

The background is a solid red color with a fine halftone dot pattern. Overlaid on this are several large, semi-transparent geometric shapes, including triangles and polygons, in various shades of red and dark red. In the bottom right corner, there is a diagonal section that transitions from the red background to a grey and black striped pattern, also featuring the halftone dots.

THE **ENTERPRISERS** PROJECT

**WHAT IS DIGITAL
TRANSFORMATION?**
YOUR TOP QUESTIONS
ANSWERED

WHAT IS DIGITAL TRANSFORMATION?

WE ANSWER COMMON QUESTIONS AND SHARE LESSONS LEARNED



Digital transformation is the integration of digital technology into all areas of a business, fundamentally changing how you operate and deliver value to customers. It's also a cultural change that requires organizations to continually challenge the status quo, experiment, and get comfortable with failure.

Digital transformation is imperative for all businesses, from the small to the enterprise. That message comes through loud and clear from seemingly every keynote, panel discussion, article, or study related to how businesses can remain competitive and relevant as the world becomes increasingly digital. What's not clear to many business leaders is what digital transformation means. Is it just a catchy way to say moving to the cloud? What are the specific steps we need to take? Do we need to design new jobs to help us create a framework for digital transformation, or hire a consulting service? What parts of our business strategy need to change? Is it really worth it?

A note: Some leaders feel the very term “digital transformation” has become so widely used, so broad, that it has become unhelpful. You may not love the term. But love it or not, the business mandates behind the term—to rethink old operating models, to experiment more, to become more agile in your ability to respond to customers and rivals—aren't going anywhere.

This article aims to answer some of the common questions around digital transformation and provide clarity, specifically to CIOs and IT leaders, including lessons learned from your peers and digital transformation experts. Because technology plays a critical role in an organization's ability to evolve with the market and continually increase value to customers, [CIOs play a key role](#) in digital transformation.

It's also worth noting that today's organizations are in different places on the road to digital transformation. If you are [feeling stuck in your digital transformation work](#), you are not alone. One of the hardest questions in [digital transformation](#) is how to get over the initial humps from vision to execution. It creates angst: Many CIOs and organizations [think they lag far behind their peers](#) on transformation, when that isn't the case.

Even organizations that are well down the digital transformation path face tough ongoing hurdles, like [budgeting](#), talent struggles, and [culture change](#). Let's dig in for advice for organizations at various places on that road to change.

What is digital transformation?

Because digital transformation will look different for every company, it can be hard to pinpoint a definition that applies to all. However, in general terms, we define digital transformation as the integration of digital technology into all areas of a business resulting in fundamental changes to how businesses operate and how they deliver value to customers. Beyond that, it's a cultural change that requires organizations to continually challenge the status quo, experiment often, and get comfortable with failure. This sometimes means walking away from long-standing business processes that companies were built upon in favor of relatively new practices that are still being defined.

With a plethora of articles and various definitions of digital transformation, it's easy to see why there is some confusion around the topic. For instance, [author Greg Verdino](#) focuses on what businesses that undergo digital transformation may expect to achieve. He says, "Digital transformation closes the gap between what digital customers already expect and what analog businesses actually deliver."

A [definition](#) from The Agile Elephant emphasizes all the ways businesses may need to adjust their existing practices: "[Digital transformation] involves a change in leadership, different thinking, the encouragement of innovation and new business models, incorporating digitisation of assets and an increased use of technology to improve the experience of your organisation's employees, customers, suppliers, partners and stakeholders."

And the [Wikipedia](#) definition, while vague, touches on how the effects of digital transformation extends beyond businesses to society as a whole. "Digital transformation is the changes associated with the application of digital technology in all aspects of human society," it states.

Leaders, think about what digital transformation will mean—in practice—to your company and how you will articulate it. "Digital is a loaded word that means many things to many people," says [Jim Swanson](#), Executive Vice President and Group CIO at Johnson & Johnson (and previously CIO and Head of Digital Transformation at [Bayer Crop Science](#).) When you discuss digital transformation, unpack what it means, he advises.

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At Monsanto, Swanson [discussed digital transformation in terms of customer centricity](#). “We talk about automating operations, about people, and about new business models,” he says. “Wrapped inside those topics are data analytics, technologies, and software—all of which are enablers, not drivers.”

“In the center of it all is leadership and culture,” Swanson says. “You could have all those things—the customer view, the products and services, data, and really cool technologies—but if leadership and culture aren’t at the heart, it fails. Understanding what digital means to your company—whether you’re a financial, agricultural, pharmaceutical, or retail institution—is essential.”

Why does digital transformation matter?

