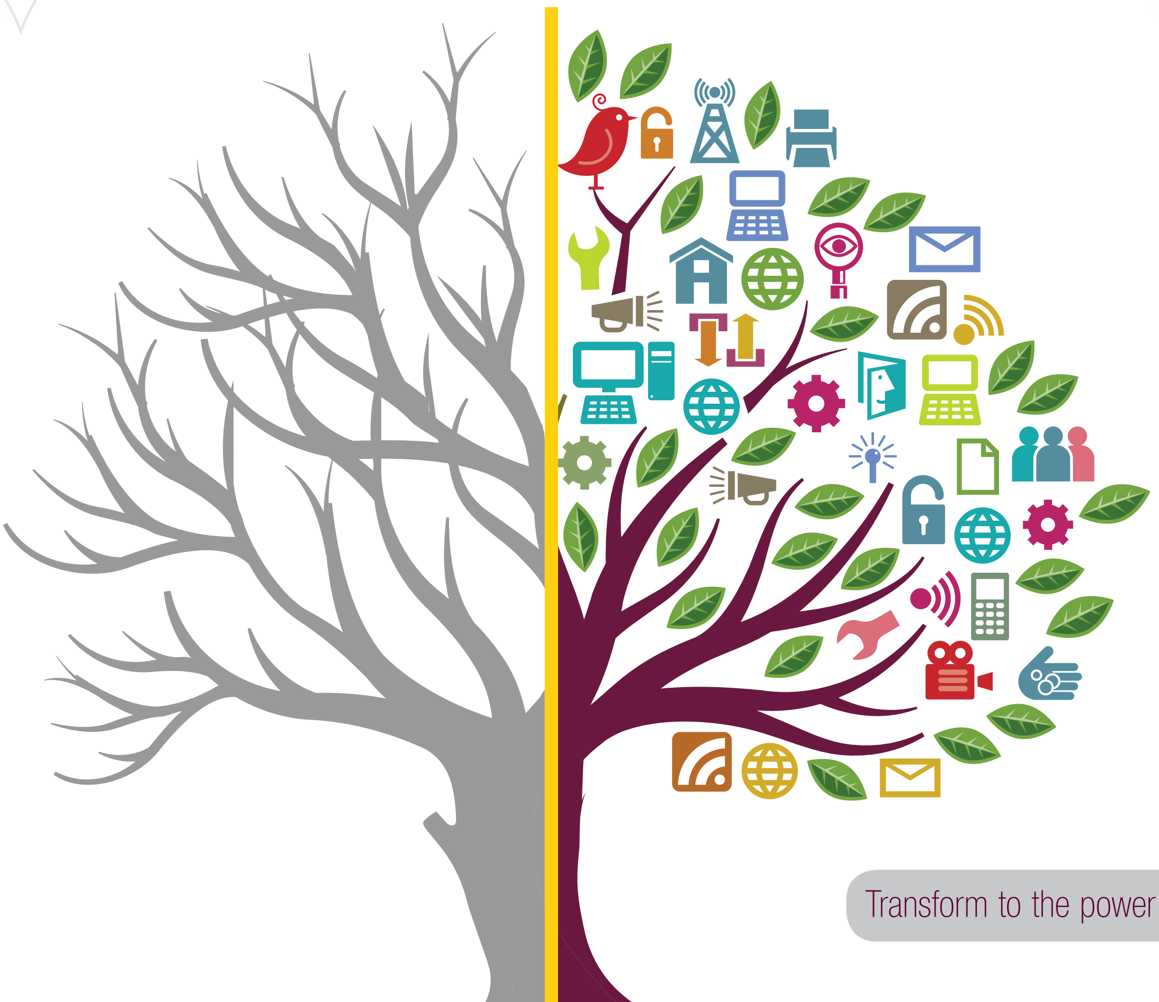
Capgemini Consulting

MITSloan MANAGEMENT

The Digital Advantage: How digital leaders outperform their peers in every industry



Transform to the power of digital

Introduction

New digital technologies like social media, mobile, and analytics are advancing rapidly on the economic landscape. These innovations are used widely by consumers and employees alike. Facebook has more than 1 billion users.[1] There are more than 6 billion mobile phones.[2] Employees often have better digital solutions at home than they do at work, and many customers are more technology savvy than the people trying to sell to them.

Executives in every industry – from media to electronics to paint manufacturing – face a bewildering array of new digital opportunities. They are paying attention, but they have few signposts to guide them. Most stories in the business media focus on fast-moving startups like Zynga and Pinterest, or on a few large high-tech firms like Apple, Google, or Amazon. Unfortunately, to many leaders, stories of these nimble and innovative firms just do not make sense for traditional companies that are older, larger, and burdened with inflexible legacies.

We decided to find out what fast-moving digital innovations mean for large traditional companies. In two years of study covering more than 400 large firms (See About the Research), we found that most large firms are already taking action. They are using technologies like social media, mobile, analytics and embedded devices to change their customer engagement, internal operations and even their business models. But few firms have positioned themselves to capture the real business benefits. Our research points to a real "digital advantage" to those that do.

Digital maturity matters. It matters in every industry. And the approaches that digitally mature companies use can be adopted by any company that has the leadership drive to do so.

> *"Few firms have positioned themselves to capture the real business benefits. Our research points to a real "digital advantage" to those that do."*

What is Digital Maturity?

Some companies are what we call the "Digirati." They have the digital maturity not only to build digital innovations, but also to drive enterprise-wide transformation. And they benefit from their actions. Digirati have significantly higher financial performance than their less digitally-mature competitors.

Digital maturity is a combination of two separate but related dimensions (See figure 1). The first, **digital intensity**, is investment in technology-enabled initiatives to change how the company operates – its customer engagements, internal operations, and even business models. Burberry (See page 5) used technology to improve the in-store experience and increase operational excellence. Codelco (See page 5) is automating mining operations to improve efficiency and safety while creating new business opportunities.

Companies in all industries are investing in interesting digital initiatives. However, in many firms, these investments are uncoordinated and sometimes duplicative.

Firms maturing in the second dimension, **transformation management intensity**, are creating the leadership capabilities necessary to drive digital transformation in the organization. Transformation intensity consists of the vision to shape a new future, governance and engagement to steer the course, and IT/business relationships to implement technology-based change. Volvo developed a vision and governance capabilities before it began to implement new digital services in its cars.[3] Nike built a digital division called Nike Digital Sport to coordinate and extend the successful activities it had built separately in social media, digital product design, custom manufacturing, and other areas (See page 19). The elements of transformation management intensity work together – through a combination of top-down leadership and bottom-up innovation – to drive ongoing digital transformation. However, in many companies, these elements are overly slow or conservative, preventing the company from investing in innovative opportunities.

Figure 1. The What-and-How of Digital Transformation

DIGITAL INTENSITY

Technology-enabled initiatives in:

- Customer Engagement
- Internal Operations

Location-based marketing
Connected products
Digital Design
Real-time monitoring of operations
Mobile sales
Optimized Pricing
Communities in social media
...

TRANSFORMATION MANAGEMENT INTENSITY

Leadership capabilities including:

- Vision
- Governance
- Engagement
- IT-Business Relationships

Vision of the firm's future
Cross-silo coordination
Evolving the culture
New skills
...

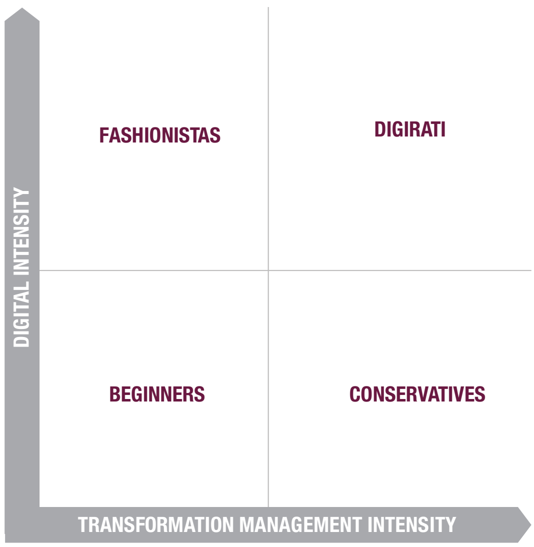
The two dimensions spell out four different types of digital maturity (See figure 2). Companies in the lower left are *Digital Beginners*. These firms do very little with advanced digital capabilities, although they may be mature with more traditional applications such as ERP or electronic commerce. Although companies may be Beginners by choice, more often than not they are in this quadrant by accident. They may be unaware of the opportunities, or may be starting some small investments without effective transformation management in place.

