Capgemini Consulting

Organizing for Digital: Why Digital Dexterity Matters

Organizational Design is Key to Reaping the Rewards from Technology Adoption

In the late 19th century, the industrial world's factories underwent a massive technology shift as electric power replaced steam. However, at the outset, electrification was not accompanied by significant changes in operations. As a result, it did not give productivity levels the expected shot in the arm. In fact, it took nearly three decades for productivity to surge, when factories used electrification to radically rethink their organizational design (see Figure 1).

With electric motors, manufacturers realized they could power smaller groups of machines – and eventually individual machines – rather than all machines at once. These developments gave rise to efficient layouts, such as assembly lines, with Henry Ford famously reducing the time to build a car from 12 hours to 2.5 hours in 1913[1]. *Productivity surged as a consequence of organizational change, not just the emergence of a new technology.*

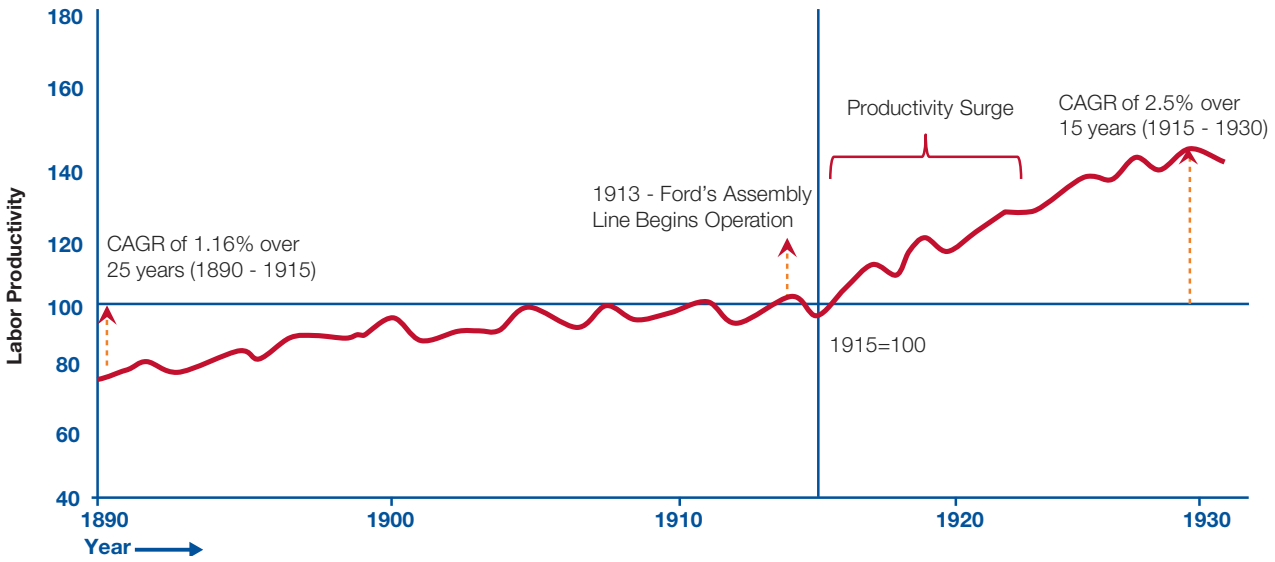
Fast forward from the age of electricity in the 19th century to today's digital 21st century, and we can see history repeating itself. Today's Henry Fords – the digital masters – are harnessing digital technologies to redesign their operations and create truly digital organizations:

> *"Today's Henry Fords – the digital masters – are harnessing digital technologies to redesign their operations and create truly digital organizations."*

Starbucks. The company made organization change its top priority as it embarked on its digital transformation. It carved out an internal, venture capital-style incubator for digital technology called Starbucks Digital Ventures. The unit remained separate from the company's Marketing and IT groups, but collaborated closely with both to drive innovation in the company's digital strategy. Further, it brought key customer-facing initiatives under the chief digital officer's purview in an effort to boost customer loyalty and growth. As Starbucks chief digital officer Adam Brotman says, *"Before the CDO position was created, my job was web, mobile and social media. It wasn't global digital marketing, it wasn't card, and it wasn't loyalty. Those were in three different separate groups in the organization. We realized those were all one thing and they all work best together. If you listed the vision for where we wanted to go with digital, it was encompassing all those things."*[2] By bringing these fragmented responsibilities together, Starbucks strengthened its digital unit and set the stage for its digital leadership. Today, 12 million people actively use Starbucks apps, conducting seven million transactions a week. Starbucks' loyalty program has eight million active members, helping the company become one of retail's most powerful mobile ecosystems[3].

General Electric. The aircraft engine to industrial products conglomerate understood the importance of large-scale organizational change in the journey to becoming a digital organization. Back

Figure 1: Labor Productivity in the Electrification Era Surged as Organizations Redesigned Operations



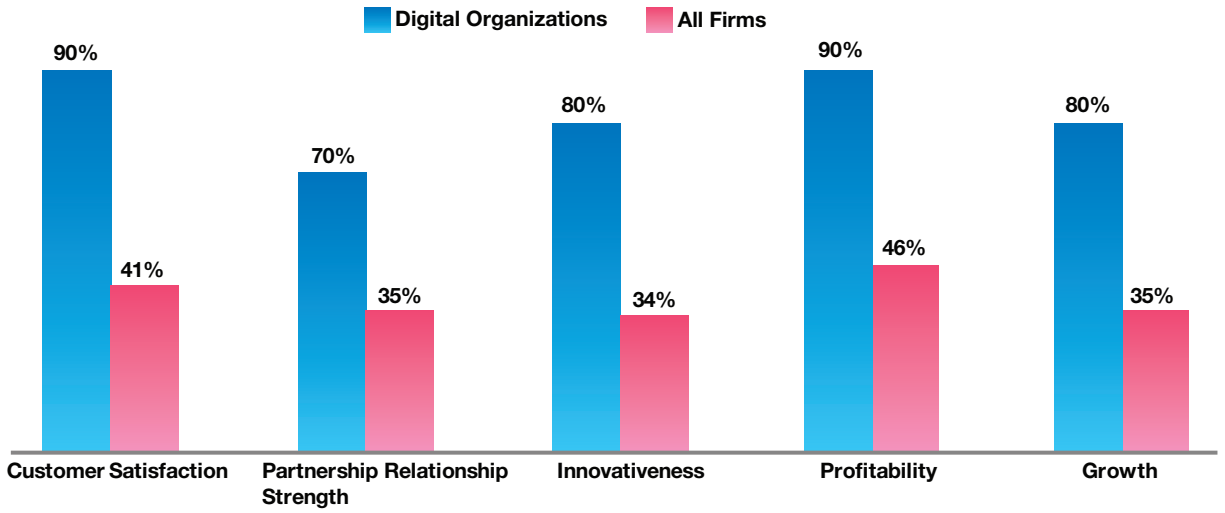
Source: Adapted from Erik Brynjolfsson and Andrew McAfee, "The Second Machine Age", January 2014