A business may take on digital transformation for several reasons. But by far, the most likely reason is that they have to: It’s a survival issue for many.

Howard King, in a contributed article for The Guardian, puts it this way: “Businesses don’t transform by choice because it is expensive and risky. Businesses go through transformation when [they have failed to evolve](#).”

John Marcante, CIO of Vanguard, points this out, as well: “Just look at the S&P 500. In 1958, U.S. corporations remained on that index for an average of 61 years, according to the American Enterprise Foundation. By 2011, it was 18 years. Today, companies are being replaced on the S&P approximately every two weeks. Technology has driven this shift, and companies that want to succeed must understand how to merge technology with strategy.”

Enterprise leaders have largely gotten the message—and are prioritizing accordingly. IDC forecasts that worldwide spending on technologies and services that enable digital transformation will reach \$1.97 trillion in 2022, per the (IDC) Worldwide Semiannual Digital Transformation Spending Guide. IDC predicts that digital transformation spending will grow steadily, achieving a five-year compound annual growth rate of 16.7 percent between 2017 and 2022.

“IDC predicts that, by 2020, 30 percent of G2000 companies will have allocated capital budget equal to at least 10 percent of revenue to fuel their digital strategies,” said Shawn Fitzgerald, research director, [Worldwide Digital Transformation Strategies](#). “This shift toward capital funding is an important one as business executives come to recognize digital transformation as a long-term investment. This commitment to funding DX will continue to drive spending well into the next decade.”

As of 2018, advanced analytics is the number-one digital investment—with enterprises planning to increase related deployments by 75 percent during the next 12 to 18 months, according to research from [The Hackett Group](#). This includes a particular emphasis on data visualization tools and machine learning.

Organizations are at different places in the digital transformation journey, of course. But speed has become a business imperative for all. IT leaders face pressure to show that digital initiatives continue to translate to increased agility and speed for the entire organization.

As Dion Hinchcliffe, VP and principal analyst at [Constellation Research](#), [writes](#): “The top IT executives in today’s rapidly evolving organizations must match the pace of change, fall behind, or lead the pack. That’s the existential issue at stake in today’s digitally-infused times, where bold action must be actively supported by out-of-the-box experimentation and pathfinding.”

This must be done while managing the inexorable daily drumbeat of operational issues, service delivery, and the distracting vagaries of the unpredictable, such as a major cyberattack or information breach. The CIO this year must be both a supremely masterful priority juggler and an effective digital leader from the front.”

Improving customer experience has become a crucial goal—and thus a crucial part of digital transformation. Hinchcliffe calls seamless customer experience “[the most important discriminating factor for how a business will perform.](#)”

What does a digital transformation framework look like?

Although digital transformation will vary widely based on organization’s specific challenges and demands, there are a few constants and common themes among existing case studies and published frameworks that all business and technology leaders should consider as they embark on digital transformation.

For instance, these digital transformation elements are often cited:

- Customer experience
- Operational agility
- Culture and leadership
- Workforce enablement
- Digital technology integration

While each guide has its own recommendations and varying steps or considerations, CIOs should look for those important shared themes when developing their own digital transformation strategy.

A few examples of digital transformation frameworks include:

MIT Sloan: [The Nine Elements of Digital Transformation](#)

Cognizant: [A Framework for Digital Business Transformation](#)

Altimeter: [Six Stages of Digital Transformation](#)

Ionology: [A Step-By-Step Guide to Digital Transformation](#)

What role does culture play in digital transformation?

In recent years, IT’s role has fundamentally shifted. CEOs increasingly want their CIOs to help generate revenue for the organization. According to the [2018 Harvey Nash/KPMG CIO Survey](#) of more than 4,600 CIOs, the CIO’s top operational priority is “improving business process.” But among CIOs at ‘digital leaders’—companies identified as top performers—the CIO’s top operational priority is “developing innovative new products.”

Rather than focusing on cost savings, IT has become the primary driver of business innovation. Embracing this shift requires everyone in the company to rethink the role and impact of IT in their day-to-day experience.

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Bryson Koehler, CTO, Equifax, says, “There is a [very different mindset](#) at work when you take IT out of an operating mode of, ‘Let’s run a bunch of packaged solutions that we’ve bought and stood up’ to ‘Let’s build and create new capabilities that didn’t exist before.’ If you look at the vast majority of startups, they’re not starting with giant, shrink-wrapped software packages as the base of their company. If you’re trying to create innovation inside of a large enterprise then you shouldn’t start with that either. You’re not here to run the mainframe anymore. You’re not here to run the servers. You’re not here to run the data center, or the network, or operations. That is table stakes. That’s what you can outsource.”

