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Five enterprise-architecture practices that add value to digital transformations

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Enterprise-architecture teams can play an integral role in transforming companies with technologies. New survey findings and firsthand experience highlight the practices that matter most.

What does it take for traditional companies to create value with digital technology? McKinsey research suggests that successful digital reinventors—digital natives and digitally transformed incumbents—employ a range of approaches, such as investing boldly and adopting cutting-edge technologies at scale. Efforts like these can run into various difficulties, though. In our experience, a push to launch more digital applications can make a company’s technology landscape increasingly complex and difficult to manage, to the point that it impedes transformation programs.

Things don’t have to be this way. A new survey by McKinsey and Henley Business School highlights the need for enterprise architects to facilitate digital transformations by managing technological complexity and setting a course for the development of their companies’ IT landscape. These responsibilities fall within the typical enterprise-architecture (EA) team’s remit, which is to manage the way that all of the company’s IT systems work together to enable business processes. But not all EA teams carry out their responsibilities in the same manner. Survey respondents who described their companies

About the survey

McKinsey has conducted a survey on enterprise architecture in collaboration with Henley Business School since 2015.¹ Respondents come from a number of countries and a variety of industries. The findings presented in this article are drawn from more than 150 responses collected in 2017. (Respondents are not required to submit answers

to every survey question, so the number of respondents can vary from one question to another.) The findings are based on a two-sided t-test with an error value of $p \leq 0.05$. Respondents are asked to identify their companies as “digital leaders,” and these choices form the basis for our comparative analysis of digital leaders and other companies.

¹ To participate in the survey, please visit easurvey.org. Participation is free, and results will be shared with all respondents.

as “digital leaders” indicated that their EA teams adhere to several best practices (see sidebar, “About the survey”). These teams engage senior executives and boards and spend extra time on long-term planning. They track their accomplishments in terms of how many business capabilities are deployed, while implementing more services. And they attract talent primarily by offering people appealing assignments, ample training opportunities, and well-structured career paths. Below, we take a closer look at these best practices and their benefits.

1. Engage top executives in key decisions

A number of EA teams we know have helped accelerate their companies’ digital transformations by participating in discussions of business strategy, which deal increasingly with technology. When we asked survey respondents about their involvement with various stakeholder groups, 60 percent of those at digital leaders named C-suite executives and strategy departments as the stakeholders they interact with most. By comparison, just 24 percent of respondents from other companies said they interact most with C-suite executives and strategy departments.

Survey respondents who say their companies are not digital leaders indicated that it’s common for their executive teams and boards to discuss enterprise

architecture only when significant issues arise, such as spending decisions, while CIOs alone usually oversee the enterprise architecture.

While few if any EA groups would claim not to be focused on the business, effective teams truly invest their time in understanding business needs and convince senior leaders to invest time in enterprise architecture. Our experience suggests that digital transformations are more likely to succeed when board members understand the importance of technology for their business model and commit their time to making decisions that seem technical but ultimately influence the success or failure of the company’s business aims.

2. Emphasize strategic planning

The survey results also indicate that EA teams at digital leaders maintain a clearer orientation toward the future than teams at other companies. One hundred percent of respondents from digital leaders said their architecture teams develop and update models of what the business’s IT architecture should look like in the future; just 58 percent of respondents from other companies said they adhere to this best practice.

Another key difference emerged when we asked respondents how much time their companies devote

to strategic planning. Respondents who said their companies' EA teams devote a higher-than-average proportion of their capacity to strategic planning were also more likely to say they create added value for their organizations. (On average, respondents said strategic planning takes up about one-fifth of the EA team's working capacity.) Teams that spend more capacity than average on strategic planning were more likely to report delivering sustainable business solutions, making greater contributions to the benefits of projects, and gaining wider recognition within the enterprise (Exhibit 1).

Given the versatility of enterprise architects, leaders may be tempted to assign them to help resolve urgent problems of various kinds. However, this can cause the architecture team to spend most of its time solving problems and little or no time on advance planning. As a result, the drive to quickly fulfill demand for

particular applications takes precedence over the thoughtful design process that is required to maintain a cost effective, flexible, and resilient IT environment.