Firms in the top left are *Digital Fashionistas*. These companies have implemented or experimented with many sexy digital applications. Some of these initiatives 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 the digital transformation strategy is not founded on real knowledge of how to maximize business benefits. Companies lacking enterprise-level governance may find they are in this quadrant at the corporate level, even if digital efforts are more mature in some business units.

Companies in the bottom right are *Digital Conservatives*. They favor prudence over innovation. Conservatives understand the need for a strong unifying vision as well as for governance and corporate culture to ensure investments are managed well. However, they are typically skeptical of the value of new digital trends, sometimes to their detriment. Though aiming to spend wisely, their careful approach may cause them to miss valuable opportunities upon which their more stylish competitors will pounce.

Firms at the top right are *Digirati*. They truly understand how to drive value with digital transformation. They combine a transformative vision, careful governance and engagement, with sufficient investment in new opportunities. Through vision and engagement, they develop a digital culture that can envision further changes and implement them wisely. By investing and carefully coordinating digital initiatives, they continuously advance their digital competitive advantage.

Figure 2. Four Types of Digital Maturity



Codelco:

Revolutionizing Mining Through Digital Technologies

Codelco, the largest copper producer in the world, has its roots back in the 1800s. Owned by the Chilean State, it operates internationally and employs over 18,000 people. At the beginning of the millennium – facing increasing challenges around workers' security, environment and productivity – Codelco took a hard strategic look at what the future of mining could be. An important goal was to automate mining operations, shifting from a physical-intensive model to a knowledge and technology-intensive one. To turn vision into reality, Codelco Digital was created in 2003. It has both operational and strategic objectives: to drive initiatives in mining-automation and also to support the CEO in developing, evolving and communicating a digital vision. Today, four mines in Chile are operated automatically: trucks drive themselves, operations are controlled remotely, information is shared in real-time, and so on. This was more than just a technology implementation challenge. It involved a new culture, employee engagement, and new skills. As CIO Marco Antonio Orellana Silva explains: *"Our company is very conservative, so changing the culture is a key challenge. We created internal innovation awards to promote new ideas and encourage our workers to innovate."*[4]

Today, the firm is shifting from the traditional "Codelco 1.0" model to "Codelco 2.0", a real-time mining model with highly automated processes and remotely-controlled machines. And there is already a vision for "Codelco 3.0": an intelligent mining model relying on integrated information networks and fully-automated processes.[5]

CODELCO

Burberry:

The Digital Transformation of an Iconic Luxury Brand

Burberry is an iconic British luxury brand established in 1856. When CEO Angela Ahrendts took over in 2006, it was significantly underperforming against its peers: while the overall sector was growing at around 12-13% a year, Burberry's rate was about 1-2%. To address these issues, Ahrendts launched a significant transformation program covering multiple business areas, from customer experience to operational excellence, and largely driven by digital technologies. As well as online, Burberry also leveraged digital technologies to enrich the in-store customer experience, while at the back end, it rolled-out a global ERP program to unify processes and integrate data across the globe.

Achieving this transformation was much more than new technology implementation. This was a closely managed change program to achieve cross-channel consistency, engage employees, secure the right skills, and develop strong IT-business relationships. Specific governance was put in place, new roles were created, and missing skills were developed or acquired. According to Ahrendts, *"Digital has been a catalyst for everything in the company and, when we got everyone on board with this concept, they were clamoring to become even more connected."* While this transformation is now bearing fruit, Ahrendts already has one eye on the future possibilities: *"Consumer data will be the biggest differentiator in the next two to three years. Whoever unlocks the reams of data and uses it strategically will win."*[6]

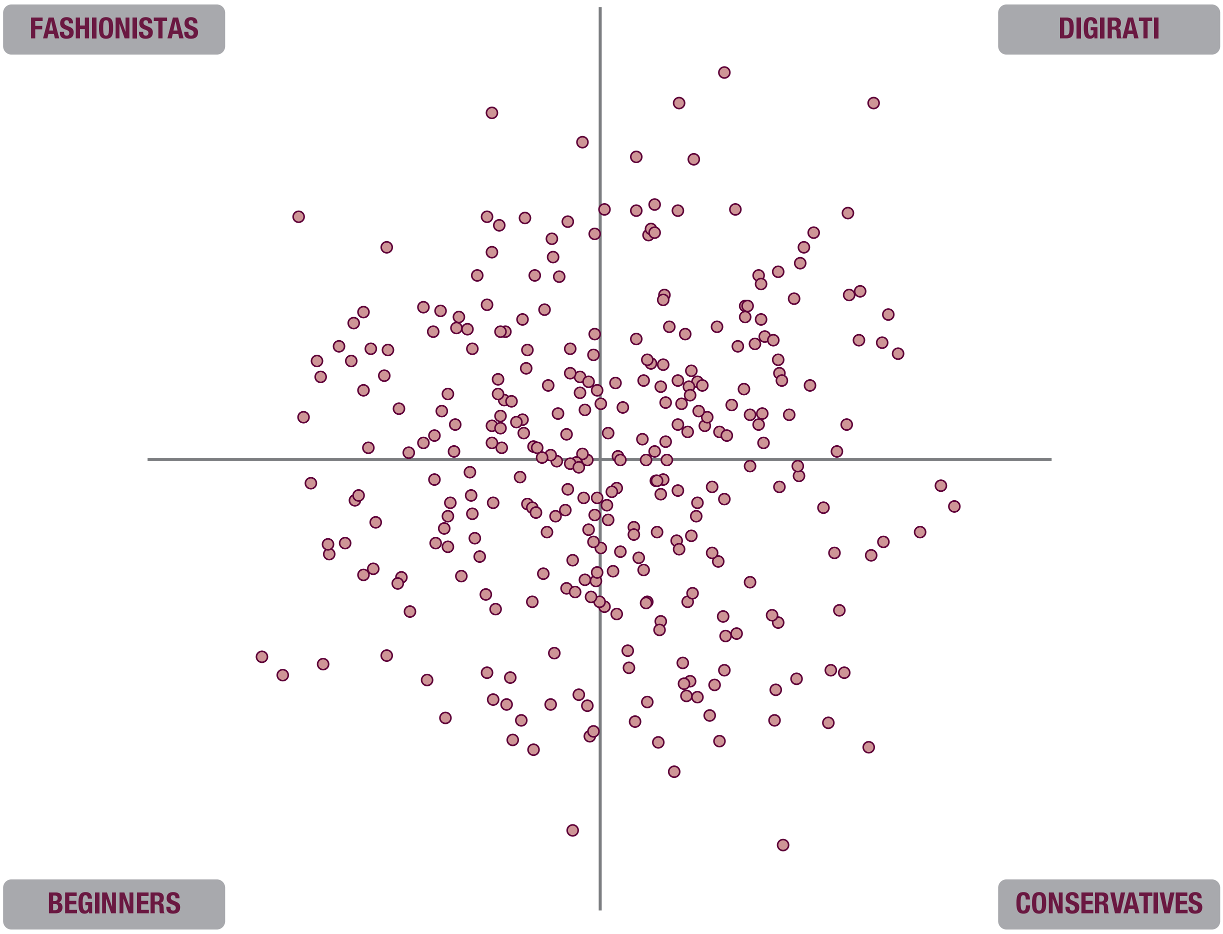
BURBERRY
LONDON

Digital Maturity Matters

Companies take different paths to digital maturity. Nike started by developing digital intensity in silos. Then it added elements of transformation management intensity to link the silos and launch new capabilities. Indian paint manufacturer Asian Paints went the other way, creating vision, governance and IT capabilities to become a more unified company.[7] Then it repeatedly built on its capabilities to transform its customer engagement, internal operations and business models. Both firms are reaping huge benefits.

