Executive Summary

New digital technologies present both game-changing opportunities for—and existential threats to—companies whose success was built in the pre-digital economy. From a study of 25 companies that were embarking on digital transformation journeys, the full article identifies two digital strategies—customer engagement and digitized solutions—that provide direction for a digital transformation, and two technology-enabled assets essential for executing those strategies: an operational backbone and a digital services platform. A big old company needs to combine these three elements to navigate its digital transformation.

Elements of Digital Transformation at a Big Old Company

Big old companies must choose one of the digital strategies, and the choice will shape priorities for building the two technology-enabled assets—an operational backbone to ensure efficiencies of scale for critical transactional and decision-making capabilities, and a digital services platform to ensure rapid innovation of critical digital offerings for customers. These two assets allow a company to execute its chosen strategy and ultimately, to deliver both customer engagement and digitized solutions.

Two Digital Strategies

**Customer Engagement Strategy.** A customer engagement strategy aims at creating a seamless, omnichannel experience that makes it easy for customers to order, inquire, pay and receive support, in a consistent way from any channel at any time. This strategy relies on analytics applied to a growing repository of customer data, to better understand varying customer demands.

**Digitized Solutions Strategy.** A digitized solutions strategy aims to reformulate a company’s value proposition by integrating a combination of products, services and data. This type of digital strategy is driven by R&D efforts that seek to anticipate—rather than respond to—customer needs. An effective digitized solutions strategy invariably involves collecting and using additional data—often gathered through sensors. In many cases, digitized solutions may shift company revenues from the sale of products to recurring revenue from ongoing services.

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1 The full article is published in the September 2017 issue of *MIS Quarterly Executive*, available online at www.misqe.org.
Choosing a Digital Strategy. Many business leaders are reluctant to commit to one digital strategy, in part because they believe that digital success involves both customer engagement and digitized solutions. But our research found that the best strategies guided both strategic choices and operational decisions, and that committing to one strategy paid off. Even though the study showed there is a natural synergy between the two digital strategies, it is essential that an organization commits to one strategy or the other.

Two Technology-enabled Assets are Essential to Executing a Digital Strategy

An Operational Backbone Enables Operational Excellence. Companies need a strong and scalable operational backbone (also referred to as a digitized process platform) to support efficiency and operational excellence. The critically important benefit of an operational backbone is that it establishes a strong and stable foundation for introducing new digital products and features. It frees up management attention to pursue digital innovations and ensures that existing business capabilities can be integrated, as needed, with new digitally enabled capabilities.

A Digital Services Platform Enables Rapid Innovation. Because an operational backbone does not offer the speed and flexibility that companies need for rapid digital innovation, they also need a digital services platform. The architecture of a digital services platform must facilitate experimentation and provide reusable technology and digital services. A company that fails to design and build a well-defined digital services platform risks falling behind competitors that can rapidly act on digital opportunities.

Companies in our research needed both an operational backbone and a digital services platform to deliver the efficiency, reliability, speed and agility that the competitive environment demands. Although these two assets support very different business capabilities, they are complementary. Digital services invariably have to link up with the operational backbone.

The Impact of Digital Transformation on the IT Unit

At most of the companies studied, the fundamental business changes brought about by new technology-enabled business capabilities had first affected the IT unit. However, research participants anticipated that changes already occurring in the IT unit will eventually be cascaded across the entire enterprise.

Recommendations for Digital Transformation at Big Old Companies

1. Define a Digital Strategy. By articulating a digital strategy (whether customer engagement or digitized solutions) a company’s leaders can focus employees on clear objectives. With clear direction, a company can start building integrated, difficult-to-replicate capabilities to deliver on that strategy.

2. Act Now to Invest in an Operational Backbone. Investing in an operational backbone is a necessary prerequisite for success in the digital economy. Without such a backbone, a company will lack the foundational capabilities that are needed to enable its digital services platform to provide transaction transparency and access to customer data, and to support standardized business processes.

3. Architect a Digital Services Platform. Companies should start to define the architecture for a digital services platform by focusing on a small set of digital innovations that will be critical to business success. Once a company has established the data requirements for a small set of critical business components and has set up APIs for accessing the needed data, it can then build the infrastructure needed to protect, connect, analyze and support innovative digital services.

4. Design the Digital Services Platform with Partners in Mind. The study suggests that customers, suppliers and other stakeholders will want to develop innovative business services or front-end apps that also become integrated capabilities (or common business services). The digital services platform should therefore be designed with those extensions in mind.

5. Adopt a Services Culture. Companies are beginning to structure themselves around the services they provide. They are empowering service owners to deliver the innovations and efficiency that customers and employees expect. Over time, we believe, designing around business services will become the way most companies do business.

In summary, the old-school divide-and-conquer mindset is not well suited to digital transformation. The most exciting digital technology opportunities integrate products and services across functional, organizational and geographic boundaries. To succeed digitally, big old companies need to embrace new organizational structures and processes that empower their people to collaboratively experiment with technologies and deliver integrated products and services to their customers. Those that fail to heed the need for digital transformation will likely be left trailing behind in the dust.