in 2011, GE's software efforts were distributed across the firm. Software talent, as well as products, were based in silos, creating a fragmented landscape and undermining its objectives. Moreover, analytics capabilities were limited. As GE's chief digital officer, Bill Ruh, puts it, *"Every one of our products had a different underpinning platform, architecture, technology, and set of vendors. It was taking us years to build the software, and years to get it out the door. And customers' needs were changing too rapidly to keep up."*[4] In the years that followed, Ruh and other senior leaders identified and eradicated key inefficiencies by consolidating and co-locating talent and building standard, enterprise-wide technology platforms. The company set aside $1.5 billion for boosting analytics capabilities[5], assembled 1200 software engineers, and formed GE Digital – which brings all of GE's software and IT capabilities under one organization– to become the go-to-platform that powers the Industrial Internet[6]. Today, GE monitors and analyzes 50 million data elements from 10 million sensors on $1 trillion of managed assets daily[7]. Using the new platform, GE Aviation alone analyzed 340TB of data from 3.4 million flights on 25 airlines to improve asset performance and minimize disruptions[8].

HSBC. The multinational banking and financial services organization has been under pressure to drive down its cost base in order to stay competitive. It also had to meet the growing industry-wide need for automation. These pressures forced HSBC towards a large-scale transformation that had organizational change at its heart[9]. The transformation will shift 70% of its operations staff to offshore locations and plans to eliminate 750 legacy systems across different organizational units. The ultimate aim is to streamline IT and operations in order to generate up to $5 billion in cost savings and more than $1 billion of investment in digital. Furthermore, HSBC will significantly re-shape global finance and risk functions to save up to $700 million by re-engineering, simplifying and automating processes. Its simplified organizational structure will also eliminate nearly 1 ,000 dual reporting lines.

> ***"GE set aside $1.5 billion for boosting analytics capabilities, assembled 1200 software engineers, and formed GE Digital – which brings all of GE's software and IT capabilities under one organization."***

Figure 2: Digital Organizations Outperform their Peers



N=135; Percentages indicate share of firms whose respondents report "Better than most" or "An Industry Leader" performance relative to their competitors or industry

Source: Capgemini Consulting analysis

Digital Organizations Enjoy a Competitive Edge

Our research shows that digital organizations – firms that have redesigned their organizations to adapt to digital while investing significantly in technology – reported that they outperformed competitors on key performance indicators, such as customer satisfaction and innovation (see Figure 2). For example, 90% of digital organizations believe they achieve a class-leading performance in customer satisfaction. This drops to 41% across all respondents to the survey. Digital organizations enjoy a competitive edge and are better equipped to deal with future disruption.

To understand more about the capabilities and qualities of these digital organizations, we launched an in-depth research study, together with MIT Center for Digital Business, involving over 270 senior executives across 135 enterprises, 13 industries and 28 countries. In the following sections, we consider the key issues for organizations as they navigate the transition towards digital organizations. In this report, we provide:

- The **blueprint of the digital organization** and an assessment of the importance of dexterity in today's fast-changing environment.
- A **guide to becoming a digital organization**: the mindset, practices, talent, and data and tools required.
- A **self-assessment of your digital organization maturity**, to understand where your organization sits on the spectrum from beginner to accomplished performer.

> *"Digital organizations – firms that have redesigned their organizations to adapt to digital while investing significantly in technology – reported that they outperformed competitors on key performance indicators."*

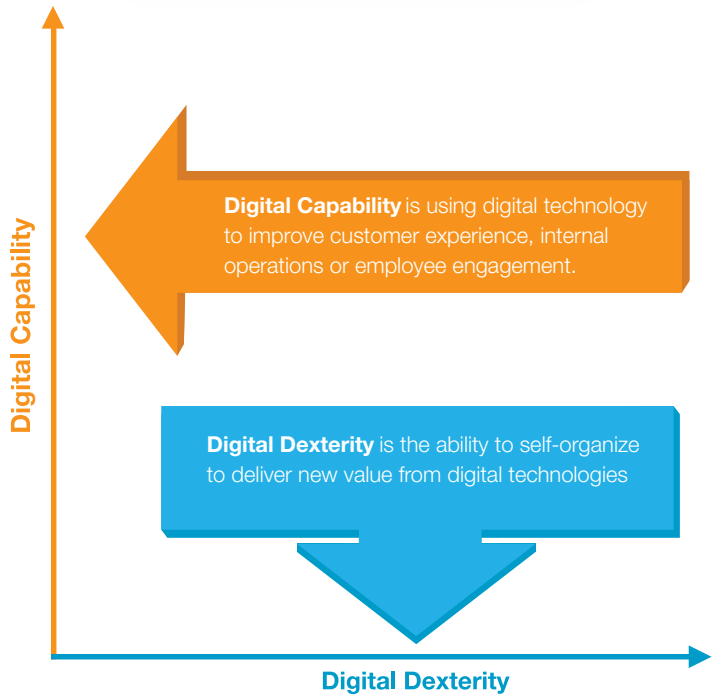
Blueprinting Your Digital Organization[a]

In our previous years' research into digital transformation with the MIT Center for Digital Business, we showed how highly accomplished organizations are using investments in digital technologies to fundamentally transform their capabilities in key areas, from improving the customer experience to streamlining operations[10]. However, in today's volatile and disrupted world, capability leadership is not enough. Organizations also need to be nimble and flexible – dexterous – if they are to respond to ever-changing technology advances, emerging competitive disruptions, and changing customer needs (see Figure 3).