These companies are not alone. The 391 companies in our survey vary widely on digital maturity (See figure 3).

Figure 3. Digital Maturity Varies Widely



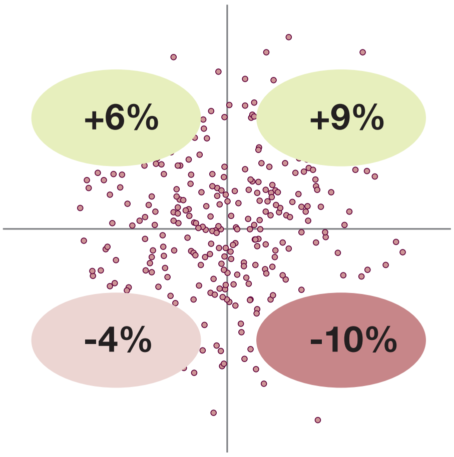
To understand the relationships between digital maturity and financial performance, we analyzed industry-adjusted financial performance of the 184 publicly traded firms on our sample (See About the Research). Comparing digitally mature companies to their less-mature competitors, we found striking differences (See figure 4). Companies that are mature in either of the two dimensions outstrip industry competitors along different dimensions of financial performance. Digirati – those companies that are mature in both dimensions – have the highest performance, far outperforming less-mature firms on multiple financial measures.

Figure 4. Financial Performance

REVENUE GENERATION

Companies with stronger digital intensity derive more revenue from their physical assets

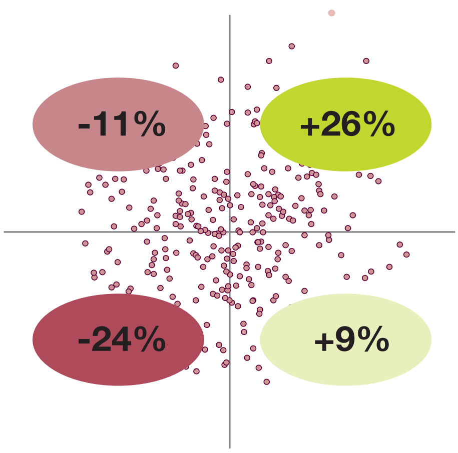
Basket of indicators:
- Revenue / Employee
- Fixed Assets Turnover (Revenue / Property, Plant & Equipment)



PROFITABILITY

Companies with stronger transformation management intensity are more profitable

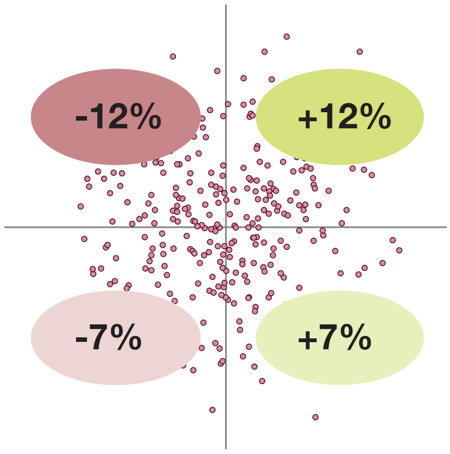
Basket of indicators:
- EBIT Margin
- Net Profit Margin



MARKET VALUATION

Companies with stronger transformation management intensity achieve higher market valuations

Basket of indicators:
- Tobin's Q Ratio
- Price / Book Ratio



Digital Intensity and Revenue Generation

Companies that are mature on the digital intensity dimension (vertical axis in the matrix) are better at driving revenue through their existing assets. On a basket of measures including revenue per employee and fixed asset turnover, Fashionistas and Digirati outperform average industry performance by 6-9%. Hospitality firm Caesars Entertainment, for example, has launched a location-based mobile marketing capability (See page 16). Customers get offers when and where they need them, and Caesars is able to learn – in real time – about the personal preferences of each customer.

Digital intensity helps companies to gain and manage more volume with existing physical capacity. The difference is substantial. For example, Fashionistas – strong on digital intensity but not on transformation management intensity – drive 16% more revenues through their human and physical assets than Conservatives do.

> *“Digital intensity helps companies to gain and manage more volume with existing physical capacity.”*

> *“Companies that are mature in transformation management intensity are more profitable.”*

Transformation Management Intensity and Profitability

Moving in the other dimension, companies that are mature in transformation management intensity are more profitable. On average, Conservatives and Digirati are 9-26% more profitable than their average industry competitors on a basket of measures including EBIT margin and net profit margin. For these firms, strong vision and governance help to align investments along a common direction. They weed out activities that run counter to the future vision of the transformed firm. Then they engage their employees in identifying new opportunities. Executives of French yellow pages firm Pages Jaunes declared that all future investment, other than maintenance, must focus on growing digital revenues and profits, not improving the traditional paper-based business. Meanwhile, through communication and training, executives engaged the workforce to enact the vision and generate new ideas.

Digirati outperform all others

Firms that are more mature on either dimension outperform their competitors in specific and different ways. The Digirati – the 25% of firms that are more mature in both dimensions – far outperform the others. On average, Digirati are 26% more profitable than their industry competitors. They generate 9% more revenue through their employees and physical assets. And they create more value, generating 12% higher market valuation ratios. The Digirati advantage is more than just the sum of performance gains for Conservatives and Fashionistas. Digirati combine digital intensity and transformation intensity to achieve performance that is greater than either dimension can deliver on its own.

Digital Maturity Matters in Every Industry

The results are clear. On average, Digirati are 26% more profitable than their industry competitors. For the large traditional companies we studied – most of which are $1 Billion or larger in revenues – the difference can be many millions of dollars on the bottom line. But, does this mean every industry is equally affected? Can companies in some industries afford to wait?

Digital transformation is moving more rapidly in some industries than in others. Companies in the travel and music industries were hit early by threats from digital competition, and have already undergone profound transformation, but still have more challenges to face. Industries such as financial services and retail underwent major transformation due to electronic commerce in the 2000s, and are now starting to innovate with technologies such as social media, mobility and analytics. Other industries, however, have yet to be hit hard by fast-changing technologies.

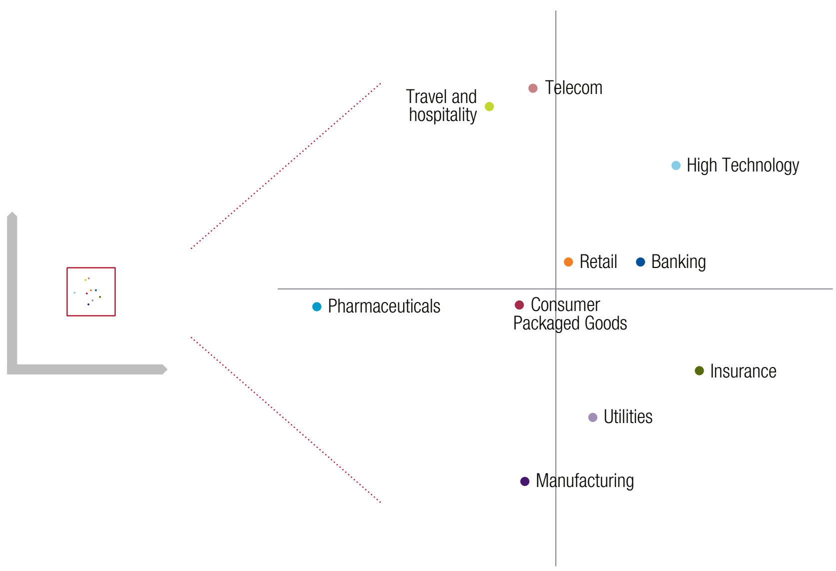
Figure 5 shows digital maturity, by industry, for our survey. Each dot represents the average maturity of industries for which we have 20 or more data points. High Technology firms lead in digital maturity, as might be expected. Banking and retail are in the Digirati space, but are not as mature as high tech. The bankers' Digirati status may be because digital features such as online or mobile banking are good for both banks and their customers. Digital offerings provide convenience to customers while serving as lower-cost channels for the banks.

