, the framework would have to incorporate and account for the following elements:

- *Deal parameters* – the assessment must factor in key variables of the given IT integration scenario, such as strategic objectives of the deal, stages (see Figure 1. M&A IT integration in banking – the timeline), staff and skills available to pull multi-disciplinary frameworks together, etc.
- *Methodology-agnostic assessment* – the assessment and recommendation of specific tools and project delivery for the given IT integration scenario must be based strictly on their applicability and usefulness, rather than a preferred approach (e.g. the one the given team or individual have more experience with or the one used by default by their organization).

When asked about the potential viability of creating the framework by combining elements of popular models from relevant fields over designing it from scratch, the respondents’ opinions were overwhelmingly in favour of the reuse of existing material, thereby producing a composite rather than a monolithic product. The two chief benefits of such an approach were named as follows:

- *Combining existing models capitalizes on the knowledge already accumulated in the industry* – as relevant popular methodologies (e.g., TOGAF, COBIT, ITIL, etc.) represent the tried and tested approach, the practical application of a comprehensive framework utilizing elements of those methodologies would potentially be less risky and be more readily accepted by the industry as a valid approach.
- *It is easier to apply this type of framework in a stressful context* – ensuring effective collaboration of the integration teams from the merging entities in a scenario that is time-constrained and has high stakes can be challenging. Applying a framework composed from blocks that are already known to the practitioners would flatten the learning curve and facilitate speedier application.

To that effect, selecting and combining elements of the popular models would have to be:

1. *Grounded in existing technology* – in most IT integration methods (e.g. take-over, standardization, or synchronization) the existing technology would effectively condition the merged business TOM configuration and thus determine the choice of popular frameworks to be utilized (e.g., TOGAF, ITIL, etc.).
2. *Adherent to relevant standards and policies* – the resulting framework must accommodate relevant key standards and regulations (e.g., international accounting standards, GDPR, etc.).
3. *Relevant, cost-effective, and practical* – the resulting framework must be cost-effective and practical to implement in a range of IT integration scenarios.
4. *Role-based* – the resulting framework must flexibly accommodate both the perspectives of key stakeholders in the IT integration project (e.g. strategy, operations, infrastructure, project delivery, organization and stakeholder management, etc.), and varying degrees of availability of resources.

#### 3.4.2.2 Key Specialist Roles to Involve in the Selection Process

To account for the broad spectrum of views on the post-merger IT integration objectives, delivery method, and outcomes, the following roles have been identified as key in providing input into the framework design:

- *Company director* – the role is important because the efficiency of the transaction requires a full understanding of the deal parameters and governance. People in this role would ensure the business objectives are

met by identifying specific business units, applicable methodologies and the roles required to carry out the work. They are also legally accountable for the decisions of their subordinates.

- *Business user* – the role would advise the IT architects and system engineers in terms of functional/non-functional requirements of the integrated IT platform, thus they must have a say in what particular popular models provide building blocks for the comprehensive framework.
- *Service delivery* – the role would work alongside the business user and IT engineer in delivering the service enabled by the integrated IT platform.
- *Senior IT management* – this role must be engaged very early on in the selection process, as they have the best understanding of the IT landscape and will be subsequently operating the integrated IT platform.
- *IT architect* – the role would take the lead on the design of the overall IT architecture and support business units who may not fully understand all the frameworks and standards involved.
- *IT engineer* – the role would work with the IT architect on the implementation detail, to ensure the integrated IT platform design reflects the needs of the business, and then build and maintain the platform.
- *Security* – the role would ensure the cyber-security considerations are firmly embedded in the integrated IT platform design, and the associated risks are monitored and controlled on an ongoing basis while operating the platform.

#### 3.4.3 Decision-Making Areas and Candidate Popular Models for Reuse

Firmly aligned with the perspectives of key stakeholders and specialist roles to be involved in the IT integration project, the following decision-making areas were identified as essential to be covered by the comprehensive framework:

- Business and IT strategy.
- Business and IT architecture:
  - a. Service delivery (functional and non-functional),
  - b. Service protection (disaster recovery, overall business continuity and resilience planning).
- IT infrastructure.
- Operations:
  - a. Business continuity,
  - b. Service delivery,
  - c. Cybersecurity.
- Change, project and programme management.
- Risk and compliance.
- Supplier management.
- Governance.

