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# Putting digital process innovation at the center of organizational change

When a merger is announced, the IT organization has a unique opportunity to help the company reimagine its technology landscape and clarify its digitization strategy.

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When it comes to mergers, acquisitions, or divestitures, IT professionals are necessarily focused on the immediate tasks of streamlining unwieldy IT systems; given the complexity and sheer size of the integration task, they must be selective about what projects and changes they can tackle within the first 100 days. That shouldn't preclude them, however, from looking a bit further ahead in the integration schedule and identifying how the business could eventually revamp its processes in ways that can create significant long-term value.

IT organizations' initial reaction to mergers and acquisitions has typically been to reduce the scope of change where possible, weather the storm, and

resolve as many technical issues as possible by announced "go live" dates. They have tended to focus on maintaining what is there—primarily, costly legacy systems that add a complexity tax to every business activity undertaken. The organization can become mired in a long, frustrating integration process that yields only some (or even none) of the intended benefits of the acquisition or merger.

Instead, IT leaders should take the time to reconsider their IT architectures in the broader context, considering not just the requirements for the first 100 days of the merger but also the potential efficiencies the company may gain over time from digitization as well as the technical

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## Takeaways

There are three steps organizations can take to encourage digital process innovation after an M&A: streamline end-to-end processes, define how information and data are managed, and reexamine the organizational structure and operating model.

Acquiring companies can increase their revenue from R&D efforts by up to 25 percent when they and their targets take advantage of digital processes.

The companies that can seize the unfrozen moment just before or just after an announced merger or acquisition have an opportunity to realize significant long-term change.

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solutions the business needs to meet its efficiency objectives. Indeed, IT leaders should systematically review their options for building a more agile frame around existing and acquired systems. A focus on the implementation of new or enhanced technology-enabled ways of working—or digital process innovation—can help companies simplify the technology landscape, reduce overall IT costs, and bring products and services to market quicker, thereby realizing greater earnings potential.

In this article, we present a three-point framework for encouraging the pursuit of digitization during M&A transitions—namely, by performing end-to-end mapping of business activities, assessing and improving data management and analytics expertise, and exploring new organizational roles and operating models. To help illustrate how these activities may be carried out, we consider the potential effects of introducing digital processes in a consolidating pharmaceutical and medical-device market. In our experience, however, the framework discussed here can be applied in companies in any industry facing M&A opportunities and integration decisions.

### Potential impact of digital process innovation

Our research indicates that introducing digital processes and capabilities throughout a company can facilitate acquisitions, mergers, or divestitures. Consider the market for pharmaceuticals and medical products; the average value of M&A deals in this industry is rising as more companies seek to streamline their R&D, supply-chain, sales, and marketing operations while still increasing market share<sup>1</sup> (Exhibit 1). However, in this industry and

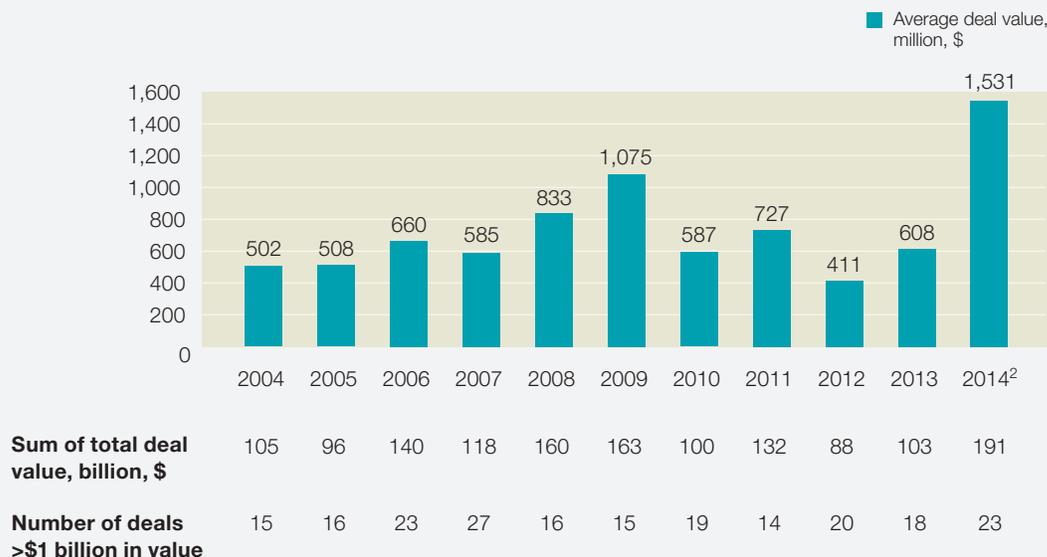
others, successful deals have been hindered by poor cultural fit, poor or slow execution, lack of adequate planning, and a limited understanding of the technologies and digital capabilities each side brings to the table.

