

Talking ‘bout a revolution

MIT Center for Digital Business - Capgemini Consulting findings
on how companies are succeeding with digital transformation



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MIT CENTER FOR DIGITAL BUSINESS — CAPGEMINI CONSULTING FINDINGS

ON HOW COMPANIES ARE SUCCEEDING WITH DIGITAL TRANSFORMATION.

The times they are a-changin'

*H*ow can senior executives successfully lead digital transformation? In this report, we share the findings from a study of how 157 executives in 50 global companies manage – and benefit from – digital transformation.

Digital transformation:
the use of technology
to radically improve
performance or reach
of enterprises.

Digital transformation is a hot topic for companies across the globe. Executives in all industries use digital advances such as analytics, mobility, social media and smart embedded devices – and improve their use of traditional technologies such as ERP – to reshape customer relationships, internal processes, and value propositions. Other executives realize how quickly digital technology has disrupted media industries in the past decade and now know they need

to pay attention to changes in their industries.

Two-thirds of the executives in our sample spoke of the pressures they feel from competitors and customers to speed up their digital transformation. One-third also mentioned pressure from employees. However, organizations adopt digitally driven changes at varying paces, and experience varying levels of success.

Only a fifth of the companies in our sample are truly reshaping their businesses through digital transformation.

Other companies gain some value from transforming parts of their businesses, but are only partially fulfilling their true potential through digital transformation. And some have not yet begun their digital transformation journeys.

Many executives express healthy skepticism about how fast to proceed. After all, revolutions are a dime a dozen these days and leaders can legitimately wonder if commentators aren't being overly dramatic.

Are we overreacting?

The electric revolution – history's second industrial revolution – offers an interesting analogy. At the turn of the 20th century, electrical machinery began to replace steam in powering factories and other systems. Many companies saw electrical machinery as a simple substitution or incremental improvement. They replaced their steam engines with electric dynamos, but left the rest of the

organization the same. However, a few companies saw the potential of the dynamo to allow new ways of working. They redesigned their production lines to take advantage of the fact that electric engines could be placed virtually anywhere in the factory, rather than connected to the central drive train. They could design processes and buildings around the flow of the work, not around access to steam power. These companies, who envisioned

the technology as a chance to transform their businesses, were far more successful than their competitors.

So are we overreacting? Our conviction is that the world has entered the third industrial revolution. Digital technology has the potential to improve corporate performance and reach radically, but the analogy with the second industrial revolution shows that digital transformation is as much about organizational change as it is about implementing new technologies.

**“Come on.
I know the company’s
more than 100 years old,
but our IT capabilities
don’t have to match the
age of the company.”**

(an executive quoting
a younger employee)

What are corporate leaders doing to implement change? The study identifies common patterns. How can executives drive change throughout their organizations? We highlight the paths toward success. This study aims to give insight into the “What”, the specific set of

digital initiatives implemented by organizations, and the resources used to do so, as well as the “How”, the ways in which leaders shape and drive transformation in their organizations. These can also be thought of as “Substance” and “Style”.

Digital maturity requires organizations to be mature on both the “What” and the “How”. Where does your organization fit in?

“We kind of fell behind our competitors a little bit. We hope to be one of those that falls behind in the race early and then kicks it into gear and wins”

(a hospitality firm executive).



What's the revolution about?