3. Focus on business outcomes

At a high level, digital transformation involves reshaping business models with advanced technology solutions. This puts a premium on collaboration between business functions and IT. In our experience, a lack of coordination between business and IT hinders large transformations. We have seen that such disconnects sometimes originate in the posture of IT functions: instead of concentrating on the enablement of business priorities, they focus excessively on the delivery of technology solutions as an end in itself.

According to our survey, EA teams at digital leaders appear to avoid this trap. Respondents from digital leaders were more likely to say that EA teams contri-

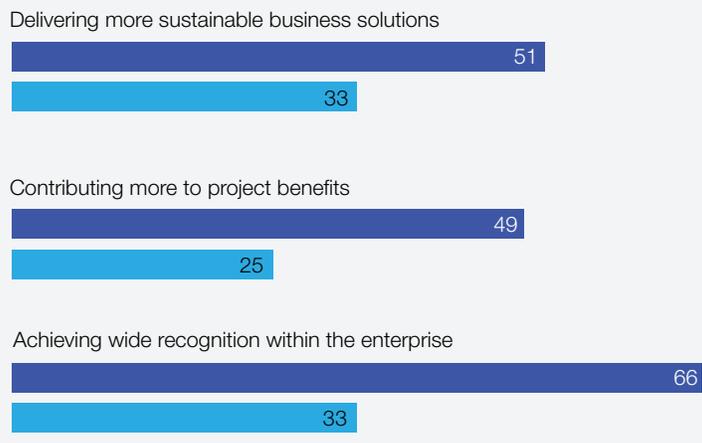
EXHIBIT 1 The enterprise-architecture department brings more value to companies when it spends extra time on strategic planning.

Average allocation of enterprise-architecture team's capacity, % of time



Enterprise-architecture team's effectiveness, % of respondents

- Companies that spend more time than average on strategic planning
- Other companies



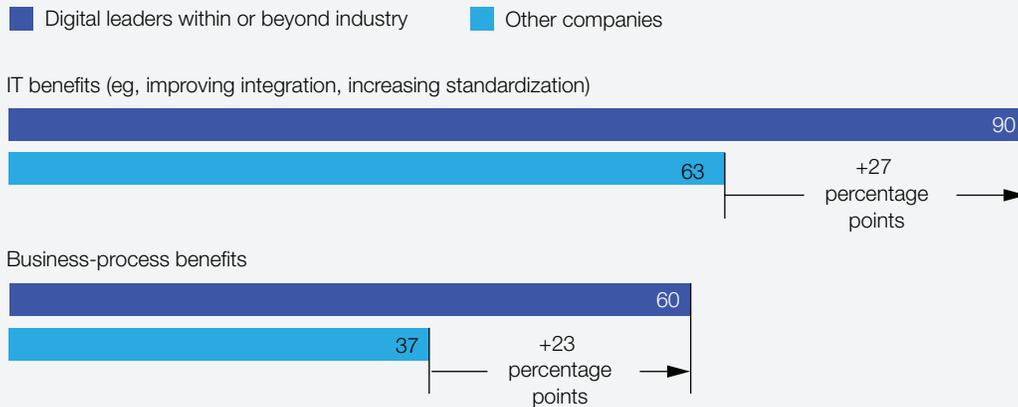
Note: Figures may not sum to 100%, because of rounding.

Source: Enterprise Architecture Survey, a joint survey from McKinsey and Henley Business School

EXHIBIT 2

At digital leaders, enterprise-architecture teams make more valuable contributions.

Benefits of enterprise-architecture team's work, % of respondents rating "high" or "very high"



Source: Enterprise Architecture Survey, a joint survey from McKinsey and Henley Business School

bute "high" or "very high" benefits to business and IT (Exhibit 2).