One medical-device manufacturer, for instance, acquired a start-up firm, seeking to capitalize on the smaller firm's expertise in technologies for creating digital services for customers. The device manufacturer announced the acquisition and quickly entered into a multiyear rebuilding project. While the integration period was under way, dynamics in the healthcare market continued to change, and by the end of what turned out to be an extended transformation period, the IT goals the company had set at the beginning now seemed outdated given emerging tools and technologies. Rather than capture the full value intended from the deal, the company was facing significant cost overruns and was lagging competitors.

Our research and industry analyses indicate that acquiring companies can increase their revenue from R&D efforts by up to 25 percent when they and their targets can jointly take advantage of digital processes that are enabled by big data and advanced analytics to unearth innovative ideas, make product-development decisions, and collaborate more effectively. They could also increase their revenue from sales and marketing initiatives by launching new or shared digital sales channels. And they could realize a 5 percent increase in revenue attributed to operations by using virtualization, automation, and other digital

**Exhibit 1 The average value of M&A deals in the pharmaceutical and medical product industry is rising.**

**Average deal value and total deal volume<sup>1</sup>**



<sup>1</sup> Includes deals involving biotechnology, medical-device, and pharmaceutical companies.

<sup>2</sup> As of September 17, 2014.

Source: Strategic Transactions Database

technologies to create end-to-end visibility and management of supply-chain functions—from warehouse to shipping to delivery.

**Enabling digital process innovation**

There are three critical actions organizations can take to encourage digital process innovation: map and then streamline select end-to-end business activities, get a clear view of how information and data are managed across the parent and target companies, and reconsider the organizational structure and operating model. Underlying all of these actions is the need for a dual-speed IT architecture—one that preserves existing legacy systems on the back end but also enables quick development of innovative customer-facing applications on the front end<sup>2</sup> (see sidebar, “Digitization requires a two-speed architecture”).

**Streamline select end-to-end processes**

In the wake of an announced merger, IT executives should make system optimization decisions that go beyond planning for the go-live date. They should begin to consider which end-to-end processes in both the parent and target companies—for instance, procurement to payment, order to cash, and record to report—would benefit most from streamlining through digitization. They should categorize the applications associated with these processes and determine which technology capabilities and areas of expertise they still need to develop.

**Assess business processes.** The first step is to identify the company’s highest-level business processes to determine where there are standardization opportunities across business units, geographies, and product categories. The medical-device

## Digitization requires a two-speed architecture

A dual-speed IT architecture is a prerequisite for digital process innovation. It decouples the management of slower legacy systems on the back end from the development of faster customer-facing applications on the front end. And it allows IT organizations to release innovative digital products and services to customers more frequently without compromising the maintenance and stability of back-end systems.<sup>1</sup>

To implement a two-speed approach, companies first need to consider how their front-end software

is developed and deployed—emphasizing cocreation by IT staffers and the business units. Rather than perpetuate a system where business units throw their software requirements over the wall to IT, companies can establish new work flows whereby representatives from each group collaborate in small cross-functional teams to develop new prototypes as well as frequent updates to existing software. Companies may also want to explore cloud-based infrastructures that can speed up this development process and facilitate sharing.