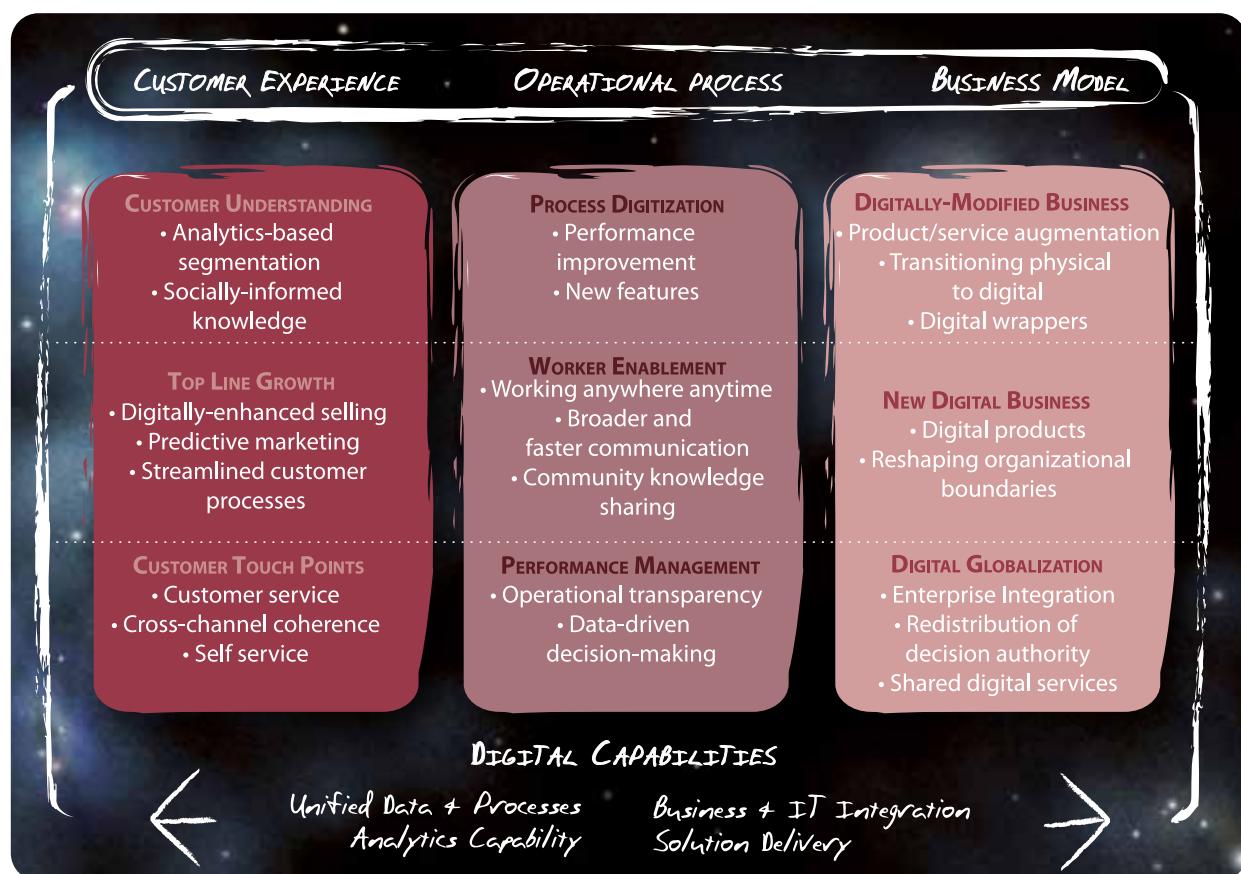
Digital transformation is a multifaceted undertaking. However, there are a few emerging patterns. Executives are digitally transforming three key areas of the firm's value proposition: customer experience, operational

processes and business models. "What is digital transformation?" The answer to this core question can be found in the figure below. It shows nine digital building blocks where companies invest, deploy technologies and

resources, and change their organizations in the quest for digital transformation.

What are some of the things they're doing, and why?

Executives are transforming three facets of their business



Engage customers in a conversation

Digital technology enables companies to understand and collaborate with customers in exciting new ways. The dialogue between customers and companies has become lively, interactive – more broadly based and more focused at the same time.

One manufacturing executive points out that “with social media, we are able to react more quickly to customers’ color preferences.” A similar direct benefit is noted in the experience of a banking company that set-up a Twitter account for rapid responses to client complaints, saving customers the trouble of visiting a branch or calling customer service. The benefits often extend beyond what was envisioned, as described

by a mortgage executive: “We launched a non-profit real estate community to help our customers. As an unplanned benefit this helps us to understand them better. We subsequently launched special products, such as a special loan offering for divorced people, following several customer questions.”

Relationships are great – and even better if they feed profitable top-line growth. Digital technologies offer plenty of power to make this happen. Some companies leverage customer purchasing data to create a more personalized sales and customer service experience. “Analytics help us segment our clients and connect SME offerings and clients in a predictive way,” says one executive. Other companies create concept stores to innovate about customer experience or use plug-ins to

simplify the buying experience. The revolution in the way companies and customers interact is leading to closer, more personal relationships, and rising customer satisfaction, but also higher customer expectations. This means, for example, that companies must meet the challenge of creating consistency across all channels and touch points, whether physical or digital.

Rewire your operations

Although transformed customer experiences are critical to corporate performance, firms also realize strong benefits from transforming internal operations and processes. The benefits go beyond improving efficiency and quality of production processes.

Automation lets companies refocus their people on more strategic tasks. A materials company automated many R&D processes so that its researchers could devote themselves to innovation and creativity instead of staying mired in repetitive efforts. In addition, the data streams created by automated processes produce a wealth of information that can be usefully mined down the road.

