IT Governance and Post-merger Systems Integration

By Mukul Pareek, CISA, ACA, AICWA

Corporate strategy today is increasingly reliant upon nonorganic growth through mergers and acquisitions (M&A). The volume of M&A activity is increasing after several quiet years, and today's business environment emphasizes governance and risk management as much as operational and financial efficiencies. M&A activity is now part of business-as-usual for most organizations, and not merely a once-in-a-lifetime corporate event. This creates a unique challenge for chief information officers (CIOs) and information security personnel who need to manage the integration of the merging businesses' systems according to an established governance framework that can stand up to subsequent scrutiny.

Transaction risks, or the risks from an M&A transaction gone bad, can be a source of personal liability for corporate officers. A source of transaction risk is the integration of the merging entities' IT systems, which, if not done correctly, may render impossible the realization of many of the synergies factored into the merger valuations. The use of an appropriate risk assessment and governance framework can help manage transaction risks and demonstrate that the right governance processes were applied in managing the merger.

Many companies are setting up board-level M&A committees, with the CIO and IT professionals directly reporting to them in respect to their roles in the post-merger integration efforts. Therefore, IT integration needs to be controlled using repeatable, mature processes carried out under an established framework, as opposed to being managed as once-off, *ad hoc* projects.

Part of the governance needed over merger integration is to achieve operational objectives; for example, poorly integrated systems could mean deserting customers, lack of a focused corporate brand identity for the newly merged entity and spiraling costs. Timely integration of systems and processes is necessary for the merged entity to derive the economies of scale and eliminate duplicate functions to allow the synergies to be achieved.

Companies face many choices when bringing together their systems. The resulting duplication of more than one application system serving the same business process in each of the merged entities means that the merged entity could either move away from one of the systems or continue both of them with data aggregation at a high level that provides a global picture for the new combined operations, or the opportunity may be used to implement something completely new. Integration is not merely about consolidating data from disparate systems, but also about evaluating options, making decisions, and prioritizing and resourcing the choices made. Every new integration project is an opportunity to review IT governance goals and performance.

Like all other integration issues, people factors and human sensitivities play the most important role in deciding the direction of the systems integration. The background of key officials in the merged organization, the philosophy at the top and issues of perception relating to the relative efficiency of the merged companies play an equally important role in deciding the course to be followed for the systems integration effort. Decision-making around mergers tends to be judgmental, with key decisions taken first and later justified by financial criteria. The integration effort around the systems of the two entities involved is often no different. An appropriate governance framework makes it possible to build a rational case for the systems integration option ultimately adopted.

The rest of this article considers:

- Applying the *Control Objectives for Information and related Technology* (COBIT) IT processes to manage an integration project
- Options that a company can consider in a post-merger scenario when looking at systems integration
- Special considerations that the IT project manager may need to take into account while executing the project

