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Architect Your Business—Not Just IT![1]

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Architecture is about the "art or practice of designing and building structures," especially buildings.[2] But businesses require "architecting" too. And indeed, business architecture practices are becoming quite fashionable. But what is business architecture and how do you do it? MIT CISR completed two in-depth case studies and interviewed forty-seven business architects and other IT and business leaders to answer those questions.

What we found is that, despite the title, business architects rarely design their company's business. In fact, architecture has become a bad word in some companies, mostly because architects in those companies are seen as more of an obstacle than a problem solver. But with the pace of business change accelerating, many companies are finding that their processes, structures, and systems are not providing the agility they need to respond to new opportunities and threats. In other words, companies are not "architected" for the digital economy.

Most of the business architects we interviewed reported that they are struggling to gain traction outside the IT unit.

There is no consensus on what business architecture entails or how it can make a business more successful. This briefing summarizes research in progress,[3] with a proposed definition and approach to business architecture for leaders trying to design their businesses for the digital economy.

The State of the Art of Business Architecture

Clearly, business architecture is becoming a more established function. In a 2011 MIT CISR survey, just under half of the 146 responding firms had a business architecture function. More recently, in a January 2014 MIT CISR poll, 72% of companies had a business architecture function. Interestingly, 58% of those companies had located business architecture inside the corporate IT unit.[4]

The most common task business architects described in our interviews was the development and analysis of capability maps: comprehensive lists of all activities performed in the company. For example, one company identified roughly one hundred capabilities, mostly aligned by function (e.g., "Key Account Management," "Lead Management," and "Configure Price Quote" were all capabilities within the sales function). Capability maps can be used with maps of existing applications to identify gaps and overlaps in the applications landscape. This is a valuable step in application portfolio rationalization and can help establish priorities for IT investment. But such efforts are valued mostly within the IT unit. Most of the business architects we interviewed reported that they are struggling to gain traction.

The Growing Need to Architect the Business

Companies are responding to both the opportunities and the challenges of the digital economy with more complex, integrated strategies including (1) packaging products and services into integrated solutions that address customer needs, rather than just selling separate items; (2) offering omnichannel access to the company's products and services; (3) offering a single face to customers to make it easier to sell across various lines of business; and (4) rapidly innovating new (and often digital) products and services to expand into new markets or attract new customers.

But companies born in a pre-digital era are not designed to deliver on these strategies. In fact, the dominant design approach for large compa-

[1] In a related video—"Making Architecture Matter Beyond IT"—Martin Mocker discusses the value of business architecture.

[2] "architecture," Merriam-Webster.com. 2014. http://www.merriam-webster.com/dictionary/architecture.

[3] MIT CISR is conducting this research with Jerome Moreau, Stuart Scantlebury, and Benjamin Rehberg of BCG.

[4] Of the eighty-five companies with business architecture functions, 16% had most business architects based in a different corporate function, and 25% had them located within business units.

nies is "divide and conquer," in which individual leaders accept responsibility for success over a specific set of closely related business activities. These designs facilitate functional and business unit excellence, but they do not serve the integration requirements of the above-mentioned strategies well. Although recently adopted roles such as global process leader assign responsibility for coordinating activities across organizational units, most companies have not figured out how to integrate increasingly interdependent activities throughout the business.

Given the emphasis on the word "digital" and the integrative role of IT, it's not surprising that IT leaders are often the first to grasp the need for business architecture initiatives that can help map requirements for coordination. But architecture is not, first and foremost, a systems challenge. It is an organizational design challenge. Thus, locating a business architecture function within IT may limit impact in part by limiting expectations for business architecture to systems design.

What It Means to Architect a Business

We define business architecture as *the purposeful (re)design of processes, structures, roles,[5] incentives, and IT systems to create coherence between business purpose and business capabilities.* Business leaders have long recognized that processes, structures, roles, incentives, and systems—which we refer to as design elements—all interact with one another. Thus, designing businesses has always been challenging. But the pace of the digital economy is exacerbating the challenge.

> Together, stable operational capabilities and capabilities to facilitate rapid, targeted innovation can help companies keep design elements aligned with both one another and their business purpose.