Telecom and travel are in the Fashionista space. They have launched important technology-based features and business model changes, but on average their transformation management intensity is not quite enough to move them into the Digirati.

Insurance and utilities are in the Conservative space. Some insurers are focused on innovating with new technologies, but many are being held back by regulatory concerns or difficult organizational legacies. Similarly, utilities may be hindered by legacies of culture or regulatory environment that force a focus on cost reduction rather than broader innovation.

Other industries are less mature. Manufacturers and CPG firms, for example, are still in the Beginner quadrant on average, although some firms are more advanced. Pharmaceutical firms, while still Beginners on average, look more like Fashionistas than the other two industries. Pharma companies are starting to invest, but may be having difficulty in linking organizational silos – a legacy of a long history of acquisition and decentralization – or executives may believe they have time before they need to transform.

Figure 5. Maturity by Industry



* Average digital maturity for all industries with 20 or more companies represented in the survey

Beginners

Pharmaceuticals – Executives see threat in digital transformation but less opportunity than other industries do, perhaps because of regulation. Many are building capabilities in analytics and worker enablement, but most firms are just beginning their digital journeys, leaving many opportunities untapped.

CPG – Digital opens new possibilities for firms to engage directly with customers. 24% of firms surveyed stand out as Digirati, while others lag far behind. Generally, less-mature CPG firms can improve through stronger visions, greater digital investments and more robust transformation management.

Manufacturing – Traditionally slow to react to digital,[8] Manufacturing is on the cusp of emerging from Beginner status. Efforts in digital remain focused on operational efficiencies and worker enablement, but the B2B nature of many companies may limit their attention to digital customer engagement. Manufacturers see less opportunity and threat in digital transformation than other industries. To mature, firms may need a transformative digital vision, plus the engagement and governance to develop impetus for digital investments.

Figure 6 helps to clarify maturity differences among industries. It shows the percentage of firms in each industry by quadrant. Note that more than 80% of travel and hospitality firms are Digirati or Fashionistas, and there are no Beginners in the industry. Many travel and hospitality firms have made extensive investments in digital intensity, but not all have invested in transformation management intensity necessary to drive additional value from digital transformation. They may even be Digirati in disconnected silos. These firms, having already implemented digital innovations, can invest in ways to develop a more coordinated and efficient approach to digital transformation. Given the large number of Digirati in the travel and hospitality industry, Fashionistas should carefully consider investing in transformation leadership capabilities.

Conservatives

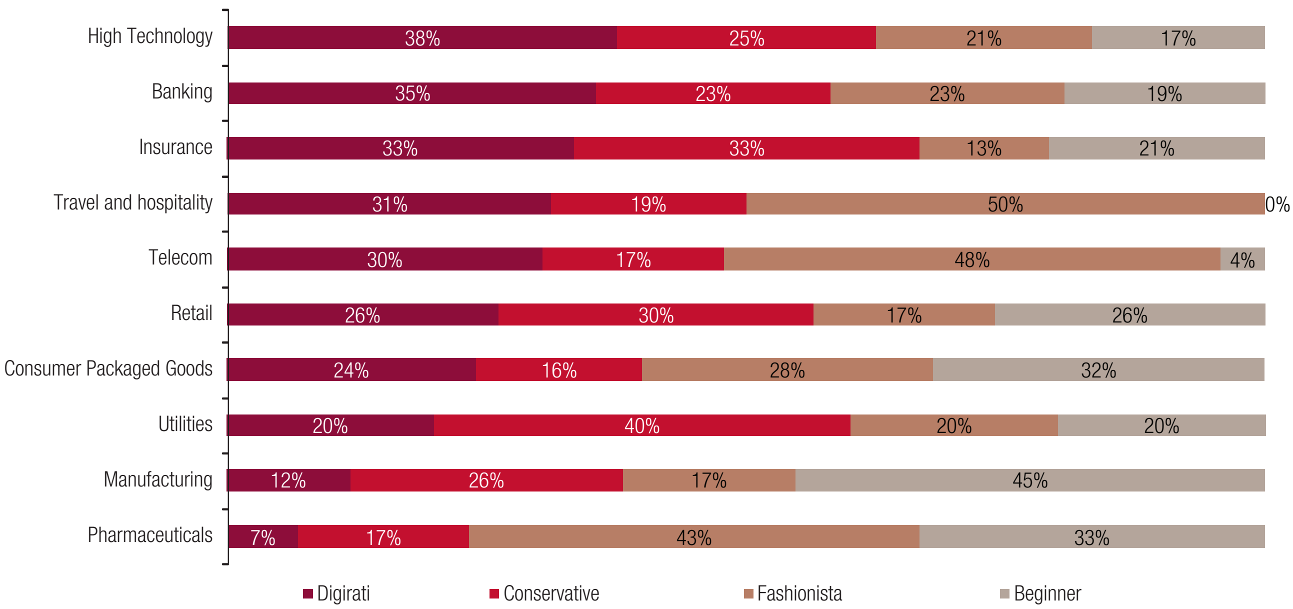
Insurance – High expectations for digital and strong vision and governance suggest that the insurers should be leading the digital revolution. Yet, this is not the case for most firms. Generally, scores for engaging customers through social media and mobile are lower than average, suggesting that the combination of strong digital governance capabilities, regulatory worries, and a risk-averse culture could be an innovation-stifler.

Utilities – For the Conservative Utilities industry, efficiency is the name of the game in digital transformation. Constant pressure to reduce costs and the advent of smart metering create digital opportunities in customer experience, worker enablement, analytics and process improvement.

Retailers, surprisingly, look more like utility companies in their digital maturity profile than like faster-moving technology companies. Although many retailers have mastered both dimensions of maturity when managing multichannel e-commerce, some others still struggle with the multichannel integration. Investing in transformation management intensity may help these retailers master multichannel business while launching new ways to enhance sales and service through social media, mobile and analytics.

Other retailers may have slipped from Digirati to Conservative quadrants if they were slow to invest in newer technologies like social media, mobile, and analytics. The large number of Conservatives in retail – already having transformation management intensity to gain value from technology investments – could move quickly into the Digirati quadrant by increasing their digital intensity in newer technologies.

Figure 6. Maturity Breakdown by Industry



Fashionistas

Telecom – Facing ever-increasing levels of connectivity and data consumption, Telecom firms have been quick to respond. Of the organizations in our study, 78% are high on digital intensity (Digirati or Fashionistas) and Beginners are almost non-existent. To complement their digital strengths, Telecom firms can focus on stronger digital leadership to integrate and align initiatives across silos**.**

Travel and hospitality – Since the advent of the web, digital has turned the industry upside down. The industry has responded, with 81% of firms in the Digirati or Fashionista quadrants and no Beginners. Opportunities exist to improve worker enablement in many companies. To make the jump into Digirati territory, Fashionistas will need to build levels of excellence in transformation management to match their high digital intensity, including a transformational vision for the future.

"Every industry – from manufacturing to high technology – has firms that have already begun to gain the benefits of digital transformation."

Do we have time to wait?

Executives in industries such as CPG, pharmaceuticals and manufacturing might be tempted to believe they do not yet need to engage in digital transformation. Their industries are less digitally mature than others, so they might have time to wait.

Digirati

Banking – Digital is revolutionizing the relationship between customers and retail banks, who have responded with strong capabilities in customer service, analytics and even social media. Banks have an opportunity to parlay these successes into new innovations in mobile or social customer engagement and internal knowledge sharing. In addition, opportunities exist to integrate initiatives and processes across corporate silos.