Digital capability is how companies achieve specific tactical objectives, such as providing services on a mobile application or facilitating customer self-service. A number of organizations have developed digital capabilities to work in new ways. For instance, over a third of respondents (36%) say their organization uses digital technologies to collaborate across organizational boundaries and 31% say they use digital to standardize operations.

Digital dexterity is the ability to rapidly adapt to change: new technologies, changing customer expectations, industry shifts, or internally-driven resource allocation. Dexterity allows an organization to flex, as the COO of a leading services company describes. *"We are very fluid,"* he explains. *"We tend to organize based on the information and the challenges that we face at hand. So, we […] reorganize frequently. And sometimes things are centralized, and sometimes things are decentralized[11].* Enterprises with high levels of digital dexterity exhibit considerable flexibility in terms of their organization design, allowing enterprise divisions to pivot in response to market opportunities. They do so while working closely with technology partners and vendors to rapidly take advantage of new business opportunities.

Figure 3: A Digital Organization Combines Digital Capability with Digital Dexterity



Source: Adapted from Soule, D., Puram, A., Westerman, G. and Bonnet, D. "Becoming a Digital Organization: The Journey to Digital Dexterity" (September, 2015), Working Paper, available at http://ssrn.com/abstract=2697688.

Dexterity: critical in a fast-changing world

For Tanya Cordrey, Chief Digital Officer at Guardian News & Media, complexity and competitive intensity have reached new levels. *"The world is getting more complicated,"* she says. *"We're still wrestling with the enormous changes in the competitive landscape. Not only do we have a thousand-and-one fantastic little start-ups nibbling at our feet, you also have the likes of Google, Facebook and Apple who have decided to park tanks on the lawn of news. We have issues around new technologies and where news and content is delivered. We also have shifts in user behavior. All of those are changing all of the time."*[12]

[a] *This section adapted from Soule, D., Puram, A., Westerman, G. and Bonnet, D. "Becoming a Digital Organization: The Journey to Digital Dexterity" (September, 2015), Working Paper, available at http://ssrn.com/abstract=2697688.*

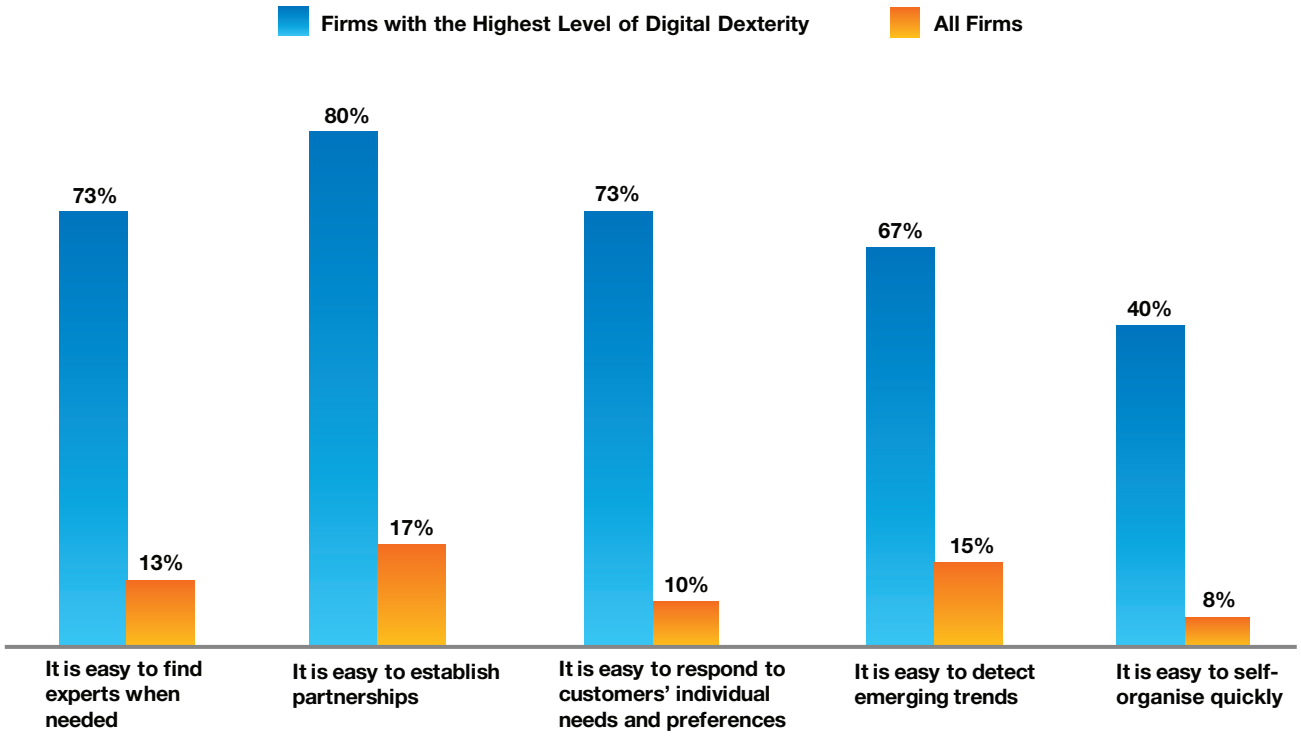
Digital Dexterity Offers Significant Advantage

Digital capabilities drive business results in key areas such as improving the customer experience, boosting employee engagement or enhancing internal operations. However, digital dexterity allows organizations to seize opportunities – and respond to disruptions and changes – much more quickly than their traditional competitors. Our research found that organizations that are high on digital dexterity are more responsive, better at finding talent, and able to self-organize at speed. They also enjoy significant advantages in identifying and re-deploying expertise when it is needed and are better at establishing partnerships (see Figure 4).