COBIT IT Processes as a Project Driver

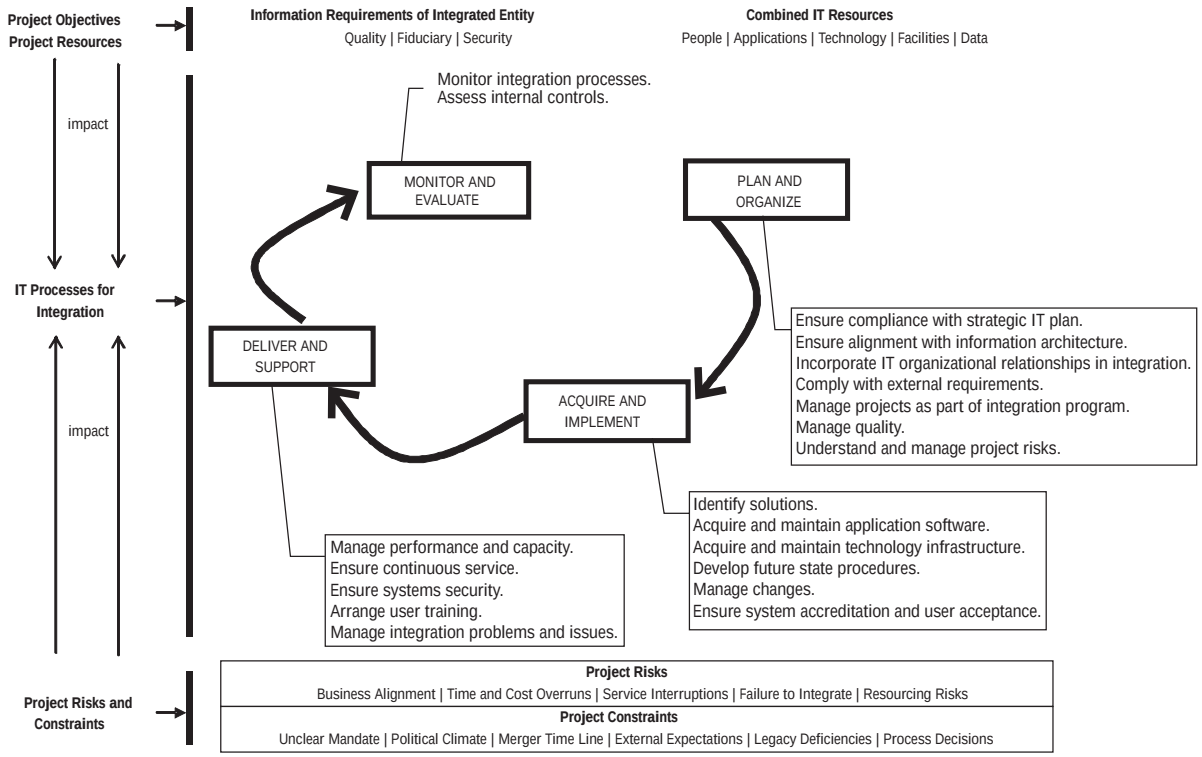
COBIT can be used to help ensure that project plans incorporate generally accepted phases in IT planning, acquisition and development, service delivery, and project management and assessment. Most of COBIT's IT processes and related control objectives can be used as a framework to drive an IT program for merger integration.

Figure 1 depicts how an IT integration exercise would be carried out within COBIT's domains.

Project objectives are determined at the initial stages of the project and are driven by business requirements from the overall integration program. These requirements can almost always be translated into specific informational requirements that drive the project objectives. Project resources include the entire repertoire of what comprises IT resources, including people and the available technology. IT processes that need to be carried out to complete an integration project can be mapped to COBIT domains and help organize a complete effort that addresses business requirements and alignment with the business and IT strategy within an overall framework of strong and auditable internal controls.

Merger integration projects tend to be high-risk as well as high-profile, and IT's failures can undermine not only the overall integration program, but also the credibility of IT. Project risks need to be continually reassessed at each stage of the project, and the project manager must be aware of the myriad non-IT-related environmental constraints to which he/she is subject.

Figure 1—Project Objectives, Resources, Risks and Constraints Influence the Execution of Project Processes



Special Considerations

Much of the guidance available through COBIT directly applies to a post-merger or acquisition situation. The project manager carries out the different IT processes, considers the control objectives and uses the COBIT framework to guide the efforts of the integration team.

The COBIT framework is available in the public domain and should be referred to for a detailed explanation of the different IT processes. This paper focuses on the special challenges, particularly those relating to application evaluation and implementation, that a merger situation presents. The following sections discuss the special considerations that the systems integration project manager needs to take into account for each of the four COBIT domains.