Retail – A decade-long history with digital disruption has seasoned retailers and produced a number of Digirati (26% of firms surveyed). Retailers are generally confident in the potential for social and mobile, as well as their digital skill set. Moving forward, firms may want to focus on cross-channel consistency and worker enablement while building analytics capabilities.

High-Tech – For High-tech, digital is close to home. Firms generally enjoy well-developed capabilities and high digital maturity. They are also – not surprisingly – enthusiastic about digital's potential. This momentum may create further opportunities in mobile and embedded devices.

"Digital Beginners in any industry are several years from gaining the digital maturity that their Digirati competitors already possess."

However, Figure 6 shows an important message even for these industries. Every industry, regardless of how digitally mature, hosts companies that are Digirati. In other words, every industry – from manufacturing to high technology – has firms that have already begun to gain the benefits of digital transformation.

This should be a call to action for executives in every firm. It takes several years to build maturity, especially in the transformation management intensity dimension. Digital Beginners in any industry are several years from gaining the digital maturity that their Digirati competitors already possess.

Building Digital Maturity: Digital DNA

Digital maturity matters. It matters for every industry. But how can you develop your own digital maturity? We have identified common patterns for how companies have built their digital advantage. All Digirati invest in the elements of transformation management – vision, governance, and engagement. They also perform well on the digital intensity dimension. But, Digirati status is more than simply a combination of sound management and digital capability – there is something inherently different about Digirati DNA that separates them from the rest. Digirati make strategic choices about how they will be excellent in digital intensity. They build their digital intensity through a set of common patterns that exploit complementary capabilities to deliver ever-greater levels of digital value.

Strong transformation management capabilities

We identified four key transformation management practices that enable companies to align their digital efforts under a common vision and coordination structure, and engage the company in making that vision a reality. These practices are:

- **Transformative vision.** A strong vision helps to frame in people's minds a picture of how the company will be different in the future. It also helps people understand what former assumptions may no longer be valid. Executives in the French yellow pages, Pages Jaunes, seeing their traditional print model lose 10% of revenues annually in the face of digital search competitors like Google, re-envisioned their business. CEO Jean-Pierre Remy helped employees understand they were not in the business of producing heavy yellow books. They were in the business of connecting small businesses to local customers. Books were just a technology that could be replaced by websites or location-aware smartphone apps.[9]
- **Digital governance.** Effective investment rules and coordination mechanisms improve efficiency and ensure digital efforts are moving in the right direction. When Spanish media conglomerate Prisa launched its digital transformation program, one of the first initiatives was to create a central digital unit to coordinate and assist in building digital businesses. Appointing a Group-level Chief Digital Officer, reporting directly to the CEO, was a major signal. Local CDOs were appointed in each division, coordinating with the central unit.[10]
- **Engagement.** When employees are engaged in a shared vision they help to make the vision a reality. They offer less resistance to change and often identify new opportunities that were not previously envisioned. At Codelco, engaging employees in the digital vision was critical to succeed, but difficult because of the firm's Conservative culture. Codelco's top management launched innovation contests for employees in order to foster a culture of change and innovation in the firm.[11]
- **IT-Business relationships.** Digital transformation is about re-defining big parts of the business, and IT is essential in doing it. In some companies, the CIO is the perfect person to suggest and even drive digital initiatives; in other cases the digital agenda will be driven by business or joint IT-business teams. In any case, shared understanding between IT and business executives is critical to success.

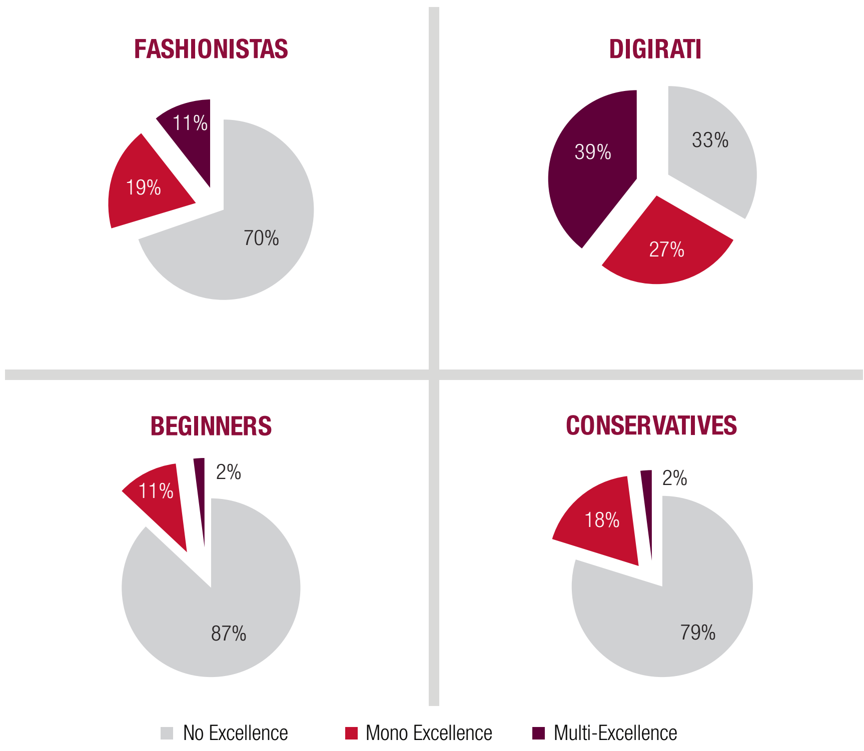
By definition, both Conservatives and Digirati perform well on the four components of transformation management intensity. What separates Digirati, however, is Vision. Where Conservatives focus on control and alignment, Digirati have also developed a strong transformative vision that energizes employees to make change happen.

Digirati make strategic choices on where to excel digitally

To understand how Digirati distinguish themselves in digital intensity, we examined six digital intensity domains: customer experience, social media, mobile, customer analytics, process digitization and internal collaboration (See figure 8 overleaf).

Our analysis of these capabilities yielded two important findings. First, although both Digirati and Fashionistas have strong digital intensity, Digirati distinguish themselves by excelling in one or more areas (See figure 7). Two-thirds of the Digirati exhibit one or more domains of excellence. 70% of Fashionistas have none, despite comparable average levels of digital intensity. This gap is even more significant compared to Conservatives and Beginners.