But dexterous digital organizations like these are few and far between. This cadre of leading organizations exhibits a digital-first mindset, has digitized their operations at company-scale, and holds significant experience and skills in digital technologies. The workforce of digital organizations is highly engaged, collaborative and seamlessly uses technology tools, operations and customer data to deliver a superior performance. However, our analysis suggests that only 7% of companies have made the full transition to this level of sophistication. The majority of organizations are in a phase of transition - journeying towards becoming digital organizations in four key stages (see Figure 5).

> *"Digital dexterity allows organizations to seize opportunities – and respond to disruptions and changes – much more quickly than their traditional competitors."*

Figure 4: Advanced Level of Digital Dexterity is a Key Advantage over Competition



N=135; Percentages indicate share of organizations agreeing with each statement

Source: Capgemini Consulting analysis

Stalling – These organizations are grappling with the possibilities of digital and are unclear on how to deliver results. They are inflexible, without any significant digital capability and unable to respond to emerging trends and customer needs.

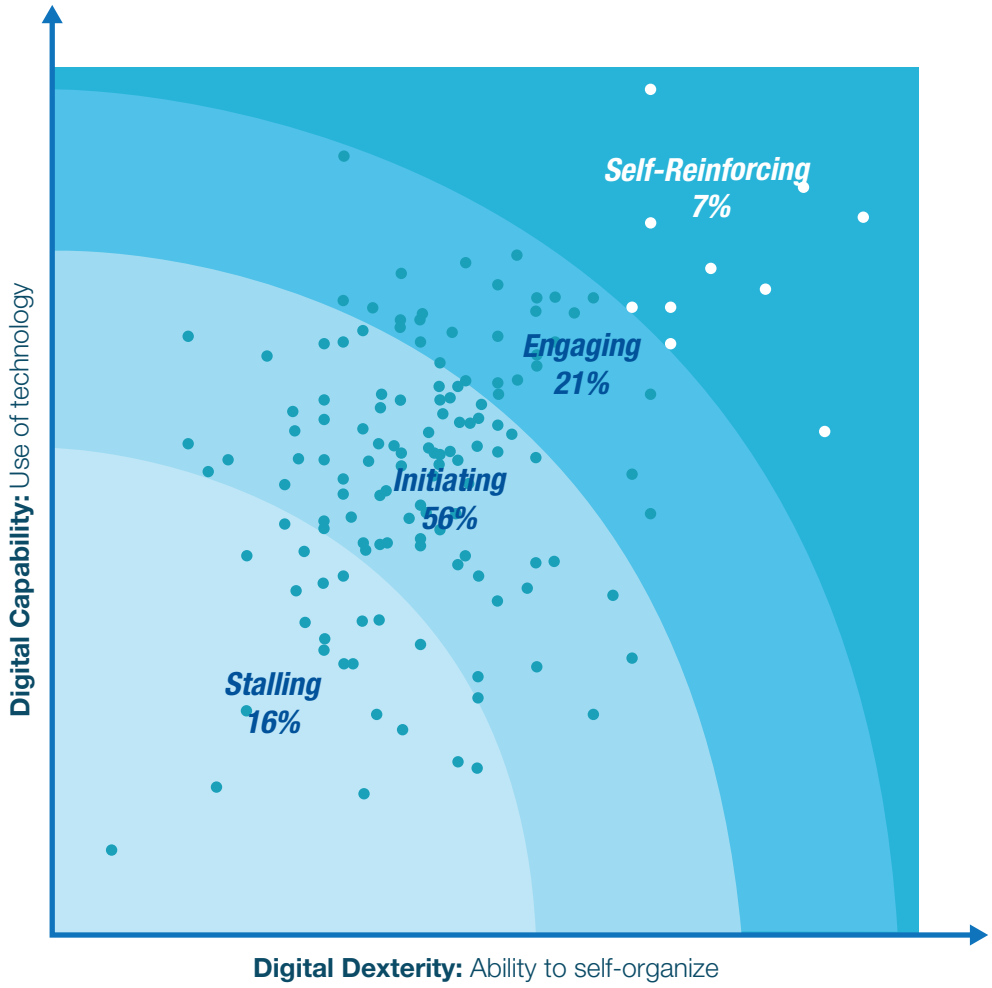
Initiating – These firms are mobilized to start the transition. They invest in digital expertise and initiate partnerships to leverage digital opportunities. They start developing digital capabilities in digitizing operations, improving communication and collaboration, and controlling brand image.

Engaging – Here, enterprise transition is underway. Firms have various digital capabilities in personalizing customer experience, simplifying routine tasks and enabling collaboration across the firm. They are able to detect emerging trends and respond to changing customer needs.

Self-Reinforcing – At this stage of evolution, firms become highly flexible digital organizations. They are able to rapidly re-organize or self-organize to take advantage of new digital opportunities. They have developed advanced digital capabilities in improving customer experience, operations efficiency and workforce enablement.

> *"The majority of organizations are in a phase of transition - journeying towards becoming digital organizations in four key stages."*

Figure 5: How Firms are Progressing to Become Digital Organizations



Source: Capgemini Consulting analysis

Becoming a Digital Organization[b]

Every enterprise has the potential to become a digital organization, but it will require leadership, investment and tenacity. Drawing on our research, our experience in working with clients and interviews with industry practitioners, we have identified four dimensions that are critical (see Figure 6).

- **Digital-First Mindset:** seeking and prioritizing digital solutions first and foremost
- **Digitized Practices:** digitizing operations and encouraging collaborative ways of working and learning
- **Empowered Talent:** raising the digital IQ of the organization, developing key skills and increasing engagement
- **Data Access & Collaboration Tools:** accessing data and collaboration tools to drive innovation and share intelligence across the organization