Figure 1 summarizes our understanding of how top-performing companies design themselves to meet a high-level purpose. The business purpose is the foundation of any company's design. It is essential that the company's purpose be well-articulated, offering a clear statement of the unique value proposition for customers. For example, Wells Fargo intends to put the customer first by offering a single multichannel experience.[6] Philips' CEO has defined a strategy of local innovation leveraging global scale. Schneider Electric is transforming from a manufacturer and distributor of electrical products to a provider of energy management solutions.[7]

This statement of purpose provides a clear, long-term direction for decisions on the individual design elements. The design elements themselves (i.e., processes, structures, roles, incentives, and systems) will transform in response to winds of change such as competitive threats and new technologies. And because design elements are interdependent, shifts in one will necessitate or facilitate adjustments in others. For example, to provide global scale, Philips identified three global processes to be mostly standardized across its businesses: idea to market, market to order, and order to cash. These process changes necessitated new roles, including Executive Business Process Owner (BPO). Executive BPOs became members of the Executive Committee. In addition, the global processes required new systems, so Philips is implementing a new IT platform called the Philips Integrated Landscape (PIL) to support its global processes.[8]

The digital economy is creating such constant change that many companies are struggling to keep the various design elements aligned with both one another and their business purpose. As a result, companies' increasingly interdependent activities get out of sync. Innovations are late to market due to production delays. New products come to market before customer service agents are ready to respond to customer issues. Systems crash due to unexpectedly high volumes.

Two key architectural decisions can help address these misalignments:

1. What set of capabilities constitutes a stable base for ongoing operations
2. What capabilities are most essential to facilitating rapid, targeted innovation

In figure 1, these two architectural decisions are shown supporting the design elements and ensuring coherence with the purpose.

Designing a stable set of operational capabilities. For years, IT architects have been designing technology platforms to support core operations. Many of these platforms rely on software like ERPs or CRMs, but the implementation of the software demands changes in most if not all other design elements. These technology platforms (i.e., systems), along with implementation of other design elements, stabilize

[5] Although roles, accountabilities, and skills could be listed as separate elements of a company's design, we believe that clear role definitions establish accountabilities as well as the requirements for skills needed to perform the role.

[6] Wells Fargo, 2013 Annual Report, Dec. 31, 2013, Chairman's Letter, from Wells Fargo investor relations website, https://www.wellsfargo.com/invest_relations/annual.

[7] Jean-Pascal Tricoire, Chairman and CEO, Schneider Electric, "Group Strategy" (presentation at Investor Day, event with investors and financial analysts in Paris, France, February 20, 2014).

[8] For more detail, see M. Mocker, J.W. Ross, and E. van Heck, "Transforming Royal Philips: Seeking Local Relevance While Leveraging Global Scale," MIT Sloan CISR Working Paper No. 394, February 2014.

a company's routine operations. Philips Integrated Landscape, which supports standard processes governed by Executive Business Process Owners, is an example. MIT CISR's research on operating models describes how companies can approach the design of core operating capabilities.[9] Once implemented, these capabilities ensure the quality and reliability of what's not changing in the business, while allowing management to focus on what is changing.