Figure 7. Focus on Excellence

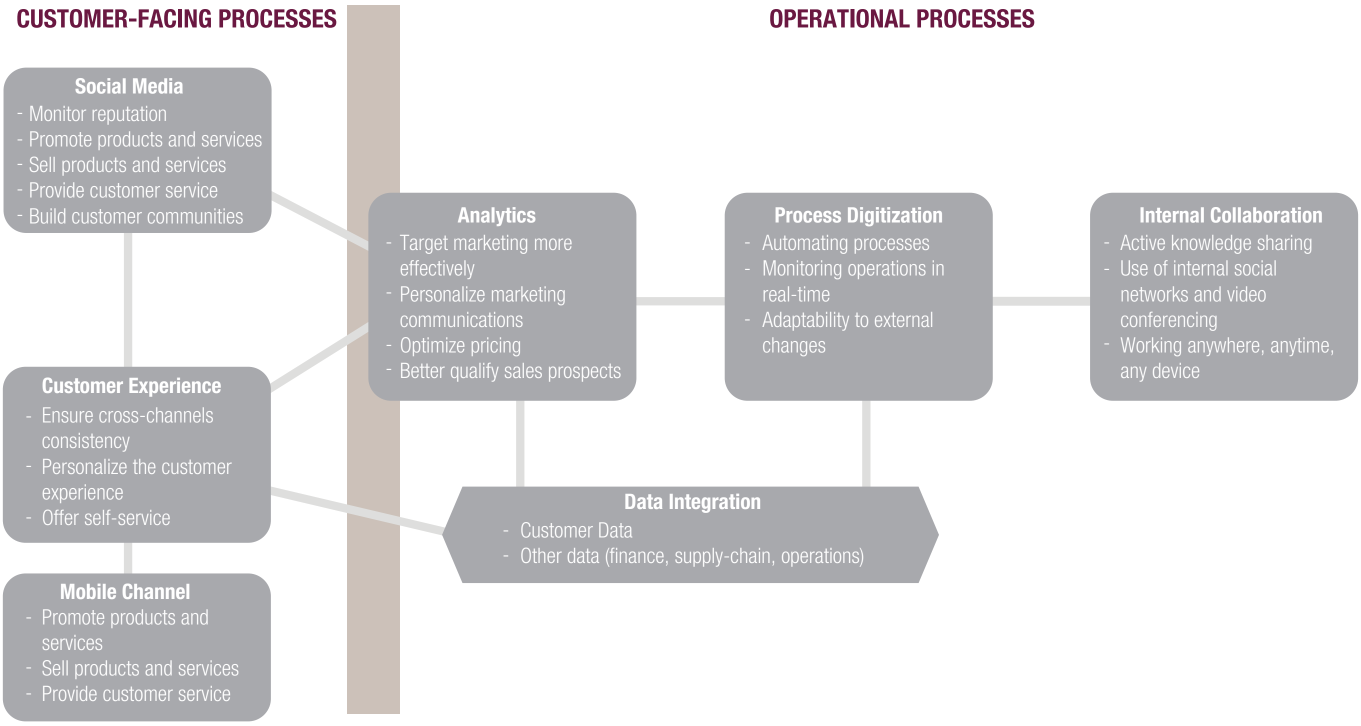


Note: charts represent percentage of companies that exhibit Excellence in one or more of the six digital intensity domains. We define excellence as an average score > 6 (on a 1-7 scale) on all questions of a given domain, after dropping the question with the lowest score.

Second, there are clear patterns in how and where Digirati invest in these domains. Though every company's journey is unique, certain combinations of investment appear to be complementary. Companies seem to combine digital capabilities to exploit synergies between them. Figure 8 illustrates patterns we identified between the six domains, plus data integration. Although not an end in its own right, data integration is – not surprisingly – an important enabling capability for a number of domains.

> *What do you want to be famous for? Where to start? What to do next?*

Figure 8. Most Common Linkages Between Domains of Excellence



Executives can use this model to build their digital vision and define their digital transformation journey: What do you want to be famous for? Where to start? What to do next? A careful analysis of the company's strategic assets can help answering these questions.

For example, when Burberry initiated its transformation journey in 2006, the management team identified how to build on its strategic assets to succeed in the digital world. According to CEO Angela Ahrendts, *"we began to develop our five-year strategy, asking: What do we have that our peers don't?… And we did have a number of key differentiators in the luxury sector we could exploit."* Building on these strengths, Burberry decided to transform its customer experience, both in-store and online, including advanced customer interactions in social media. Internally, Burberry rolled out a large ERP program to improve data integration and find ways to excel in operational processes. According to Ahrendts, *"we wanted to be as admired and respected for the back end of our business as for the front end."*

While Burberry started with the left of our model and moved to the right, other firms go the other way. Indian paint manufacturer Asian Paints started with process excellence and moved leftward. Manish Choksi, CIO and Head of Strategy, explained: *"in the early 2000s, our focus was on internal efficiencies. We implemented a traditional enterprise-wide ERP and advanced supply chain. This was the basis for further improvements in sales and customer processes."*[12]

In both cases, strong data integration is critical to linking customer-facing and operational processes. Analytics are often considered the next important game changer. Companies mastering these domains have many strategic options both on the customer and operational sides. In the mid-2000s, Caesars Entertainment developed analytics excellence that helped it to offer highly personalized customer experiences to its clients both online and in its facilities (See page 16). In the early 2010s, Caesars extended its excellence to the mobile channel by providing new services and information and even engaging in personalized location-based marketing.

Transforming Business Models

Changing customer experience or operational process – two key elements of digital intensity – is difficult. Changing a business model or globalizing a company is even more difficult.

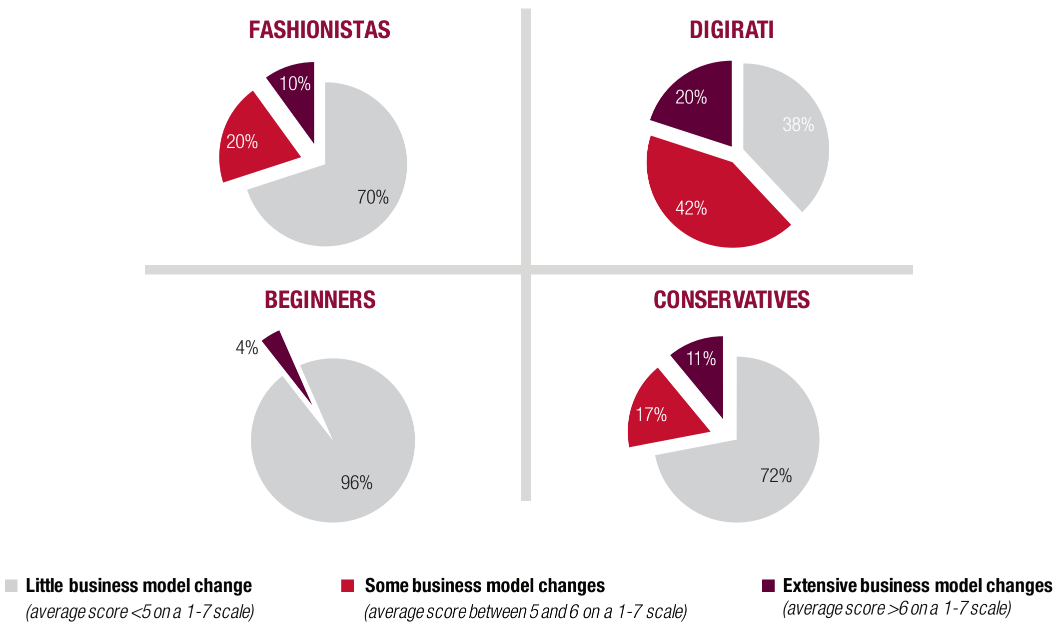
> *“Digirati are far better than other types of firms at changing their business models.”*

Figure 9 shows the extent to which companies in each quadrant are able to execute these changes. Digirati are far better than other types of firms at changing their business models. They are able to link their implementation capabilities and leadership capabilities to fundamentally transform how the company operates. Companies in other quadrants are less able to do so.

The business model changes we analyzed included topics such as adding value to products and services, reaching new customers, linking operational and customer-facing processes in new ways, and even launching new businesses. Digirati often engaged in more than one change. For example, when Volvo developed automobile connectivity features, a key goal was to deliver a better experience to clients: drivers can use a smartphone to lock the car, start the heater remotely, or locate the car, or buy roadside assistance and theft protection services.[13] But customer experience was not the only objective. Connectivity brings Volvo closer to end customers who traditionally had a relationship only with dealers. It enables Volvo to augment its traditional B2B model of selling cars to dealerships with a B2C model of interacting directly with customers.

Figure 9. Business Model Changes

Percentage of companies in each quadrant achieving business model changes through the use of digital technologies



Caesars Entertainment:

Creating the Data-Driven Mobile Experience

Global resort and gaming firm **Caesars** is a leader in improving customer loyalty and revenues by enhancing customer satisfaction. For more than a decade, the firm's award winning[14] loyalty program, Total Rewards, has used analytics to deliver an extremely personalized experience for its customers. Now, Caesars is extending its data-driven approach with mobile.

Texpress: Upon arrival at one of Caesars' 40 properties, guests that have opted into Caesars' Texpress service are invited to check-in via SMS. They can bypass registration lines and get their keys at the bell desk. Texpress also combines mobile location data and SMS to deliver timely and relevant special offers. *"If you're at Paris, we could send you two free admissions to the Eiffel Tower ride or if you're at Caesars Palace after 6 p.m., we could send you an offer for the Bette Midler show,"* explains Neal Narayani, director of e-mail and mobile marketing for Caesars. *"We might have some additional show tickets left over, so knowing where the customer is, is a great way to get those tickets pushed."*[15]

Apps: Caesars' apps put more of its services at guests' fingertips during their stay. The myTR app allows Total Rewards members to keep track of special offers, manage reward points and even book rooms. The firm's Las Vegas or Atlantic City apps[16] provide access to a mobile concierge, real-time event information, in-room dining, and even wake-up calls.