Another area of fruitful change involves virtualizing individual work processes. A financial services firm replaced assigned desks with a completely modular work space, where even the CEO might work in a different place each day. Meanwhile, the firm's collaboration and networking tools allow employees to talk with anyone in the company from wherever they are sitting. This

is setting the stage for further changes related to globalization. The tools that virtualize individual work, while implemented for cost reasons, have become powerful enablers for knowledge sharing. In a broader sense, digital transformation replaces limited one-way vertical communication with broad communication channels that are both vertical and horizontal. Leaders can engage in two-way communication instantly and at scale.

Performance transparency was also a key highlight mentioned during interviews. Executives in most companies say they are more informed when making decisions. Transactional systems give executives deeper insight into products, regions, and customers, allowing decisions to be made based on real data and not on

assumptions and intuition alone. This is happening in both internal processes and customer-directed processes.

Check out your business model

"We've realized that if we don't transform the way we do business, we're going to die. It's not about changing the way we do technology but changing the way we do business." This media executive knows that digital transformation can reach into the very heart of how companies choose to define their businesses and build their business models. Digital technologies give companies the tools to make the shift from multi-national to truly

global operations. They are, in the words of many executives, “becoming more centralized and decentralized at the same time.” Technology, coupled with integrated information, allows companies to leverage global synergies while remaining locally responsive. By building digital business platforms, companies benefit from global shared services for finance, HR, and even core capabilities like manufacturing and design. Global shared services promote efficiency and reduce risk. They also promote global flexibility. A manufacturer in the

study shifts production around the globe with only a few days’ notice in response to interruptions or excess demand.

At the same time, a company will perhaps stay true to its traditional business but use digital tools to launch a new growth area, like the grocery firm that stated: “After two years, our e-commerce platform is bringing us 20% of our new clients and our traditional clients are consuming 13% more on average.” Or maybe companies add digital features to traditional products (for instance, some B2B firms are extending beyond their

traditional products to provide services incorporating digital components) or create entirely new fields in which to find value. What is certain is that many executives out there are looking at how digital technology can reshape their organizations, support globalization or lead to new growth.

Although some companies are digitally transforming their companies in exciting ways, many companies face significant challenges as they move forward on the path to digital success.



DON'T FORGET TO WORK ON YOUR DIGITAL CAPABILITIES

Digital capabilities cut across all three pillars. They are a fundamental building block for transformation in customer experience, operational processes, and business models. Although CIOs and existing IT departments lead many digital initiatives, some firms acquire extra skills or build separate units to manage digital efforts.

Unified data and processes: The most fundamental technological need for digital transformation is a digital platform of integrated data and processes. Large successful companies often operate in silos, each with its own systems, data definitions, and business processes. Generating a shared approach to customers or products can be very difficult. Without a shared perspective, advanced transformation of customer engagement or process optimization cannot occur.

Solution delivery: Most IT departments have solid solution delivery methods in place, but they are often geared to tightly defined requirements and mature technologies rather than emerging digital technologies and practices. Mobile and social media, for example, often require fast and iterative approaches to learn about what will work in the market or workplace.

Analytic capabilities: Companies can gain a strategic advantage over competitors by combining integrated data with powerful analytic capabilities. However, building analytic capabilities is difficult and requires changes to skills and culture in addition to investments in information technology.

Business and IT integration: Technology and business executives need to work together to implement digital transformation, so companies with a history of strained IT-business relationships have an additional hurdle to overcome. Companies that have solid internal IT-business relationships, have a more solid basis from which to launch digital transformation.

Why it's so hard to change the world

The vision thing

Why are only one out of every five companies truly reshaping their businesses through digital transformation? An important underlying cause is that many companies are still working to understand whether and how to change. Benefiting from transformation typically requires changes in processes or decision-making that span traditional organizational or functional structures - in other words, transformation requires a vision that goes beyond existing silos. This must be a top-down effort.

"We've always been fairly slow in adopting technology because we more or less have the ambition of not being first."

(a manufacturing executive)

Executives may doubt the benefits of emerging technologies. The experience of e-commerce taught many that a fast follower approach can sometimes be better than a pioneering approach. Such skepticism, however, can result in complex investment processes that prevent the firm from engaging in digitally-enabled experiments and business changes that need to happen quickly.

Company performance can also slow the move to transformation.

If the company is not experiencing pain, the perceived risk of change may outweigh the potential benefits in the minds of many executives. One manufacturer stated: "At the end of the day, we don't want to stay on the edge of the latest trend. It's not really our business." There's nothing wrong with this as long as it's a conscious choice.