A move toward two-speed architecture can take time but even a gradual shift to this model can help companies digitize business processes at a relatively quick pace. The period just before or just after an announced merger or acquisition provides an ideal opportunity for companies to look at their existing IT architectures and consider whether there is a significant gap between back-end and front-end processes, and how best to close that gap.

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<sup>1</sup> Oliver Bossert, Chris Ip, and Jürgen Laartz, “A two-speed IT architecture for the digital enterprise,” December 2014, mckinsey.com.

manufacturer mentioned earlier had targeted its R&D processes for reinvention; with the acquisition of the small start-up, the company wanted to launch products more quickly and incorporate customer feedback into the development process. IT executives sought to engage multidisciplinary teams that could quickly integrate new technologies (Internet of Things, 3-D printing, and so on) into the organization. This meant creating new, more agile ways of working.

A mapping exercise can help companies see process flows across business functions and spot any gaps in their technology capabilities. Organizations that prioritize supply-chain operations, for instance, may clearly see a need to introduce automation technologies to facilitate their sales and distribution planning as well as their transportation and warehousing activities—for instance, automating the collection and analysis of data to identify which size trucks are required for certain deliveries, where particular items are stored within a warehouse, and what the best storage options are.

Or, they may seek to build up their expertise in advanced (and sometimes proprietary) analytics and algorithms to aid demand management—for example, generating sales forecasts and identifying purchase patterns. In those business functions in which a company’s technology capabilities are more advanced, there may be opportunities to cut costs through standardization—for instance, there may be redundant processes being used within supply-chain and finance functions.

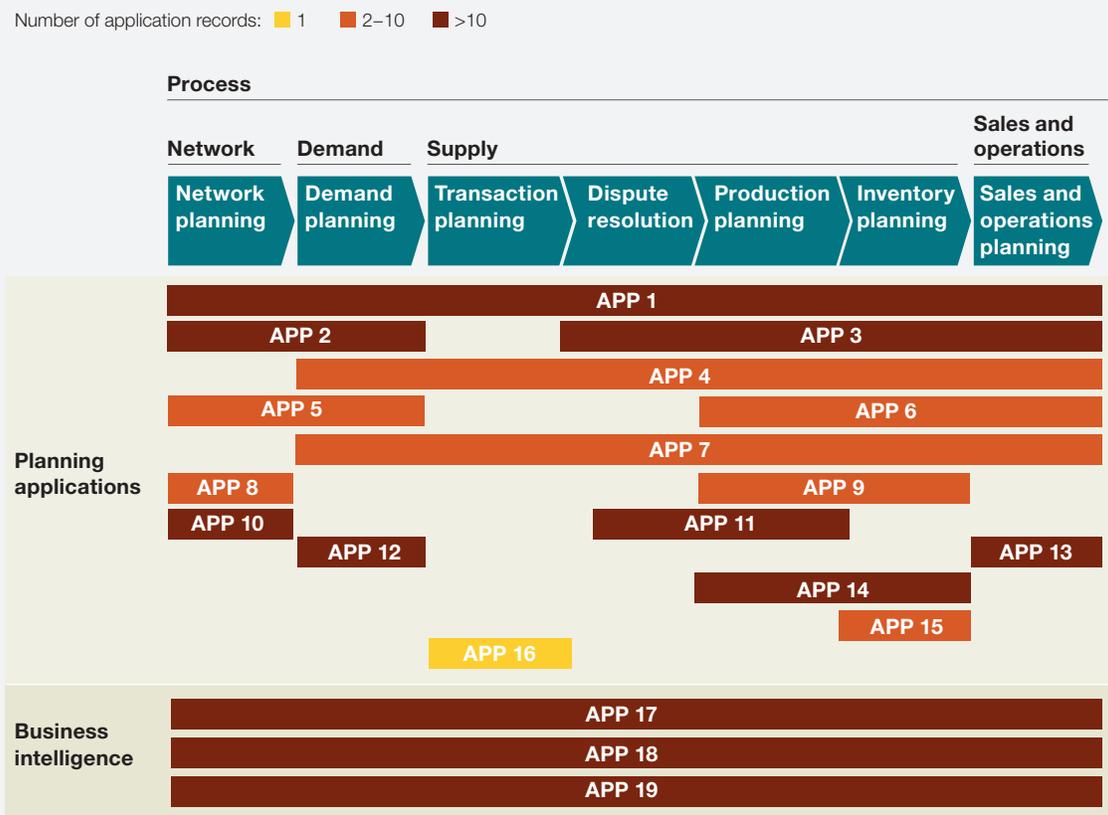
**Assess business applications.** The second step is for companies to evaluate their software applications—those of the target company as well as those of the acquiring firm. Mapping these applications to individual activities, within different business functions and divisions, allows IT executives to easily spot overlaps and redundancies in their application portfolios. One planning application, for instance, might be relevant across a number of functional areas while another may be relevant only for transportation planning or only for inventory