Linking mobile and other channels: Caesars has optimized its website to make mobile access "sleek and easy to navigate."[17] It is now integrating mobile and physical promotions. For example, a guest may scan a QR code associated with a Jerry Seinfeld show promotion, directing them to a video about the show and a website where they can buy a ticket.

According to one executive, *"Most decisions with our guests happen on the casino floor. That's where you have to reach them."*[18] Every phone in the pocket of a Caesars guest represents a unique opportunity to deliver personalized service. Monica Sullivan, VP of Advertising, explained, *"There will continue to be more opportunities with mobile devices to engage with our guests both when they plan travel and while travelling."*[19] *"Social, local, and mobile are huge areas of innovation and places to win."*[20]

CAESARS ENTERTAINMENT

Conducting Your Own Digital Transformation

CEOs and other senior executives are increasingly asking practical questions about what digital transformation means for their businesses: How and where do I start? How do I compare with my peers or versus best practices? Where do I invest? Although there is no one-size-fits-all approach, our two-year research program provides some useful pointers for successfully executing a digital transformation. Conducting your digital transformation requires taking action in four key areas: framing, investing, engaging, and sustaining.

Frame the digital challenge

As with all transformation, CEOs first need to ensure that their senior leaders have a common vision of how to proceed. They need to understand why to change, and how the future will be better than the current situation.

The first step is to **understand the threats** and opportunities that digital represents to the organization. Will existing ways of working continue to be effective in a digital world? Are there new opportunities available in customer experience, operational processes or business models? **Assess your firm's digital maturity** – both digital initiatives undertaken and leadership capabilities to drive transformation. Then, you can take steps to move depending on your current maturity level. For example, Conservatives need to energize the organization to engage in valuable digital opportunities. Fashionistas, on the other hand, should aim to rationalize a myriad of digital initiatives and add proper transformation management practices to unite functional silos.

A critical input to driving change is a **transformative digital vision**. Without a vision of change, employees tend to do what they have been doing for years, even if it is no longer useful in the digital world. Executives typically build visions with a focus on operational effectiveness (inside-out), superior customer experience and sales (outside-in), or a combination of the two. P&G, for example, uses a clear inside-out vision: "Centralization and digitization will improve productivity and create deeper, more sustainable organizational capabilities."[21] Whatever the focus, the **senior team should have a common vision** of how to proceed. Only then can they help to drive change throughout the organization.

Focus Investment

To make the digital vision a reality, executives must ensure their organizations invest in the right areas. This requires cutting back in unproductive areas while ramping up investment where it needs to occur. Digirati differentiate themselves by excelling in a few areas – customer experience, social media, mobile, customer analytics, process digitization or internal collaboration – but rarely in all. Executives must **identify where the company should excel** now, based on its existing capabilities and strategic assets. Then, as capabilities improve, they can refocus toward new areas of excellence.

An important question is to **decide if you need to adapt your business model.** In some industries, there is no choice. The structural changes in postal services, for instance, are calling for a radical rethinking of how organizations do business. Companies in other sectors, where the pace of change is less rapid, have the opportunity to create value by adapting their business models – adding value to products and services, reaching new customers, linking operational and customer-facing processes in new ways, and even launching entirely new businesses.

High-performing companies have **strong enterprise-level governance** around their digital initiatives. These governance mechanisms aim to increase the level of coordination and sharing across silo-run digital initiatives. Three key governance mechanisms are common: dedicated committees, shared units, and new roles including Digital Czars. P&G created a shared digital unit to accelerate the diffusion of digital services across the global brands. Starbucks recently hired a Chief Digital Officer (CDO) to create synergies among the many ways the company engages customers.

> *"Conducting your digital transformation requires taking action in four key areas: framing, investing, engaging, and sustaining."*

Engage the organization at scale

Putting the organization in motion early is essential. CEOs and top teams of digital leaders often send an unequivocal signal that change is necessary, and that it needs to start immediately. The CEO of L'Oréal declared that 2010 was the "Digital Year." L'Oréal's CMO explained: *"That year was therefore one of intense effort … with strategic digital initiatives impacting all of our 23 brands in all countries."*[22] Leaders can use a wide array of digital channels, such as broadcast, web, video, and social networks to generate **continuous two-way communication** at scale. Richard Branson, CEO of Virgin Group, encourages customers to get in touch with him through a custom hashtag on Twitter.[23]

Equally important is to **encourage employees to identify new practices and opportunities** that will advance the vision. Technology firm EMC runs an annual innovation competition through which employee teams can suggest new initiatives. Retailer Sainsbury runs a panel of more than 2,000 employees who give feedback every month about key issues affecting the organization.[24]

Sustain the transformation

Successful digital transformation is built on a foundation of core skills and capabilities. Although more than half of the executives we surveyed believe their firms have the necessary digital skills, nearly all believe that they need to improve in some areas. To **fill skills gaps**, consider hiring some experienced executives who can make an impact quickly and coach existing employees. Redesign your training programs to develop skills your company needs, such as Intel's "Digital IQ" program that trains and certifies employees in social media.[25] Where useful, partner with vendors to gain skills and cross-sector experience that complements your capabilities. Some companies even acquire small firms to gain specific digital skills such as mobile marketing or analytics.

Beyond skills, executives must focus on building and sustaining momentum for change. **Quantify and monitor progress** toward the digital ambition through KPIs or digital scorecards. Scorecards such as these have power beyond just measuring the impact of major investments. They help to change the culture. For example, Prisa uses a transformation index to drive accountability and cooperation across all employees in the organization.

Finally, no transformation can be planned fully in advance. As they proceed in their transformation and better understand the impact of digital, executives should look for opportunities to **iterate and improve**. Executives at Asian Paints started their transformation by unifying information and centralizing basic order taking. This created new opportunities to refocus the role of salespeople and to rethink the way that factories were managed. These changes opened up new opportunities to sell new types of services and to reduce the risk of expanding beyond the firm's geographical base in India. Each investment, each year, and each new technology creates new ways to transform the business for those executives who take time to envision and act on the possibilities.

"No transformation can be planned fully in advance."

Nike:

From Separate Initiatives to Firm-Level Transformation

Nike, the world's leading maker of athletic shoes, apparel, equipment, and accessories, has traditionally built its business through a combination of strong innovative products, intensive brand-building, and efficient operational processes. As new digital innovations appeared, Nike was fast to capitalize in all three areas.

Social Media: Nike entered social media by building a presence on major social media platforms around the world, and then by launching social sites dedicated to specific sports, products, or major events such as the soccer World Cup. Nike then went much farther by developing the Nike+ concept for runners. Nike+ monitors and tracks each workout by connecting sensors in shoes with devices such as the iPhone and an internet platform. Runners can share their performance online and even receive customized advice from coaches. Meanwhile, Nike gathers detailed data about how customers use its products. According to CEO Mark Parker, *"Connecting used to be, 'Here's some product, and here's some advertising. We hope you like it.' Connecting today is a dialogue."*[26]

Mass-customizing products: Nike's custom shoe offerings allow customers to design and order shoes online, share designs with friends, and vote on others' designs. These social media capabilities enable customers to engage with the product online before and after they buy. And listening to these online conversations allows Nike to identify popular designs and sense new trends.[27]

Digital product design: Nike started using 3D design tools to create new products in the early 2000s. It then diffused digital design and collaboration capabilities to the whole supply chain. The transition did more than improve the firm's design capability. It also supported sustainability policies and appealed to younger designers who expected digital design capabilities. CEO Parker explained *"Materials, componentry, construction methods, manufacturing methods, the whole digital revolution … We are embedding all that thinking into the product."*[28]

Connecting digital silos: Nike was innovating successfully in silos, but missing potential synergies between them. In 2010, Nike created a division called Nike Digital Sport. The new unit provides skilled resources, budget, and coordination across the enterprise.[29] The goal was to create a unified consumer experience that can respond to – and even shape – rapidly-evolving consumer preferences. The unit now leads most customer-facing digital projects, releasing products under the Nike+ brand. Teams of marketers, designers and IT people work together to develop digital innovations. They are also finding ways to mine mountains of highly accurate customer data – a key strategic asset for marketing and product development in the highly competitive digital space. Looking to the future, Nike plans to become ever-closer to each of its customers around the world.