Special Considerations: Plan and Organize

Understanding the Constraints to Integration

Aggressive integration targets early in the project are a common mistake. While setting the milestones, it is always worthwhile to understand the extent to which project constraints set the bounds on what can realistically be achieved. These constraints can apply along multiple dimensions, depending upon the context. There certainly will be resource constraints; motivational issues that lead to some people not contributing their maximum; contractual and licensing issues that may affect the order of prioritization for the systems integration; and, of course, there may be political constraints where surplus managers have an interest in doing things a certain way. Additionally, the corporate team driving the merger may have a time line from which the IT manager may need to work backwards as he/she derives project plans, and these may further be related to external expectations, say at the board level, or the market's expectations. There may be legacy issues around architecture (choices relating to applications that are too big to deal with in such a time line), and these may considerably constrict the space in which the project manager operates. Decisions on common business processes may not be timely from functional managers, and the IT project manager may need to proceed with a best-guess approach, with built-in contingencies to deal with gaps.

All these factors may lead to a suboptimum alternative being pursued in the short term, but as long as there is a conscious understanding of these issues—the overriding long-term objectives—the integration team will have done a job that stands up to scrutiny in hindsight.

Documenting the Systems Landscape

An inventory of the processes and the supporting systems and technology in each of the merging entities is the first step for a systems integration team. This information should be detailed at the process level, through an initial high-level summary matrix. Identifying the key business processes and the underlying systems, together with high-level data, can help keep the integration effort productive.

Detailed system maps are required for each of the processes after a high-level analysis, as internal systems tend to become fairly complex with linkages to sophisticated end-user-computing functionality or interfaces into local or regional applications. It is important to bear the Pareto principle in mind when doing this inventory exercise—do not put 80 percent of the effort into what brings only 20 percent of the overall benefit. Core organizational processes should receive more attention than

Figure 2—Assessing Implementation Risk

CobiT IT Process		Integration Project Task	Risk Assessment				
			High	Medium	Low	Immaterial	Not Sure
PO1	Define a strategic IT plan	Ensure compliance with strategic IT plan					
PO2	Define the information architecture	Ensure alignment with information architecture					
PO4	Define the IT organization and relationships	Incorporate IT organizational relationships in integration					
PO8	Ensure compliance with external requirements	Comply with external requirements					
PO9	Assess risks	Assess integration risks					
PO10	Manage projects	Manage IT integration projects					
PO11	Manage quality	Establish project quality plan					
AI1	Identify automated solutions	Identify integrated application					
AI2	Acquire and maintain application software	Obtain solution software					
AI3	Acquire and maintain technology infrastructure	Establish technology infrastructure					
AI4	Develop and maintain procedures	Develop future state procedures					
AI5	Install and accredit systems	Accredit integrated applications					
DS3	Manage performance and capacity	Reassess performance and capacity requirements					
DS4	Ensure continuous service	Ensure continuity of service					
DS5	Ensure systems security	Ensure security configured in applications					
DS7	Educate and train users	Arrange user training					
DS10	Manage problems and incidents	Manage integration problems and issues					
M1	Monitor the processes	Monitor integration processes					
M2	Assess internal control adequacy	Assess internal controls					

Figure 3—Assessing Business Risks

CobiT Information Criteria	Measured by	Risk Assessment				
		High	Medium	Low	Immaterial	Not Sure
Effectiveness	Overall rating					
Components	Relevance					
	Pertinence					
	Timely delivery					
	Consistency					
	Usability					
Efficiency	Overall rating					
Components	Cost of provisioning					
	Productivity measure					
Confidentiality	Overall rating					
Components	Unauthorized disclosure					
	Protection of sensitive information					
Integrity	Overall rating					
Components	Accuracy					
	Completeness					
	Validity					
Availability	Overall rating					
Components	Information availability when required					
	Safeguarding of necessary resources					
Compliance	Overall rating					
Components	Compliance with statutes and regulation					
	Compliance with contractual obligations					
Reliability	Overall rating					
Components	Reliability for financial reporting					
	Reliability for compliance reporting					

internal back-end processes with a limited user base.

Special Considerations: Acquire and Implement

Determining Options

The integration team needs to investigate options along a time-based framework—what is possible in the medium term and what is desirable for the longer term. Ideally, both options lead down the same path, but occasionally that may not be possible given operational constraints.