In terms of the popular tools, models, frameworks, and standards that could inform the design of a robust post-merger IT integration framework, the following were identified as most relevant:

- For the overall integration process planning, strategy tools, business case, and balanced scorecards (Nair, 2004) would be the most relevant instruments.
- At the IT architecture, infrastructure, service delivery, and governance level, popular frameworks such as TOGAF (The Open Group, 2018), COBIT (ISACA, 2018), ITIL (TSO, 2020) and similar ones are likely to be used.
- For compliance purposes, banking and financial services-specific regulatory frameworks, such as MiFID (Comana et al., 2019), Dodd-Frank (Leledakis & Pyrgiotakis, 2022), EMIR (Ugeux, 2014), and SYSC8 (Financial Conduct Authority, 2021) would be high on the agenda.
- For cybersecurity and risk-based due diligence, one would be looking at established standards such as NIST SP 800-39 (National Institute of Standards and Technology, 2011).
- For the overall IT integration project/program delivery, Agile-based approaches would be generally more useful due to their adaptability in evolving organizations' circumstances. Still, the traditional (waterfall) approach

continues to dominate due to the tight merger timelines, often not leaving much space for multiple iterations in the integration process.

Here, the authoring team made a somewhat surprising discovery: some of the seemingly popular choices scored quite low on the relevance meter. For instance, many relevant ISO standards (e.g., ISO/IEC 38500 (Calder, 2008), ISO/IEC 9000 (Mauch et al., 2023), ISO/IEC 27000 (Kunas, 2012), ISO/IEC 20000 (Clifford, 2011)) were often referenced to give the impression that the design in question was “standards-informed” rather than for their practical value.

Overall, the above selection of popular frameworks reinforces the earlier finding that specialists overseeing post-merger IT integrations in banking are primarily guided by the deal parameters, existing technology constraints, mandatory adherence to relevant standards and policies, and, most importantly, considerations of cost-effectiveness and practicality. Consequently, the design of a comprehensive composite M&A IT integration framework must thoroughly incorporate this notion to ensure its relevance and usefulness to decision-makers in structuring IT integration projects, aligning them with the overall M&A strategy, planning the execution in a manner that is easily understandable to all key stakeholders, and seeing the process through in a regulations-compliant and cost-effective way.

#### **4. Conclusions**

This study integrates academic theory and extensive practitioner input to provide a comprehensive examination of post-merger IT integration practices within the banking sector. Unlike previous studies that have predominantly focused either on theoretical frameworks or limited practitioner insights, this research leverages the expertise of senior-level IT integration practitioners, who collectively possess over 220 years of experience across 30 major banking M&A transactions. This dual approach offers a richer, more nuanced understanding of the complexities involved in IT integration during mergers and acquisitions within the industry.

The research underscored the necessity for a flexible, risk-based approach to post-merger IT integrations that aligns business and IT objectives, ensuring that technology integration supports broader business transformations and synergies. It also delivered practical insights into prevalent technology-related issues and strategies to address them. Decision-makers can benefit from the detailed examination of integration approaches, methodologies, and key focus areas, which can inform their planning and execution of post-merger IT integrations.

The study identified a critical gap: the absence of a publicly available, comprehensive reference guide for post-merger IT integrations in banking. Practitioners surveyed demonstrated little interest in adopting entirely new frameworks but expressed a preference for a comprehensive composite M&A IT integration framework that organically integrates elements of existing popular models. Such a framework, tailored to specific integration scenarios, would be highly beneficial, offering a structured yet flexible approach to IT integration. To that end, the study laid the groundwork for developing this practical, adaptable framework by identifying the overall approach, key specialist roles, decision-making areas and candidate popular models that could be used to source building blocks for it. This proposed framework could serve as a valuable tool for both academic research and practical application, guiding senior decision-makers in the banking industry through successful post-merger IT integrations.

#### **Informed consent**

Obtained.

#### **Ethics approval**

The Publication Ethics Committee of the Canadian Center of Science and Education.

The journal and publisher adhere to the Core Practices established by the Committee on Publication Ethics (COPE).

#### **Provenance and peer review**

Not commissioned; externally double-blind peer reviewed.

#### **Data availability statement**

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

#### **Data sharing statement**

No additional data are available.