Conclusion

The pace of technological change is accelerating, and executives in every industry are paying attention. They face a vast set of alternatives for gaining digital advantage.

Unfortunately, they also hear a bewildering barrage of advice – sometimes conflicting and often wrong – about how to move forward digitally. In our two-year study, we discovered that many common perceptions about digital transformation were actually myths (See figure 10). These myths can lead executives to make unfortunate and costly decisions.

> *No firm is immune from digital transformation.*

Figure 10. Myths and Realities of Digital Transformation

	Myth	Reality
1	Digital is primarily about the customer experience	Huge opportunities exist also in efficiency, productivity and employee leverage
2	Digital primarily matters only to technology or B2C companies	Opportunities exist in all industries with no exceptions
3	Let a thousand flowers bloom; bottom-up activity is the right way to change	Digital transformation must be led from the top
4	If we do enough digital initiatives, we will get there	Transformation management intensity is more important for driving overall performance
5	Digital transformation will happen despite our IT	Business/IT relationships are key, and in many companies they must be improved
6	Digital transformation approach is different for every industry and company	Digital Leaders exhibit a common DNA
7	In our industry we can wait and see how digital develops	There are digital leaders outperforming their peers in every industry today

Fortunately, our global survey of nearly 400 large firms, supplemented by 157 in-depth interviews with senior executives in more than 50 large companies, provides fact-based answers. First, digital maturity matters. Digirati are statistically significantly more profitable than their competitors, and the markets reward them. Second, no firm is immune from digital transformation. Every company in every industry already has competitors who are Digirati. Since it takes time to become digitally mature, senior executives in every industry should take active steps immediately to consider the opportunities and threats available through digital transformation. Finally, once you decide to act, you can map a strategy for your digital transformation based on common transformation patterns distilled from the most digitally mature firms in our research.

The future is arriving quickly. Take action now to create your own digital advantage.

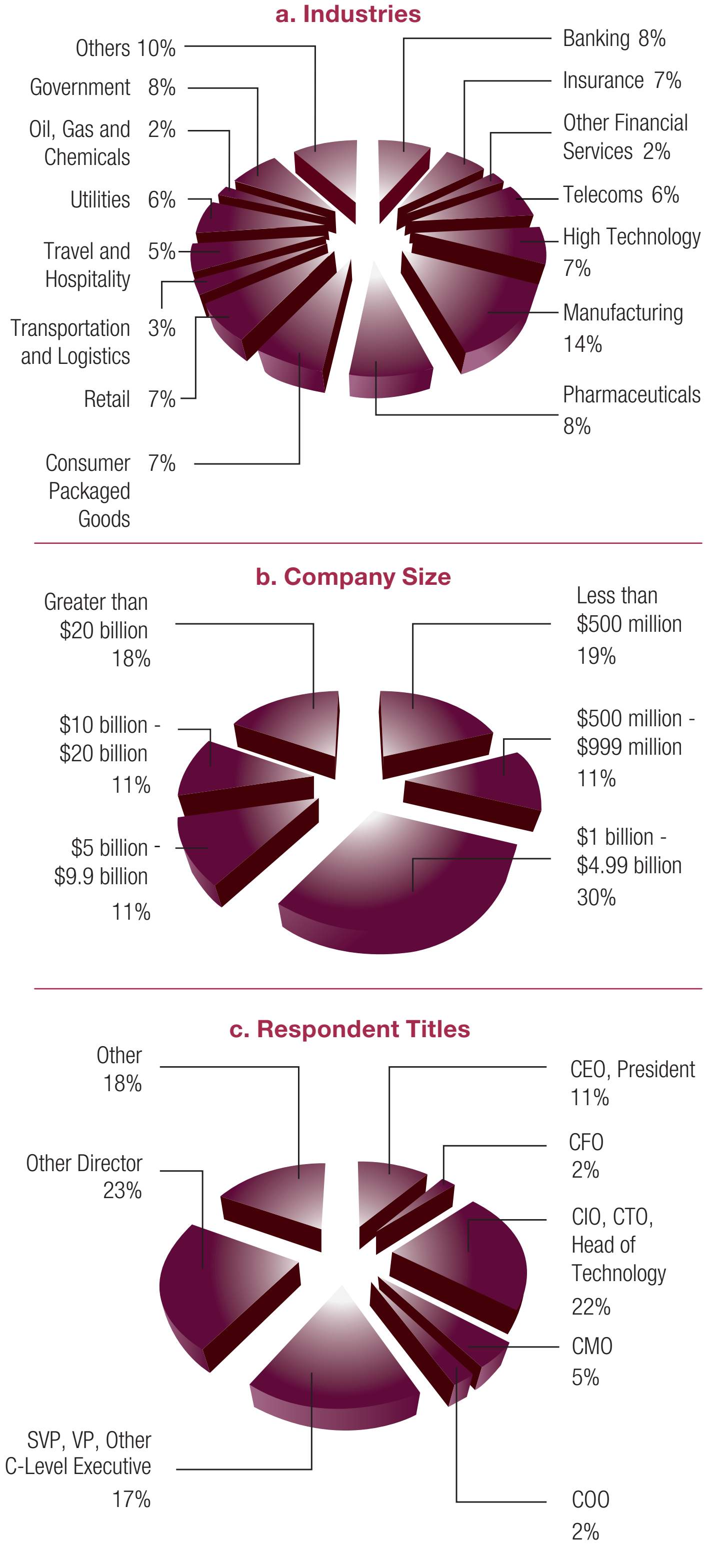
About the Research

Last year, we set out to understand how leaders in large traditional companies were gaining advantage from digital technology. We identified what companies are doing digitally, and what it means to be digitally mature. That study resulted in a research report, **"Digital Transformation: A Roadmap for Billion-Dollar Companies"**[30] that was named one of the five most influential thought leadership papers of the past decade.[31] This year, we set out to quantify the findings – to benchmark digital practices around the globe, to identify the most essential components of digital maturity, and to examine the links between digital maturity and financial performance. We gathered surveys from 469 senior executives in 391 large companies around the world. (See figure 11).

We analyzed the surveys to identify detailed drivers of digital maturity, and classified firms in two dimensions. Then, we went one step further. For each of the 184 publicly traded companies on our sample, we obtained 2011 financial performance from COMPUSTAT, converted all figures to US Dollars, and calculated standard financial ratios such as EBIT margin, Revenue per Employee, Price/Book and Fixed Asset Turnover. Then, controlling for industry and geography, we conducted rigorous statistical analysis to establish the relations between digital maturity and financial performance. We then conducted a separate analysis to quantify average financial performance gaps between the four digital maturity quadrants.

The findings from our statistical analyses, supplemented by our earlier qualitative research and additional interviews, serve as the basis for the findings and recommendations in this report.

Figure 11. Sample Metrics



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About Capgemini Consulting

Capgemini Consulting is the global strategy and transformation consulting organization of the Capgemini Group, specializing in advising and supporting enterprises in significant transformation, from innovative strategy to execution and with an unstinting focus on results. With the new digital economy creating significant disruptions and opportunities, our global team of over 3,600 talented individuals work with leading companies and governments to master Digital Transformation, drawing on our understanding of the digital economy and our leadership in business transformation and organizational change.

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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.

The MIT Center for Digital Business

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