Lack of awareness of the opportunities or threats of digital transformation can also be an issue. An executive in one of the world's largest financial companies provides the following example: "When I made a presentation to the board, I was astonished that none of the senior executives were aware of TripAdvisor." Executives who don't see new possibilities may not understand when or how to change.

The governance thing

Vision is the start, and governance helps firms get to the finish. To bring about transformation, managers in different divisions or functions must move beyond incremental vision and traditional business models to learn new ways to coordinate. Incremental vision leads to incremental change – which stands in direct

opposition to the radical top down transformative rethinking of the business that will truly harness the performance benefits of a successful digital transformation. Unless senior executives establish a transformative vision of the future, and governance mechanisms to ensure progress in the right direction, managers will tend to optimize locally within their own spheres of authority.

“We need to start rethinking our strategy. The approach of throwing everything out there and thinking that something is going to stick is not the way to go.”

(a hospitality executive)

REVOLUTIONS ARE COMPLICATED!

Even when the drive and vision are there, companies often miss other elements they need in order to successfully implement change. Among major challenges, skills are mentioned by 77% of executives, culture by 55% and effective IT by 50%:

Skills in emerging technologies. From mobility to social media to analytic-based decision-making, companies fill gaps in expertise by working with vendors, hiring from the outside, or promoting from within.

Culture can enable or inhibit change. Some challenges include being able to think beyond silos, being receptive to changes in the job, and being able to make use of digital information in decision-making. All require communication and help from the organization to make changes stick.

Effective IT. Many information technology infrastructures are proliferations of hardware and applications overlaid on one another into complex, inefficient and costly systems. This spaghetti makes it difficult to get a unified view of customers or to change business processes. The issue is even more pronounced when the speed of business change accelerates.

The successful revolution

Implementing successful digital transformation is a complex endeavor. To simplify things, executives can visualize their transformation journeys in terms of two major themes.

The “What” is the specific set of digital transformation building blocks implemented by the organization, including leveraging strategic assets and making investments to generate business benefits.

The “How” is the way senior executives drive change throughout the organization. This includes defining and communicating a vision, establishing governance and measurement mechanisms, and building a digital-ready culture.