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## Appendices

### *Appendix 1. The survey instrument (abridged)*

#### Explore the technology-related issues most prominent in the M&A integration.

1. In the list below, please rank and comment on the technology-related issues prominent in the M&A integration that you have been a part of (on a scale from 1 to 10)
  - a) Key IT personnel not involved in due diligence/planning of the integration
  - b) Lack of clarity for existing IT roadmaps
  - c) Difficulty deciding on the Target Operating Model (TOM)
  - d) Complexity of existing landscapes/interdependencies in existing systems
  - e) Inadequate assessment of future merged systems capacity needs
  - f) Key person dependencies
  - g) Lack of documentation
  - h) Vested interest of staff
  - i) Outsourced IT partners and suppliers
  - j) Software licenses
  - k) Difficulty integrating/maintaining legacy systems
  - l) Siloed, bad or incomplete data
  - m) Poor performance/loss of key people
  - n) IT integration a cause for security vulnerabilities
  - o) Regulatory compliance at risk with no clear and consistent view of data across the organization
  - p) Cost escalation due to lack of attention to IT integration during M&A execution
  - q) Achieving synergies and growing the business a challenge
  - r) Hit on the bottom line due to poor IT integration
  - s) Large projects already active

#### IT integration – understand prevailing approach and practice

##### Objectives/method

2. The typical IT integration objectives and methods are listed below. Generally speaking, what would be the criteria for choosing either of those as a target for a given case?
  - o IT Integration Objectives:
    - Complete integration
    - Partial integration
    - Co-existence
  - o IT integration Methods:
    - Absorption
    - Symbiosis
    - Preservation
3. How has the approach you have just referred to come about?
  - a) Based on experience from previous integrations
  - b) Theory-based
  - c) Recommended by external experts (not sure whether it is practice- or theory-based)
  - d) A mix of the above
4. Is full integration important?
5. If there are compromises to be made, what do they depend on?

#### Due diligence – understand aspects and approaches.

6. In the list below, please rank the aspects IT due diligence must consider (on a scale from 1 to 10)
  - a) Business process integration
  - b) Contract and regulatory requirements

- c) Competitive positioning of the solution in the marketplace
  - d) Network design, application and information architecture
  - e) Data centres, premises and facilities
  - f) IT tools and methodologies
  - g) Internal software development processes and staff skills
  - h) Rights and ownership of source code
  - i) Scalability of the solution
7. How does one, in your opinion, determine the appropriate degree of IT due diligence required on a deal? Are there any compromises to be made?
8. Have you used/considered using any theory-based framework for IT due diligence? Why?

#### **Risk management – understand aspects and approaches**

9. NIST defines four levels of risk applicable to M&A IT integration – technical-level risk, application user-level risk, business-level risk, and financial risk. Which of those would you normally consider, and in what order?
- a) All of them
  - b) Some, but not all
  - c) None of the above; we have our own list
10. Are you aware of / using any other risk management approach specifically geared towards the M&A IT integration?
11. Is it theory- or practice-based? Why?

#### **Explore the aspects, principles, factors and approaches to M&A integration**

12. In the list below, please rank and comment on the important guiding principles for M&A integration (on a scale from 1 to 10)
- a) Formal plan
  - b) Defined synergy targets
  - c) Gaining regulatory approvals
  - d) Strong alignment between strategic business and IT integration objectives
  - e) Dedicated team involving both business and IT professionals engaged in the approval, planning and execution
  - f) Accountability and measurement criteria
  - g) Blending cultures of the merging organizations
  - h) Clear communications approach for internal and external stakeholders
  - i) Customer journey
13. In the list below, please rank and comment on the prominent design aspects of the target operating model (TOM) of the consolidated business (on a scale from 1 to 10)
- a) Consolidation of core services and operations/exploitation of internal synergies
  - b) Back-office process transformation
  - c) Delivery model optimization / De-duplication of services
  - d) Governance and performance management transparency
  - e) Human Resources
  - f) IT Infrastructure
  - g) Customer journey/retention
  - h) Resilience and continuity
  - i) The “winners” selection process
  - j) Geographical location specifics
14. Which measures do you use to assess the Validity and efficiency of the chosen TOM?
15. In the list below, please rank and comment on the institutional changes/processes required to complete the transformation (on a scale from 1 to 10)
- a) Develop integration readiness assessments for each line of business
  - b) Structure the integration organization to fit the transaction
  - c) Establish a governance model requiring substantial executive participation
  - d) Create and empower the Integration Management Office
  - e) Plan the degree of integration across all functions and geographies
  - f) Plan for key staff retention
  - g) Ensure customer impact/retention focus is embedded into each workstream
  - h) Develop business and integration strategy by line of business to provide clarity early in the integration (grow and expand, harmonize customer segments and products, divest)
  - i) Identify and manage dependencies proactively through a centralized process
  - j) Identify, prioritize, and implement value driver and synergy initiatives through a centralized process