4. Use capabilities to connect business and IT

We've seen that an EA team can better align the IT function's priorities with the business's priorities by tracking its accomplishments with respect to the business capabilities that it delivers, rather than the sheer number of technology applications that it implements. Capabilities are self-contained business activities, usually belonging to an end-to-end business process, that result in discrete outcomes: for example, predicting a customer's next purchase so that a website or a call-center representative can make suggestions.

This use of capabilities stood out in the survey. Respondents from digital leaders were more likely to say that their EA teams use capabilities as their primary grouping for the delivery of milestones

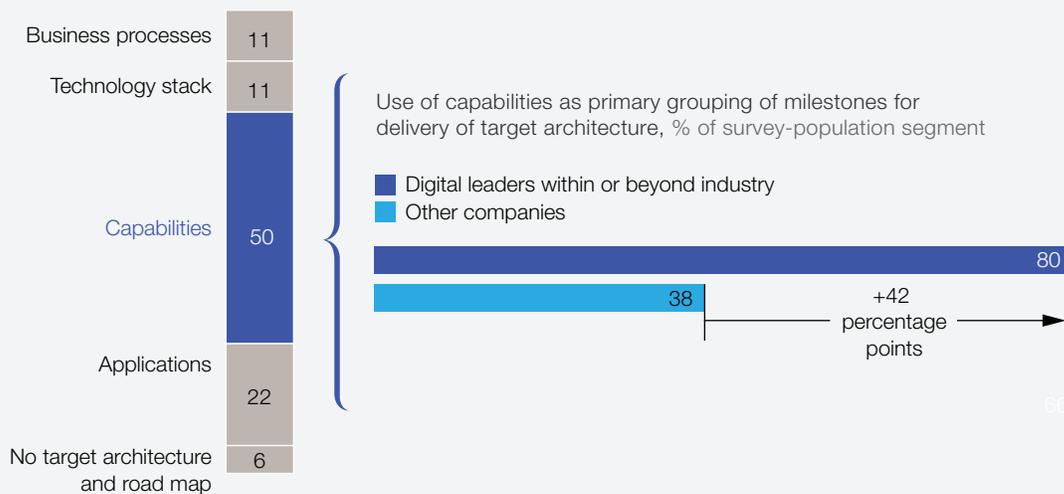
toward their target architecture (Exhibit 3). Further grouping capabilities into business domains (which generally correspond to business functionalities such as finance or customer management) can have the additional benefit of allowing an EA team to shape the IT landscape according to the business strategy.

The survey results show that digital leaders are also distinguished by how they structure their IT landscape. Digital leaders have implemented three times as many services as other companies. When it comes to integrating applications, a smaller proportion of their integrations consist of point-to-point connections between two applications (56 percent versus 76 percent at other companies), which lessens their "technical debt." Respondents from digital leaders were twice as likely as respondents from other companies to say that their companies are piloting architectures based on micro-services, which are independent components that developers assemble into software applications.

EXHIBIT 3

The enterprise-architecture department brings more value to companies when it spends extra time on strategic planning.

Primary grouping of milestones for delivery of target architecture, % of respondents



Note: Figures may not sum to 100%, because of rounding.

Source: Enterprise Architecture Survey, a joint survey from McKinsey and Henley Business School

5. Develop and retain high-caliber talent

Because EA departments play an important role in digital transformations, we’ve seen that IT leaders do well to staff them with motivated, highly skilled professionals. Yet our experience also suggests that enterprise architecture’s long-held reputation as a mundane field with limited room for advancement can create challenges when it comes to attracting top talent.

The good news is that prospective hires appear to be drawn toward exciting work that offers opportunities to learn and grow. Our survey results indicate that enterprise architects generally seek interesting challenges, recognition from their peers, learning opportunities, and structured career paths. Respondents from digital leaders were more likely to cite peer recognition, education, and well-

defined career paths as features that appeal to their employees (Exhibit 4). They were also more likely to say that they offer enterprise architects the chance to pursue career paths in departments other than enterprise architecture.