Digital-First Mindset

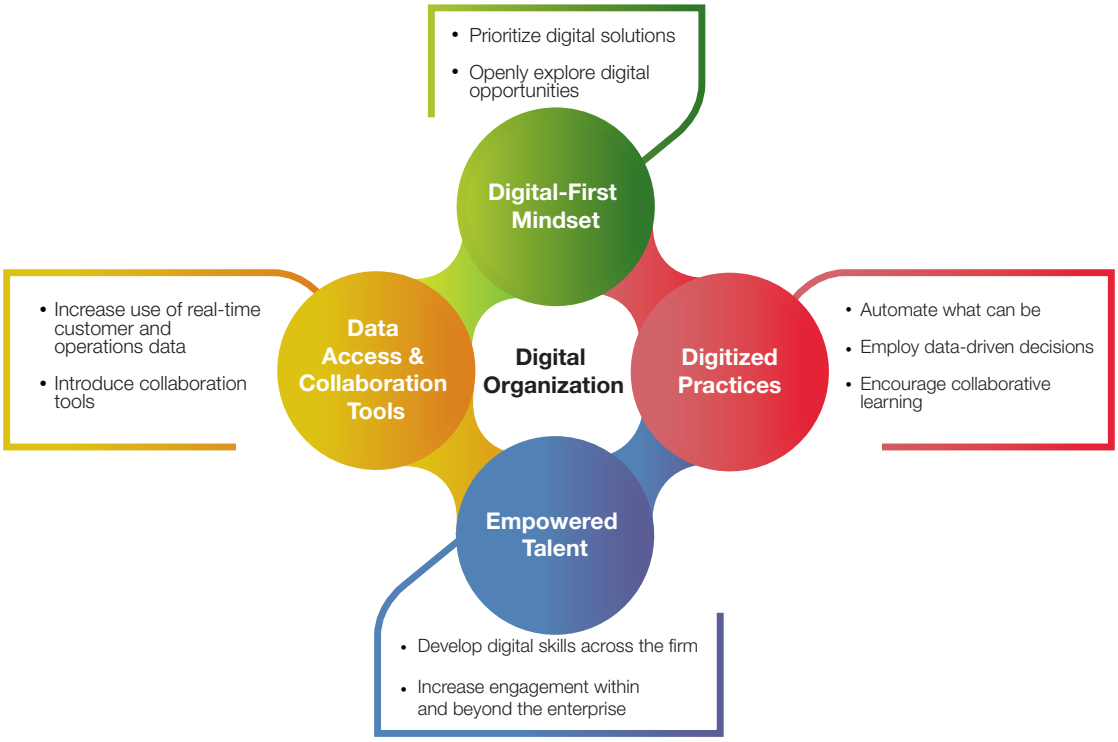
A digital-first mindset is a distinguishing feature of a digital organization. It means that the default position of the organization is to employ a digital solution first. For instance, how does the organization connect with its customers? How does it redesign its core processes using the power of digital technologies? How does the organization think of addressing any new challenge using digital technologies rather than traditional approaches?

In our research, 80% of digital organizations said that they take advantage of digital solutions wherever possible, as against only 37% of all firms. Leading organizations across the private and public sectors are taking this approach:

- At Pfizer, Kristen Peck, EVP of Business Development and Innovation, says: *"Our approach is 'think digital first.' So when we're creating content and providing information, we now ensure that it's accessible digitally."*[13]
- The "Digital by Default" program launched by the UK government, which aims to transition government services to digital, incorporates a digital-first mindset. Digital government is a top priority for each department.

> *"80% of digital organizations said that they take advantage of digital solutions wherever possible, as against only 37% of all firms."*

Figure 6: Four Key Dimensions that Form the Foundations of All Digital Organizations



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- Capital One's CEO Richard Fairbank has stated: *"Digital is who we are and how we do business. We need to make digital how we do business not only with our customers, but also how we operate the company."*[14] Today, more than 75% of Capital One's customer transactions happen over digital channels.

Developing a digital-first mindset is important in improving both digital capability and digital dexterity. Leaders with a digital-first mindset will invest more in developing digital capabilities in the customer experience, operational efficiency and workforce enablement. Since a digital-first mindset values systematic experimentation and continues to keep a look out for new technologies, digital dexterity is reinforced.

> ***"Digital is who we are and how we do business. We need to make digital how we do business not only with our customers, but also how we operate the company."***
>
> – Richard Fairbank, Capital One

Three Steps to Building a Digital-First Mindset[15]

1. Communicate the benefits to build engagement

Explain the benefits and make digital transformation meaningful to key stakeholders. Traditional financial and competitive rationales are important but not sufficient to engage employees' hearts and minds. You need to articulate how digital transformation will improve the way people do their jobs — making their work easier, better, faster, or more fulfilling. You also need to adapt those messages for your different organizational communities. For example, explain to your finance department how digital tools will increase the visibility and accuracy of financial reporting; show your marketers how to get a more refined, data-rich view of their customer segmentation.

2. Walk the talk

By acting as a role model for the desired change and encouraging your colleagues to do so, you take the first important step in earning the right to engage your employees. Coca-Cola faced huge challenges when it deployed its internal social collaboration platform. Only when Coke's executives became engaged on the platform did the community become active. "With executive engagement, you don't have to mandate activity."[16]

3. Align reward structures to digital

The reward structures for sustaining digital transformation should not be just financial. Intangible incentives such as status, reputation, recognition, expertise, and privileges are great managerial levers to drive employee motivation, productivity, and ultimately reach your transformation goals. For example, Chilean mining company Codelco and technology company EMC created internal innovation awards to promote new ideas, encourage workers to innovate, and drive culture change.

> *P&G supports real-time decision making through "Decision Cockpits" that provide a single source of truth for data to all decision-makers across geographies and business units.*