planning (Exhibit 2). The period just before or just after the announcement of a merger is a good time to take this inventory; both companies have an opportunity to determine how to reconcile and simplify their individual IT landscapes before figuring out how to actually make them work together. Indeed, applications should not be modified, retired, or rationalized without a full understanding of why the companies' IT architectures are configured the way they are. To that end, IT organizations on both sides of the deal will need to capture relevant information about their applications, such as total number of apps, total cost of ownership, usage metrics, and application ownership (which divisions in which locations). Most critical is maintaining a single, consolidated view of this information.

[Get a clear view of how information and data are managed](#)

To ensure that everyone has access to the information required to pursue digital process innovations, companies must establish a single system of record across all functions, divisions, and geographies. The system must comprise all relevant data—for instance, sales, inventory, and procurement records—plus the latest analytics tools and a reliable global delivery service, all maintained by a dedicated team of knowledge professionals. The medical-devices company, for example, created a center of excellence for data management, which included representatives from the business units and the IT organization. The company also hired analytics experts to provide an empirical perspective

**Exhibit 2 Mapping business applications to business processes provides a clear accounting of merging firms' digital assets.**



on which data should be collected, how they should be collected and disseminated, and how databases should be curated and managed over time. From a hardware standpoint, organizations will likely need to repurpose their existing data-management systems, pursue standardization options where appropriate, and develop a rigorous strategy for creating, using, and storing data as well as related governance policies. Again, a steering committee or center of excellence can play a central role in setting these policies.

#### Reconsider the organizational structure and operating model

It will be critical for companies seeking to digitize select processes to create a new management structure and operating model with several new roles. The most critical role is the global process manager or global process owner. This individual will be charged with overseeing process standardization across divisions, regions, countries, and product lines. He or she will be well positioned to provide an end-to-end view of digital processes and a framework for the implementation of any new step changes. He or she will also work closely with business and IT leaders, and division-specific program managers to understand “local” needs as well as “global” needs. Indeed, the medical-products manufacturer we described earlier ended up creating two other management positions to collaborate with its newly appointed global process manager. The business-relationship manager acts as a liaison between the IT organization and the business side and is charged primarily with defining potential digital process innovations at the division level. The IT-delivery leader is focused on execution; he is responsible for ensuring that any process innovations are properly rolled out across the organization.



To incorporate digital process innovation into their operations, IT executives will need to change some of the prevailing behaviors and mind-sets in their companies. Apart from creating a snapshot of current technology capabilities, IT executives will need to get buy-in for digital process innovations from the business side; they will need to demonstrate how the pursuit of new, technology-enabled ways of working is in direct service to desired business outcomes. As mentioned earlier, they may need to configure teams differently—not just by creating new roles, such as the global process manager, but also by reimagining existing roles in business, IT, and product-development functions. Above all else, transparency is required—among team members and in all the data captured and reported.

The companies that can look beyond the first 100 days of an announced merger or acquisition, when everything in the IT architecture is up for discussion and refinement, have an opportunity to realize significant, lasting value for the organization. ■

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<sup>1</sup> Andrew Ward, “No end in sight to wave of pharma dealmaking,” *Financial Times*, April 26, 2015, ft.com.

<sup>2</sup> Oliver Bossert, Chris Ip, and Jürgen Laartz, “A two-speed IT architecture for the digital enterprise,” December 2014, mckinsey.com.

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