The What and the How of Digital Transformation

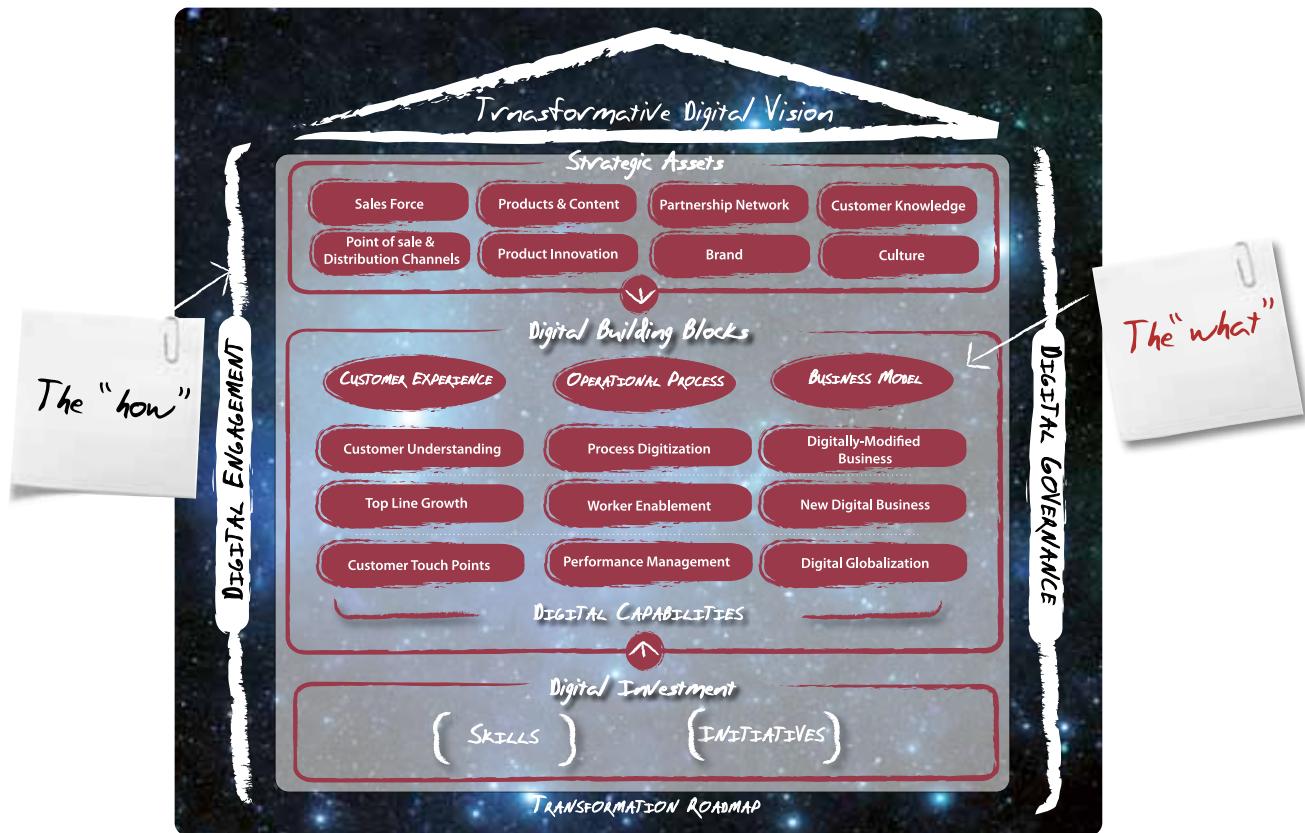


Figure out where you are

Large companies come through major transitions by leveraging valuable strategic assets and transforming them for the new environment. The idea is not to start doing something completely new – but to utilize the capabilities you already have to gain advantage through digitization. Therefore, the starting point is thoughtful diagnosis: Where do your company's advantages and skills lie? What assets will be valuable in the new world? Which will not?

Our interviews indicated that those companies that have been successful at digital transformation have been very clear about the key assets they chose to leverage and the ones

that no longer provide value.

From products and brands to distribution or customer knowledge, the savvy executive team diagnoses the exact capabilities where they can gain advantage through digitization. For example, a global insurance company realized that its distribution channels were a critical asset. It decided that its Commercial Officer would lead the digital transformation process to ensure its key assets (the distribution channels) were used to their full potential.

Envision where you'll go

Once you know what you have in hand to start your journey, company leaders must create

“Unfortunately, digital transformation was not a priority of the board a year ago: we then had 2-3% of digital revenue. Now this has changed and we have set a challenging target of 15% for all divisions.”

(the CMO of a financial company)

a transformative vision and communicate it throughout the organization.

There is no set blueprint for a successful vision. Companies in the study described visions that were externally or internally focused, or a combination of the two. Some targeted specific business units, others the entire firm. In

some cases, new businesses were imagined, in others the focus was on improving existing businesses, or transforming the company as a whole. What will work for you?

Invest to get there

The investment needed for digital transformation may be large, and a standard business case may not be clear. Successfully harnessing the digital revolution is often a strategic decision which only senior executives can make. In

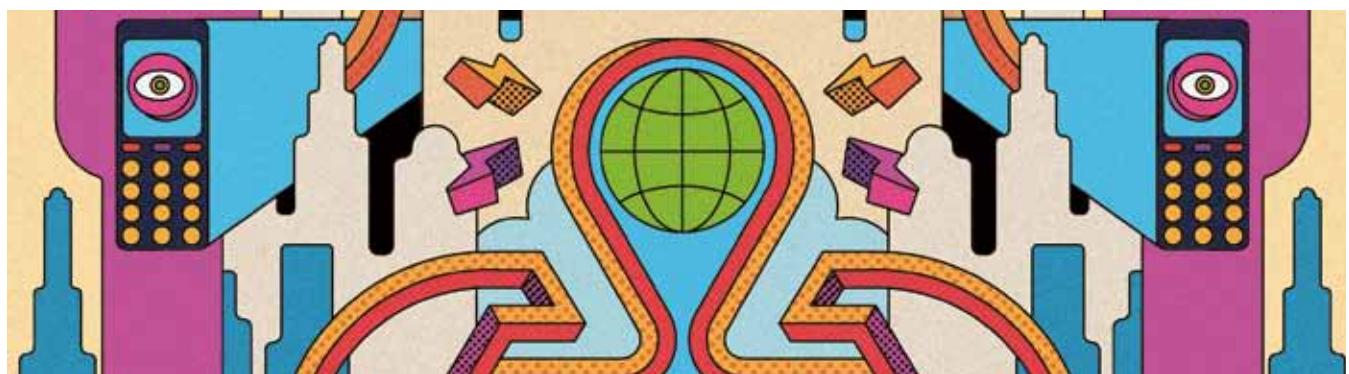
most cases, too, the changes aren't fully planned in advance, but rather built-up through investment in initiatives that move the vision forward step by step.