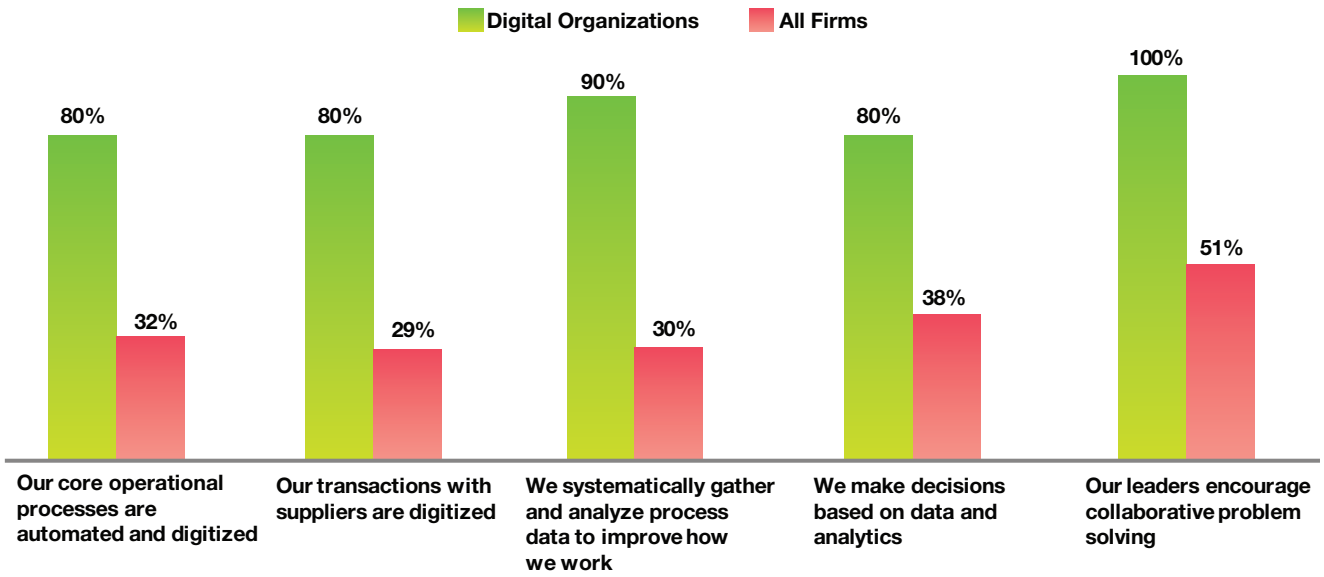
Digitized Practices

Digitized operations, data-driven decision-making and collaborative learning are essential practices for organizations' adaptability and long-term resilience. In our survey, 80% of digital organizations believed that their core operational processes were automated and digitized. Across all firms this drops to 32% (see Figure 7).

- **Digitized operations:** Lloyds Banking Group invested in a 4-year technology program that automated and simplified its unique business processes from 700 to just 23[17]. Lloyds cut the time it took its staff to close old accounts from 30 minutes to 3 minutes and for customers to transfer money to Individual Savings Accounts (ISAs) from a couple of days to within 24 hours. This initiative also allowed Lloyds to achieve annual savings of £352 million[17].
- **Data-driven decisions:** P&G is a leader in the use of data and analytics practices for decision-making. They support real-time decision making through "Decision Cockpits" that provide a single source of truth for data to all decision-makers across geographies and business units. This in turn has helped P&G speed up decision-making and reduce time to market[19].
- **Collaborative learning:** Sodexo, a global provider of on-site services, uses a social learning program that promotes peer-to-peer learning and has helped break down functional silos within the organization[20]. Collaboration without regard to function, geography, or silo will help firms build their dexterity. NTT Data developed a collaborative learning tool to build leadership skills among its employees. The game has successfully increased the number of employees taking up leadership roles by 50% compared to traditional training methods[21].

> *Collaboration without regard to function, geography, or silo will help firms build their dexterity.*

Figure 7: How Digital Organizations Advance Their Practices and Operations



N=135; Percentages indicate share of organizations agreeing with each statement

Source: Capgemini Consulting analysis

> *70% of digital organizations said that their enterprises have well-established, well-distributed digital skills. However, across all firms, this drops to just 14%.*

Collaborative learning also reinforces all other practices, making it a critical quality of a digital organization that embodies dexterity. An EVP of a leading technology design firm believes this means shifting from a traditional view of organization structure to something more dynamic. *"People have a natural way of working across boundaries, interdependently, which does not resemble a traditional organization chart. We started to remove business lines, and business groups, and those vertical silos. Now, we have one of the most fluid, dynamic organizations in our company's history."*[23] Collaborative learning, coupled with an engaged and empowered workforce, offers significant potential to accelerate a firm's progress along the path to digital dexterity.

Empowered Talent

In our survey, 70% of digital organizations said that their enterprises have well-established, well-distributed digital skills. However, across all firms, this drops to just 14%. Digital organizations put a premium on building widespread digital skills and ensuring engagement for its people within and beyond their organization's boundaries:

- Intel added a Digital IQ training program for all employees to increase innovation, communication and collaboration. Within two years, more than 20,000 employees completed the training[24]. This sort of commitment to learning can also help an organization retain its key talent and build an appreciation for digital initiatives.

Engaging the workforce can often mean changing the culture and reward structures of the organization. An executive in charge of talent development emphasizes the importance of engagement with employees: *"We're trying to change our culture because we're trying to attract a different kind of talent than we ever needed before. The expectations of our workforce are different. So, for example, we've just added non-financial benefits designed to help people feel that they are involved in the spirit of the company, engaged with the company."*[26]

Three Steps to Digitizing Your Practices[22]

1. Zero-Base Your Processes with Digital

Start by hitting refresh on your operational practices. Without being biased to current workflows, rethink your current practices with a digital solution at the forefront. Encourage a systematic gathering and analyzing of data to not only drive decisions, but identify improved ways of working – adapting your processes even further.

2. Encourage Adoption, Not Deployment of Tools

Implementations of tools that measure success in terms of live sites or licenses focus only on deployment, not adoption. They miss the true value of their digital investments: collaboration among actively engaged users, smarter decision-making, increased sharing of best practices and, over time, sustained behavior change. Encouraging employees to adopt digital tools and technologies, and doing so visibly – through role modeling, gamification, rewards, or any other methods – can have a significant impact on behaviors.

3. Institutionalize New Work Practices

Ensure new work practices become the default and adapt your management and people processes to institutionalize the updated process. This should be a key opportunity for your HR or organization development functions to take a leadership role in the transformation. Also, question your intuition—ensure that your most important managerial decisions are based on the power of data and analytics. Fight against organization fragmentation and silo-based thinking. Encourage the transparency, core process standardization, and operations efficiency that digital technologies provide.