Option I: Retain Both Systems, Building an Integration Layer on Top

Sometimes business processes may be quite complex and intertwined with the underlying software applications, such that it is necessary to retain both systems. In most of these cases, it is invariably necessary to build a data warehouse or other integration area that extracts the data from the two systems, transforms the data into a common denominator using a mapping program/system and loads the data into the data warehouse. This "do nothing" option is not costless given the need to build the integration layer.

Option II: Adopt One of the Two Companies' Systems

This clearly implies a choice that rejects one of the two systems, if they are not the same. This may be a "no-brainer" option if one company is much larger than the other.

Option III: The Transformational Approach

Sometimes a merger (with associated integration funding) may present the opportunity to move to a new best practice solution that is different from the systems of the companies. In some cases, a transformation of the business process or a move to a new business model may change the fundamental assumptions behind the integration effort, and a completely new set of business requirements may emerge requiring a different approach. New best-of-breed systems or outsourcing

are examples where neither of the companies' systems are continued in the future.

Even when the two companies are using the same software application, a choice still needs to be made, as they are bound to be running separate instances on separate servers and an integration may not be straightforward due to differences in the data architectures. A choice still needs to be made as to which company's systems should be used as a starting point to which the other company's systems are migrated.

The Evaluation Process

The evaluation process depends not only on the monetary impact of the decision, but also on a range of strategic issues that need to be considered. These issues may not be easily quantifiable, for example, due to the interdependence with much of the other merger activity that occurs simultaneously in the organization. It may be necessary at times to skip the cost-benefit quantification process, as not much may be achieved by putting a monetary amount on everything. However, it is certainly possible to rank these considerations on a desirability index that runs, for example, from –3 to +3, and bring some form of objectivity and transparency to the integration decisions ultimately taken.

Some considerations that the integration team needs to consider while evaluating the options identified earlier include strategic and quantifiable factors.

Strategic and organizational considerations include:

- Criticality of external facing interfaces
- The amenability of different systems to changes
- Process homogeneity in the two organizations
- Attractiveness of underlying technological architecture
- Application feature set—This has to do with pure functionality available to end users in each of the different options.
- Vendor desirability due diligence
- Strategic organizational direction
- Volume metrics for the underlying process
- Organizational bandwidth for change
- Level of risk

Implementation risks can be assessed using the tasks in the COBIT framework and a risk assessment worksheet like that shown in **figure 2**.

Business risks can be evaluated along the information criteria set out in COBIT, as shown in **figure 3**.

Quantifiable factors include the hard monetary amounts that can be identified with a particular option. These, among others, include:

- Implementation effort
- Staff retraining costs
- Ongoing recurring costs

Special Considerations: Deliver and Support

Project Prioritization and Resource Allocation

An IT integration project following a merger is unlikely to ever involve a single application. In fact, it needs to be managed as a program with each major process and its related applications run as a project. Even after the projects have been determined and solutions identified, there still may not be enough resources around to actually carry out all of them simultaneously. At this stage, a project prioritization, followed by a resource allocation and scheduling exercise, needs to be undertaken as part of the organization's program management processes. The IT manager needs to prioritize the projects that should be undertaken first before others are carried out as part of a project portfolio selection exercise.

Special Considerations: Monitor and Evaluate

Project monitoring, including monitoring integration processes and the assessment of the internal controls embedded in the general IT process and those in the applications, needs to receive attention as part of the monitoring exercise. These activities can be carried out following the guidance available from COBIT.

Summary

In the current business environment that emphasizes controls, merger integration projects are an opportunity for the profession to step in and help embed good governance practices as part of what is often a transformational change for the business. This is an opportunity to connect IT governance with strategy by helping in its realization. COBIT is a ready tool available to IT practitioners, that offers a comprehensive best practice governance platform for managing a post-merger IT integration effort. At the same time, it also provides the right risk assessment framework that can help identify and evaluate business choices and their respective risk-benefit trade-offs in a manner that is structured and performance-oriented.

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