Although IT will play an important role in driving digital transformation strategy, the work of implementing and adapting to the massive changes that go along with digital transformation falls to everyone. For this reason, digital transformation is a people issue.

IT leaders find themselves working in cross-functional teams more than ever. Digital transformation initiatives often reshape workgroups, job titles, and longtime business processes. When people fear their value and perhaps their jobs are at risk, IT leaders will feel the pushback. Thus [leadership “soft skills”](#)—which turn out to be rather hard—are in great demand.

[Mattel](#) EVP and CTO Sven Gerjets [says leading transformation starts with empathy](#). “When your empathy is genuine, you begin to build trust,” he says. “If you don’t have an organization that is supportive and fully onboard with the transformation efforts, it’s impossible to succeed. You need to have leaders that know what “good” looks like and who are motivated to help the organization understand why you’re doing what you’re doing.”

“This will become apparent when you hear things like, ‘Hey, we’re working with your team and it feels different,’ or, ‘We can’t believe that IT delivered this project early and it met my business needs.’”

Melissa Swift, who leads [Korn Ferry](#)’s Digital Advisory for North America and Global Accounts, finds in her consulting work that [three groups of employees tend to slow transformation momentum](#): Old-timers, by-the-book players, and lone wolves.

Companies must not ignore but engage these three groups—or face perilous stalls, she writes. How to do that? Her first suggestion: Think about your population in a segmented fashion, and work to meet different segments where they are.

“Many organizations,” she [writes](#), “have rolled out the digital journey in a highly uniform manner, with the same messages and techniques deployed throughout. “Re-skilling for everyone! New teams! Welcome to the new world!” From a [change management](#) perspective, this is pure folly—and a misuse of investment dollars that might be spent more strategically targeting smaller groups. Companies should consider both digital experience and behavioral preferences of different sub-populations within their organization, and they should craft messaging, programs, and even environments to hit the right starting point and realistic end point for different groups.”

[**Read the full article for more advice from Swift:** [3 kinds of employees who hurt transformation momentum](#).]

What drives digital transformation?

An important element of digital transformation is, of course, technology. But often, it’s more about shedding outdated processes and legacy technology than it is about adopting new tech. The [Federal IT Dashboard](#) shows that in fiscal year 2017, over 70 percent of IT spend government-wide went toward operating and maintaining legacy systems.

In the healthcare industry, despite widespread use of smartphones and other mobile devices among healthcare providers, “close to 80 percent (79.8 percent) of clinicians [continue to use hospital-provided pagers](#) and 49 percent of those clinicians report they receive patient care-related messages most commonly by pager.”

Examples like these span all industries, and the prevalence of legacy technology hinders CIOs’ ability to successfully embark on a digital transformation strategy. [Research from Forrester](#) suggests, on average, CIOs spend an average of 72 percent of their budgets on existing IT concerns, while only 28 percent goes to new projects and innovation.

If businesses want to evolve with the rapid pace of digital change today, they must work to increase efficiency with technology wherever possible. For many, that means adopting agile principles across the business. [Automation technologies also help many IT organizations gain speed](#) and reduce [technical debt](#).

How can I get started on digital transformation?

If all of this makes you feel woefully behind, fear not. One of [the biggest misconceptions](#) CIOs have about digital transformation is that all of their competitors are much further ahead of the game than they are. That’s because “there’s much admiration of (and popular press around) the fastest transformers, but little critique of how hard transformation is or how long it may take for a typical Global 2,000 company,” says Tim Yeaton, CMO of Red Hat.

As businesses formulate their own digital transformation strategy, there is much to be learned from CIOs and IT leaders who have already begun their journeys. Below is a collection of stories and digital transformation case studies you can explore further.

[10 digital transformation must-reads](#)

[Matson CIO: The most painful, gut-wrenching part of leading transformation](#)

[How hybrid cloud aids digital transformation](#)

[SunTrust CIO’s formula for speed relies on cloud, DevOps](#)

[Budgeting smarts for digital transformation: 4 tips](#)

Where can I learn more?

Digital transformation is a massive undertaking, especially for larger, established companies. When done right, it will produce a business that is more aligned with customer demands and resilient in the fast-moving digital future.

For more insights on digital transformation, see these resources:

Our entire [article collection on digital transformation](#) offers more how-to advice.

[Teaching an elephant to dance](#) (Ebook on digital transformation)

[The automated enterprise](#) (Ebook on managing IT with automation)

How leading CIOs drive revenue: [Harvard Business Review Analytic Services report](#)