Data Access & Collaboration Tools

Digital organizations exhibit data capability levels that are far more advanced than their peers (see Figure 8). They use data to drive new levels of efficiency and customer responsiveness. For example, UPS's ORION system uses prescriptive analytics that integrates its operations and customer data to optimize delivery requirements and route alternatives, prompting drivers – in real time – to the shortest, safe route out of its 200,000 options. This system is expected to save UPS more than $300 million per year once fully implemented.[27]

Providing access to data can also empower and engage an organization's workforce. At 7-Eleven Japan (SEJ), store managers can adjust any order they have placed in real time. Managers can even adjust orders on a daily basis, such as ordering more hot food on days that are expected to be cold and rainy. In a company where more than 50% of products are new each year, SEJ values local input, giving full reign to store managers to experiment on what will sell the most in their store. Successful experiments then turn into innovations that SEJ shares across all of its stores.[28]

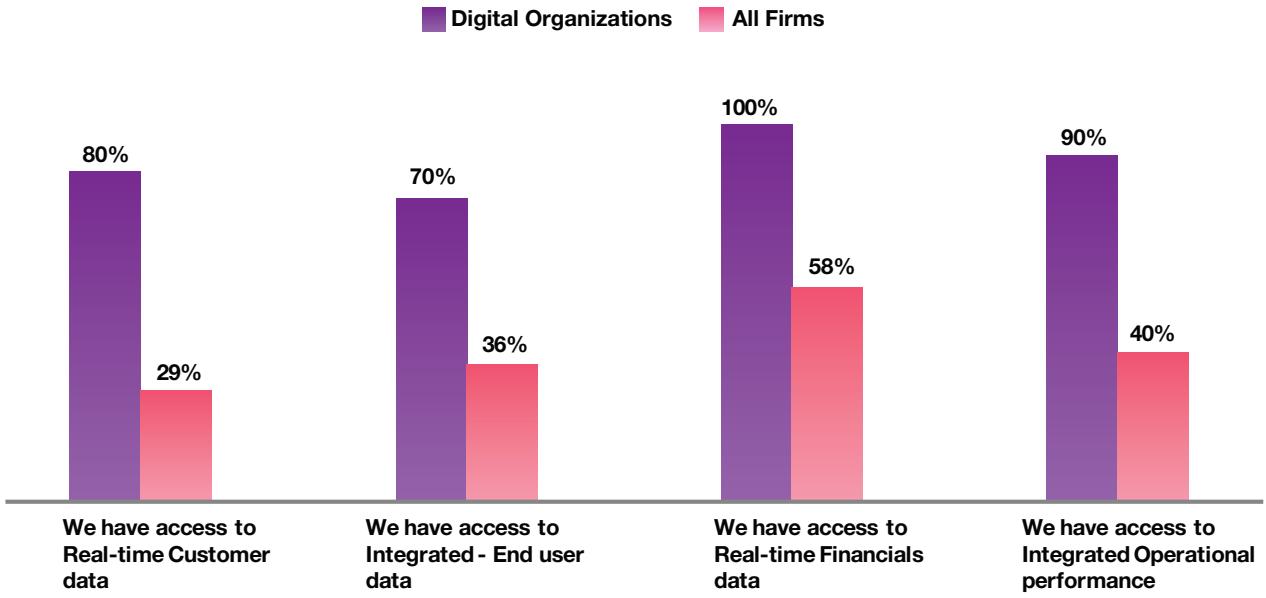
> *"Providing access to data can empower and engage an organization's workforce."*

Navigating the Journey to a Digital Organization

As they embark on the journey to becoming a digital organization, companies need to prioritize activities depending on their stage of evolution (see Figure 9).

- Enterprises in the Stalling Stage can begin by digitizing their practices to gain immediate cost advantages offered by digital technologies, which could help them showcase early wins. Only 5% of enterprises in the "Stalling" stage said their operational processes were automated and

Figure 8: Access to Real-Time Customer and Integrated Operations Data for Digital Organizations



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Source: Capgemini Consulting analysis

> *"Ambitious employees will want to remain innovative so create opportunities for them to work on new initiatives. If they can develop new skills at your company, an offer to work elsewhere will be less appealing."*[25]
> – CEO of Wayfair.com

digitized, whereas 80% in the "Self-Reinforcing" stage said they were. Firms will benefit by zero-basing practices with digital, focusing on adoption, and collaborating across the firm when digitizing their operations.

- 56% of firms were in the Initiating Stage, where they are mobilized to begin the transition. While mobilized for action, they still lack certainty about the advantages and practicality of digital solutions. These organizations will benefit from reinforcing a digital-first mindset - reminding employees about the benefits, leading by example, and aligning reward structures.

- As organizations reach the Engaging Stage, they have developed momentum and experience across most dimensions, e.g. mindset, practices, talent, data access and tools. Compared to the Initiating Stage, for example, 52% more will use digital technologies to collaborate across boundaries and 46% more will use technology to standardize operations and reduce exceptions. Increasing access to customer and operations data and collaboration tools will further increase the digital capability of companies in this stage of development.

- Organizations in the Self-Reinforcing Stage are digital organizations that are exploring new opportunities and addressing emerging design possibilities for maintaining their competitive advantage. Enterprises in this stage understand that being digital is an ongoing journey and use their rare ability to self-organize and reorganize to meet even the most accelerated changes in their internal and external environment.

An Organization's Imperative

Many traditional brick and mortars organizations have pushed forward their digital agendas. They now have the foundational capabilities that allow them to engage in new ways with customers, exploit big data and operate faster and better. However, while they have changed the way they do business, the pace of business itself has not changed for most. Digital businesses move faster than traditional businesses and new entrants, disruptive technology or fast changing customer needs can quickly expose expose companies' inability to adapt. To ensure they stay relevant in this environment, organizations need to have the agility to respond to disruption or even disrupt their own core business. In today's uncertain, volatile and complex world, it is digital dexterity that is of the essence in an organization's design. Dexterity means your organization is truly rewired for the digital age.