Lead the way!

Top-level vision brings the company from here to there through strong engagement and appropriate governance. People can do more to block successful

transformation than any complex technology, so communication is key. Successful transformation leaders use digital governance to refine and monitor progress toward the vision, while consistently communicating to keep the whole team moving in the same direction.

Consistent messages backed with appropriate coordination, measures and incentives, make the difficult process of transformation possible.



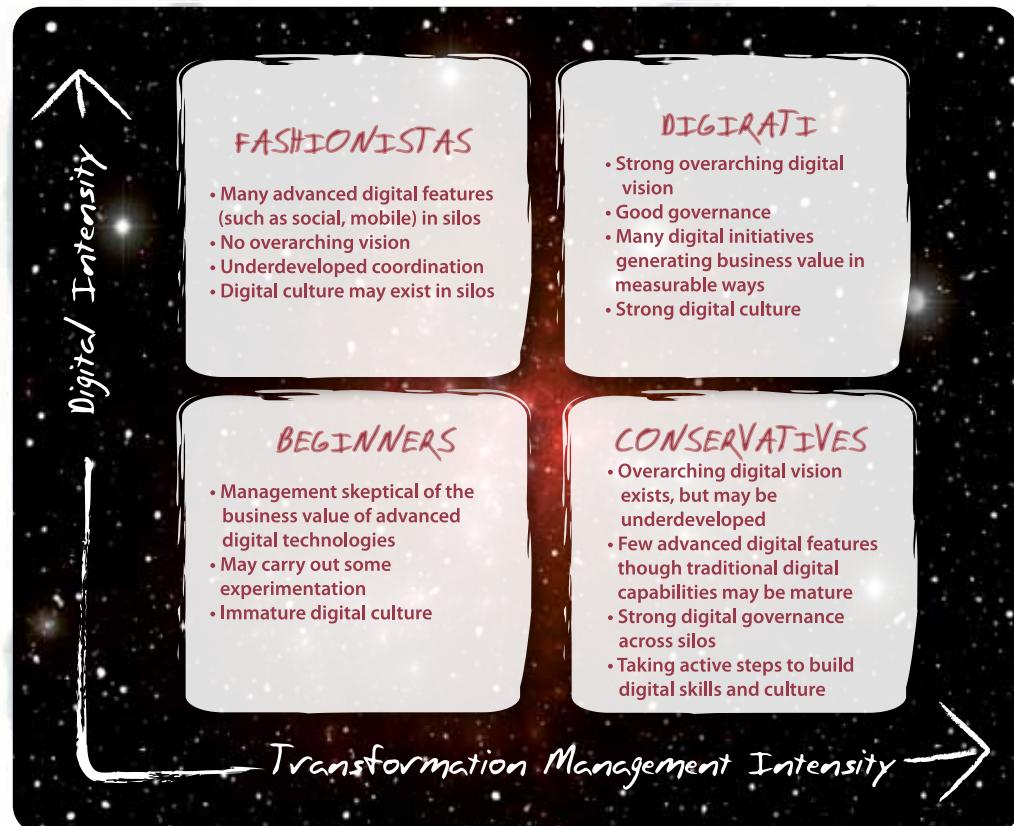
Drive the revolution through style and substance

Two key elements are at the heart of the alchemy of successful digital transformation: digital intensity (the “What”) and transformation management intensity (the “How”). These two

dimensions represent the digital maturity of an organization. Together, they can be thought of as “Style” and “Substance”. Firms that are mature in both dimensions can drive powerful

digital transformations that yield business value – a true revolution. Many firms in our study have matured in one of these areas, while others are still considering how to move forward.

Digital Transformation Maturity



► Firms in the lower left are **Digital Beginners**. These companies do very little with advanced digital capabilities, although they may be mature with more traditional digital applications such as ERP or internet. Companies may be in this quadrant by choice. For example, executives in a specialty chemicals firm believe that their B2B customers will not be interested in social media or mobile technologies, and that their engineering employees are very effective with more traditional collaboration tools. However, more often than not, companies are in this quadrant by accident. They are either unaware of the possibilities of new digital technologies or are starting some investments

without effective transformation management in place.