- k) Manage organizational design and people selection in a centralized process
- l) Get the right leadership team with representation from both sides
- m) Put the right team/resourcing model

**Identify/create the "right" framework for M&A IT integration**

16. Is there an all-encompassing generally accepted M&A IT integration framework?
17. If so, do you think it is a good fit for the job? Why? (If not, what would it take to make it so?) Skip to the end.
18. If not, why do you think that is?
19. Do you think there is a need for such a framework?
20. Can it be created at all? If yes, what would it take?
21. Do you think it would be easier to create such a framework as a combination of known popular models covering specific aspects of integration rather than producing something new from scratch? Why?
22. If one were creating a composite framework from popular existing models, what would the selection criteria be?
23. What decision-making areas should it cover?
  - a) Business / IT Strategy
  - b) Business / IT Architecture
  - c) Supplier Management
  - d) Operations (business continuity/service delivery management/security)
  - e) Risk, Conformance and Compliance
  - f) Change / Project / Programme Management
24. Which of the below popular tools/models/frameworks, in your opinion, would be relevant for a comprehensive composite M&A IT integration framework? (Please rank the ones you pick in order of significance on a scale from 1 to 10)
  - a) Business / IT Strategy
    - Strategic Plan
    - Business Case
    - Balanced Scorecard
    - ITADD (Information Technology Assessment Due Diligence) / FISDD (Framework for Information System Due Diligence)
    - TOGAF (The Open Group Architecture Framework)
    - Zachman Framework
  - b) Business / IT Architecture
    - ISO19439 (enterprise integration standard)
    - NIST Enterprise Architecture Model
    - Zachman Framework
    - TOGAF (The Open Group Architecture Framework)
  - c) Supplier Management
    - ITIL
    - PwC SRM Maturity Model
    - Carter's 10C model
  - d) Operations
    - TCO / ROI (total cost of ownership/return on investment)
    - ISO22301 (standard for business continuity)
    - ISO27031 (ICT continuity best practice)
    - ITIL (ICT service delivery methodology)
    - ITPO (IT performance optimization)
    - Lean
    - 6Sigma (approach and methodology for eliminating defects in any process)
    - ISO9001 (quality management standard)
    - Baldrige Excellence Framework
    - ISO27001 (specification for an information security management system (ISMS))
    - ISO20022 (standard for electronic data interchange between financial institutions)
    - PCI DSS (Payment Card Industry Data Security Standard)
    - CoBIT (Control Objectives for Information and Related Technologies)
  - e) Risk, Conformance and Compliance
    - ISO38500 (international standard for corporate governance of IT)
    - CoBIT (Control Objectives for Information and Related Technologies)
    - SYSC8 (Systems & Control handbook)
    - Unified Compliance Framework

- COSO (enterprise risk management framework)
  - MoR (Management of Risk)
  - ISO27001 (specification for an information security management system (ISMS))
  - PCI DSS (Payment Card Industry Data Security Standard)
  - f) Change / Project / Programme Management
    - PMBOK (Project Management Body of Knowledge)
    - PRINCE2 (PRojects IN Controlled Environments)
    - MSP (Managing Successful Programmes)
    - AgilePM (Agile Project Management)
    - AgilePgM (Agile Programme Management)
    - CMMI (Capability Maturity Model Integration)
    - CoBIT (Control Objectives for Information and Related Technologies)
  - g) Financial / industry-specific
    - BCBS239 (Risk Data Aggregation and Reporting Principles) or equivalent
    - MiFID (Markets in Financial Instruments Directive) or equivalent
    - Dodd-Frank / EMIR (European Market Infrastructure Regulation)
  - h) General
    - GDPR (General Data Protection Regulation)
    - Anti-trust legislation
    - Sarbanes-Oxley Act
  - i) Internal frameworks
25. Which of the below roles would you normally expect to be involved in the selection process?
- a) Business user
  - b) Architect
  - c) Engineer
  - d) Service delivery
  - e) Audit
  - f) Security
26. Is there any order of precedence/authority in the above list? Why? Do you think this is how it ought to be?
27. What are the notable factors/constraints here?
- a) Nature of the transaction
    - M&A
    - Demerger
  - b) Nature of your involvement
    - Occasional acquirer
    - Serial acquirer
    - Advisory
  - c) Motivation (e.g. “not invented here” vs. use “must be”)
  - d) Time
  - e) Internal politics
  - f) Regulatory

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