Figure 9: Strategies on an Organization's Journey to become a Digital Organization

	Stalling	Initiating	Engaging	Self-Reinforcing
Definition	**Enterprises are grappling with digital possibilities, unclear on what is practical and how to achieve results for their organization.**	**Enterprises are mobilized to start the transition, but still unclear on what is realistic to achieve.**	**Enterprise transitions are underway and experience the largest growth.**	**Digital organizations that are able to rapidly reorganize and self-organize to take advantage of digital opportunities.**
Strategies	**Digitize Practices as they offer early benefits:** • Zero-base practices and services with digital technologies • Encourage adoption, not deployment of tools by relying on digitized information to inform decisions • Institutionalize new work practices, encourage transparency and standardization that come with digital technologies	**Emphasize the importance of digital:** • Reinforce the benefits of digital to individual constituents • Walk the talk by acting as a role model at the leadership level • Improve reward structures to digital including non-financial and intangible benefits	**Enhance characteristics based on digital capability initiatives:** • Improve access to customer data to improve customer experience and operations data for operational efficiency • Improve collaborative tools and engagement opportunities for workforce enablement	**Use organizational characteristics to explore new possibilities:** • Use an engaged workforce and digital-first mindset to highlight new technologies for you • Use digitized practices to quickly respond to customer needs and identify trends • Use collaboration within and beyond your enterprise to quickly form partnerships

Source: Adapted from Soule, D., Puram, A., Westerman, G. and Bonnet, D. "Becoming a Digital Organization: The Journey to Digital Dexterity" (September, 2015), Working Paper, available at http://ssrn.com/abstract=2697688."

How Digitally Mature is Your Organization?

This assessment can help you understand where your organization stands on the journey to becoming a digital organization. The survey comprises 32 questions to assess your organization's position across the four dimensions: a digital-first mindset, digitized practices, empowered talent, and data & tools capability.

How to use this assessment:

1. Assign a score between 1 and 6 for your organization on each statement.
2. Calculate the score per characteristic by averaging the scores for statements under that characteristic
3. Sum the average scores calculated to arrive at the overall score for your organization
4. Compare the overall score with the legend provided at the end of the survey to understand your organization's digital maturity
5. To identify which characteristic require most improvement, undertake a relative comparison between the average scores per characteristic

To what extent do you agree or disagree with the following statements:	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree	Score 1 to 6	Average Score per Characteristic
Digital-First Mindset								
We take advantage of digital solutions wherever possible	1	2	3	4	5	6		
People naturally think of digital technologies when we consider ways to improve	1	2	3	4	5	6		
Practices: Digitized Operations								
Our core operational processes are automated and digitized	1	2	3	4	5	6		
We monitor our operations in real time	1	2	3	4	5	6		
Our transactions with suppliers are digitized	1	2	3	4	5	6		
We standardize processes that require human input	1	2	3	4	5	6		
Practices: Data-Driven Decisions								
We make decisions based on data and analytics	1	2	3	4	5	6		
We define clear expectations and metrics for roles and responsibilities	1	2	3	4	5	6		
We systematically gather and analyze process data to improve how we work	1	2	3	4	5	6		
Practices: Collaborative Learning								
Our leaders encourage collaborative problem solving	1	2	3	4	5	6		
People collaborate seamlessly across disciplines and specialties	1	2	3	4	5	6		
Our leaders promote a culture of experimentation and learning	1	2	3	4	5	6		
Decision-making responsibility is appropriately centralized or decentralized	1	2	3	4	5	6		
Our culture values information transparency and openness	1	2	3	4	5	6		

Source: Assessment items adapted from research survey conducted by MIT Center for Digital Business and Capgemini Consulting

Talent: Technology Experience								
Our organization has experience with mobile devices and applications	1	2	3	4	5	6		
Our organization has experience with social media tools and data	1	2	3	4	5	6		
Our organization has experience with big data and advanced analytics	1	2	3	4	5	6		
Our organization has experience with artificial intelligence and machine learning	1	2	3	4	5	6		
Our organization has experience with the internet of things	1	2	3	4	5	6		
Talent: Digital Skills								
Digital skills are widely distributed across our enterprise	1	2	3	4	5	6		
Our enterprise has the skills necessary to conduct digital initiatives	1	2	3	4	5	6		
Talent: High Engagement								
Our workers are self-motivated	1	2	3	4	5	6		
Our workforce is highly competent	1	2	3	4	5	6		
We have a strong entrepreneurial instinct	1	2	3	4	5	6		
Data Access and Collaboration Tools								
We have communication, feedback, and collaboration tools that make it easy to be productive	1	2	3	4	5	6		
We can access flexible computing power and storage (e.g. through cloud services and external assets)	1	2	3	4	5	6		
Characterize the availability of the following in your enterprise:	**Completely Unavailable**	**Unavailable**	**Somewhat Unavailable**	**Somewhat Available**	**Available**	**Completely Available**	**Score 1 to 6**	**Average Score per Characteristic**
Data Access and Collaboration Tools: Real-Time Customer Data								
Real-time Customer Data	1	2	3	4	5	6		
Integrated End-User Data	1	2	3	4	5	6		
Data Access and Collaboration Tools: Integrated Operations Data								
Integrated Financial Data	1	2	3	4	5	6		
Integrated Operational Performance Data	1	2	3	4	5	6		
Integrated Product/service Performance Data	1	2	3	4	5	6		
Integrated Supply-chain Performance Data	1	2	3	4	5	6		
Overall Score								

Source: Assessment items adapted from research survey conducted by MIT Center for Digital Business and Capgemini Consulting

Overall Score Legend:

10 - 22.5 : Stalling - Your organization is grappling with digital possibilities and unclear on what is practical and how to achieve results

22.5 - 35 : Initiating - Your organization is mobilized to start the transition, but still unclear on what is realistic to achieve

35 - 47.5 : Engaging - Your organization's transition is underway and can experience the most growth in characteristics

47.5 - 60 : Self-Reinforcing - Your organization has become a digital organization able to rapidly reorganize and self-organize to take advantage of digital opportunities

Research Methodology

Together with the MIT Center for Digital Business, we conducted a survey of 274 industry executives, representing 135 different enterprises across 28 countries. In addition to this survey, we jointly conducted in-depth interviews with 31 executives, representing enterprises from a range of industries. Digital Dexterity is measured from informants' responses to key items from the survey relating to mindsets and behaviors. Digital Capability is measured by averaging responses for survey items in three categories: Customer Experience, Operational Efficiency and Workforce Enablement. The current report adapts findings from our original study [available at http://ssrn.com/abstract=2697688] and adds new analysis conducted by Capgemini Consulting.

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