► Firms in the top left are **Digital Fashionistas**. These companies have implemented or experimented with a large number of sexy digital applications. Some of these items may create value, but many do not. While they may look good together, they are not implemented with the vision of gaining synergies among the items. Digital Fashionistas are motivated to bring on digitally-powered change, but their organizations' digital transformation strategy is not founded on real knowledge of how to maximize business benefits. We see many Fashionistas in B2C businesses,

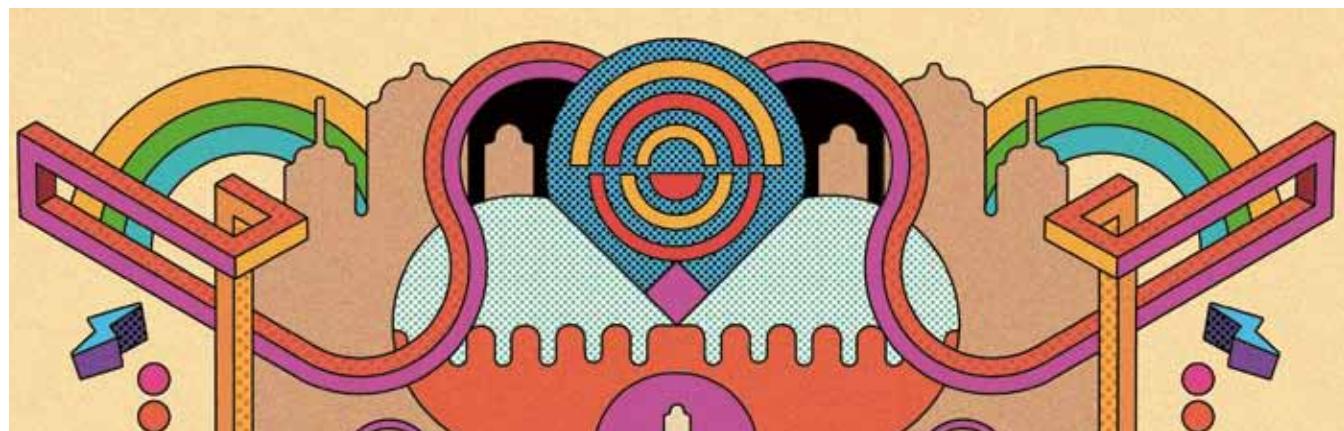
where companies, especially the marketing units, believe they must move quickly to keep up with the fast-moving world of consumer electronics, but are not necessarily thinking about a vision of how the elements will collectively create value. Some firms are in this quadrant at the corporate level, even though digital efforts in silos maybe in other quadrants.

► Firms in the bottom right are **Digital Conservatives**. These represent the wise old men and women of the digital world. They understand the need for a strong unifying vision as well as for governance and a new corporate culture to ensure that investments are managed well. However, they

are typically skeptical of the value of new digital trends, sometimes to their detriment. Digital conservatives understand where the company should be going and how to master digital challenges, but they often can't build up the momentum to carry ambitious programs. As a result, though aiming to spend wisely, their careful approach may cause them to miss some valuable opportunities upon which their more stylish competitors will pounce.

► Firms at the top right are **Digirati**. They truly understand how to drive value from a digital transformation. They combine a strong shared vision for transformation, careful governance and commitment, and sufficient investment in new opportunities. By carefully managing the “how”, they develop a digital culture that can envision further changes and implement them wisely.

By sufficiently managing the “what”, they continuously advance the competitive advantage their business draws from implementing digital transformation. Several firms have reached Digirati status at the business unit level, some have even achieved enterprise-wide Digirati capabilities.



Where do we go from here?

Digital technology, which transformed the media industry, is now transforming the rest of the business world. Companies in all industries and regions are experimenting with – and benefiting from – digital transformation. Whether it is in the way individuals work and collaborate, the way business processes are executed within and across organizational boundaries or in the way companies understand and service customers, digital technology provides a wealth of opportunities to those who are willing to change their businesses.

The pressures for change are increasing from many angles. Globalization is dictating efficient integration of businesses which can only be achieved

through digital processes and collaborative tools. Employees and customers are starting to demand new ways of working. As competitors and new entrants make digitally-enabled practices a reality in an industry, other firms will need to follow. Faced with these challenges, what are the key steps senior executives should take to steer their organizations?

1. Envision the digital future for your firm.

- What assets will be valuable in a digitally transformed business?
- How can you transform customer experience? Internal operations? Your business model?
- How can units work differently – and work together differently – in a more connected way?

2. Invest in digital transformation initiatives

- Are you getting all of the value out of your previous technology and platform investments in ERP, analytics, or collaboration tools? If not, what is necessary to get the foundations right?
- Where are the key investment areas that will maximize the contribution to the new vision?
- Can you de-risk some of the investments through experimentation and controlled testing?
- What skills are missing in your digital transformation initiatives? Do you need to hire new executives? Retrain front-line employees? Partner with another firm to gain capabilities?