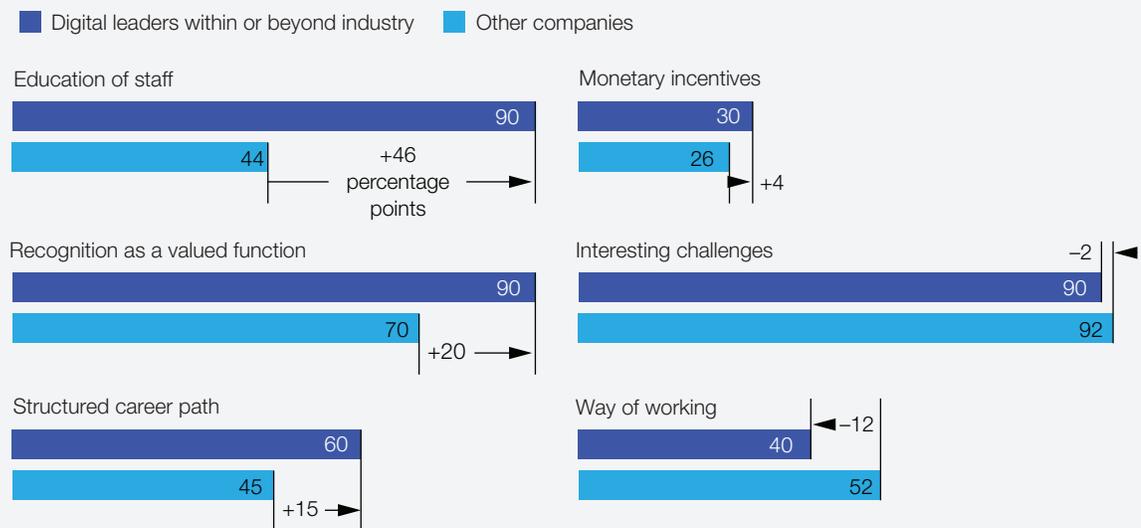
Capturing the opportunity for enterprise architecture

For EA teams, supporting successful digital transformations involves more than implementing well-chosen technology solutions. It requires an operating model that aligns governance, processes, and talent models with the business’s needs and promotes effective collaboration between business and IT. The survey findings, along with our experience in enterprise architecture, suggests that four moves can help EA teams advance their companies’ digital transformations:

EXHIBIT 4

Enterprise-architecture professionals appear motivated by interesting challenges and recognition, but digital leaders offer more opportunity.

Appeal of talent incentives, % of respondents who rated appeal “high” or “very high”



Source: Enterprise Architecture Survey, a joint survey from McKinsey and Henley Business School

- **Translate architecture issues into terms that senior executives will understand.** Enterprise architects can promote closer alignment between business and IT by helping to translate architecture issues for business leaders and managers who aren’t technology savvy. Engaging senior management in discussions about enterprise architecture requires management to dedicate time and actively work on technology topics. It also requires the EA team to explain technology matters in terms that business leaders can relate to.
- **Draw capability maps to link IT priorities with business needs.** Capability maps appear to be effective communication aids for enterprise architects: respondents from digital leaders were more likely to report using capability maps (80 percent) than respondents from other companies (38 percent). Focusing on business processes can lead companies to end up with multiple systems that perform similar functions, such as customer-relationship management. Concentrating too much on technology can cause EA teams to organize their work around building applications rather than enabling the business.
- **Start with a clear target architecture and strategy.** Digital leaders spend more time on planning the future and building a strategy to achieve it. EA departments also need to balance their long-term planning activities with meeting the business’s day-to-day demands.
- **Provide training that helps enterprise architects to succeed.** The enterprise architect of tomorrow needs similar skills to those of his colleagues on the business side: communication,

coaching, problem solving. Without these skills, architects won't be able to bridge business and IT perspectives. Companies can revise their training programs and development paths so they place greater emphasis on business and management acumen.

With these tactics, EA teams can build stronger working relationships with senior executives and managers—and thereby position themselves as strategic partners in their companies' digital transformations. ♦

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