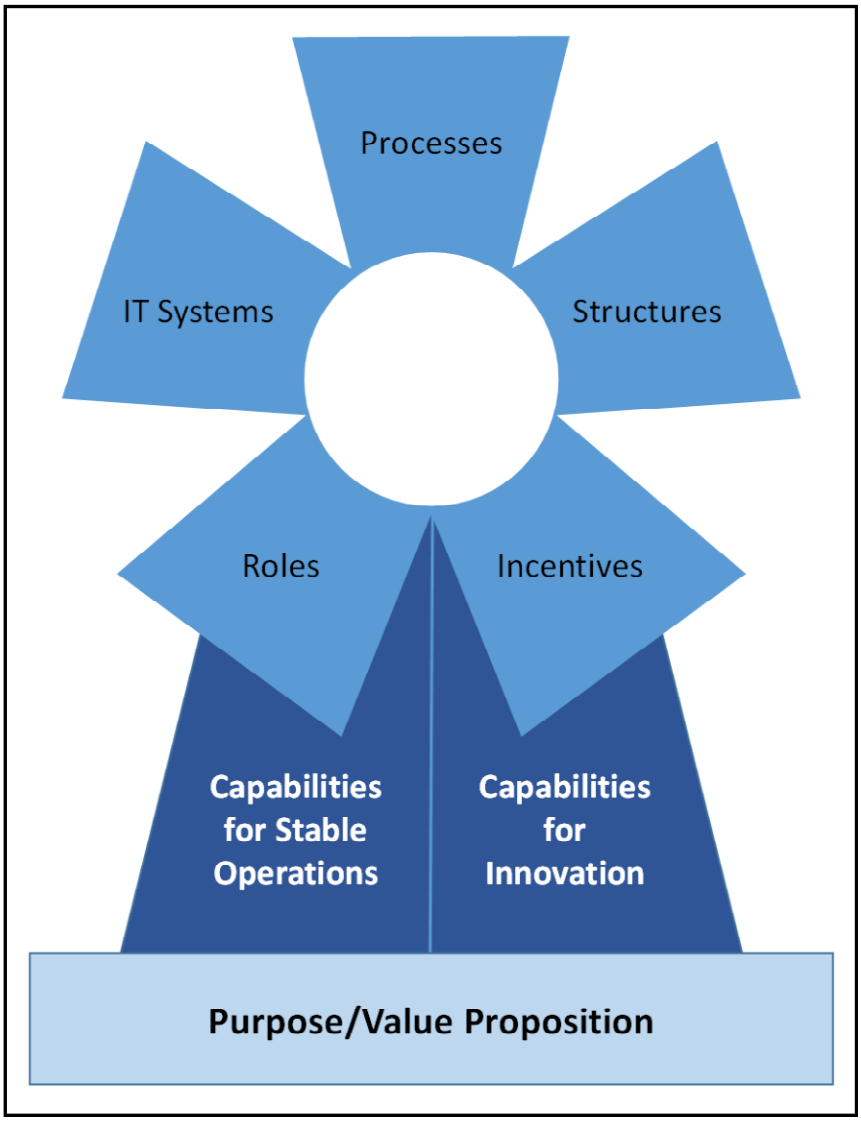
Designing innovation capabilities. In the digital economy, companies need more than operational capabilities—they need capabilities that support targeted business changes. As with stable operational processes, some of this design is related to systems, particularly systems that leverage newer technologies like social, mobile, analytics, cloud, and Internet of Things. But again, the changes touch all design elements. So this is not just an IT architecture issue; it's about business architecture. Westpac, for example, supplemented its base of mobile applications with a new mobile strategy unit and new business and IT roles.[10] These design elements supported Westpac's Mobile First strategy. Many companies are trying to become more agile, but business agility as a goal in itself will not lead to effective design. Identifying what specific activities will add value by introducing rapid innovation is essential to achieving a company's purpose.

At first blush, processes, structures, roles, incentives, and IT systems designed to address requirements for stability might seem to conflict with requirements for innovation. However, design elements can often support both. For example, Nordstrom, a US-based department store chain, has defined its purpose as providing speed, convenience, and personalization in customer service. This effort is apparent in constant innovation around channels and customer service offerings. Nordstrom has built innovation capabilities around mobile technologies paired with redefined salesperson roles. But Nordstrom's innovation also depends on operational capabilities that the company has been developing for at least ten years, including a single view of inventory and store-to-store fulfillment processes. In fact, the design of stable operational capabilities may be essential to building innovation capabilities.

What Is the Role of the Business Architect?

We expect business architecture to become an essential competency for companies in the digital economy. But business architects will need to be much more than business process analysts or experts in capability mapping. Guided by a clearly stated business purpose, business architects will work with other business leaders to shake up, prioritize, orchestrate, and design the business—processes, structures, roles, incentives, and systems. Instead of exhaustive lists of capabilities, they will focus on critical gaps, map a plan for addressing those gaps, and negotiate requirements with leaders who may struggle with all the interdependencies. IT architecture was a useful introduction to the practice of architecture within companies, but that was just the beginning. Now is the time to redesign your business for success in the digital economy. Your future may well depend on the quality of your business architecture.

Figure 1: Architecting Your Business



[9] The operating model is detailed in J.W. Ross, P. Weill, and D. Robertson, *Enterprise Architecture as Strategy: Creating a Foundation for Business Execution,* Harvard Business School Publishing, 2006.

[10] P. Weill and S.L. Woerner, "Mobile Customer Engagement Pays Off," MIT Sloan CISR Research Briefing, Vol. XIV, No. 9, September 2014.

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