3. Lead the change from the top

- How do you communicate the vision and engage the organization on a large scale? How do you monitor commitment?
- What process do you have in place to iterate the vision and strategy?
- How do you coordinate investments and activities across silos? What is the best organizational model to

coordinate digital initiatives in parallel to the core business?

- What KPIs and metrics do you need to monitor the progress of your digital transformation toward your strategic goals?
- What mechanism do you use to make the necessary adjustments?

Digital transformation requires skills and influence that only senior leaders possess. Creating a transformative vision that is clear

and compelling will galvanize your organization. Mindfully considering what parts of your company should move – as well as why and when – will make it implementable. Taking action and monitoring progress will turn the vision into reality.

You can download
the complete study at
www.capgemini-consulting.com



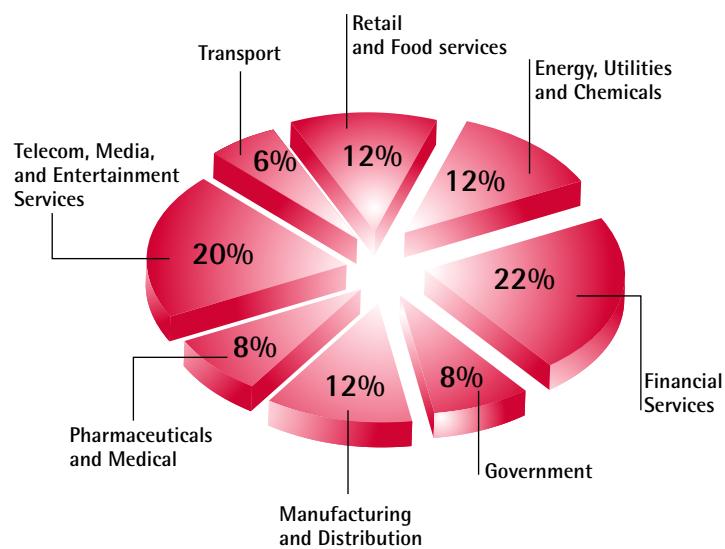
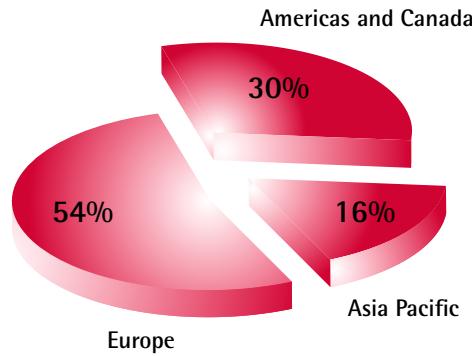
The study

The MIT Center for Digital Business and Capgemini Consulting set out to investigate the ways in which large traditional companies around the world are managing – and benefiting from – digital transformation. Phase 1 of this multi-year research is an exploratory

investigation involving 157 executive-level interviews in 50 companies in 15 countries. These companies are large, with typically \$1 billion or more in annual sales. We conducted in-depth interviews to qualitatively explore the nature of the digital transformation phenomenon

with real executives in real companies. To provide balanced perspectives, approximately half of the interviewees are business leaders such as CEOs, business line managers, marketing heads, or COOs, while the other half are IT and technology leaders.

Interviews covered a broad range of countries and industries



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Special thanks to Greg Gimpel and Mael Tannou for their valuable assistance throughout the project. We would like also to acknowledge the support of all our MIT and Capgemini Consulting colleagues who helped with data collection or contributed their ideas and insights.

About Capgemini Consulting

Capgemini Consulting is the Global Strategy and Transformation Consulting brand of the Capgemini Group, specializing in advising and supporting organizations in transforming their business, from the development of innovative strategy through to execution, with a consistent focus on sustainable results. Capgemini Consulting proposes to leading companies and governments a fresh approach which uses innovative methods, technology and the talents of over 3,600 consultants worldwide.

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About the MIT Center for Digital Business

Founded in 1999, the MIT Center for Digital Business (<http://digital.mit.edu>) joins leading companies, visionary educators, and some of the best students in the world together in inventing and understanding the business value made possible by digital technologies. We are supported entirely by corporate sponsors with whom we work in a dynamic interchange of ideas, analysis, and reflection intended to solve real problems. The Center has funded more than 50 Faculty and performed more than 75 research projects focused on understanding the impact of technology on business value, and developing tools and frameworks our sponsors can use for competitive advantage.

