

The Digital Transformation Symphony: When IT and Business Play in Sync



Successful Digital Transformation Hinges on a Strong IT-Business Relationship

CIO leadership is essential for success in a rapidly changing digital world.

To test the truth of this statement, we need look no further than Starbucks. When Stephen Gillett took over as CIO of Starbucks in 2008, the company was going through one of its most difficult phases. Starbucks' stock price had lost half its value in less than two years and its same-store sales were declining.

The company needed to do something dramatic to rev up growth and its CIO stepped up to the challenge. In early 2009, Stephen Gillett pitched the idea of setting up a new business unit focused on digital innovation and customer engagement to the company's executive council. Gillett's vision for the unit – which was christened "Digital Ventures" – involved fusing the marketing team's product and consumer knowledge with

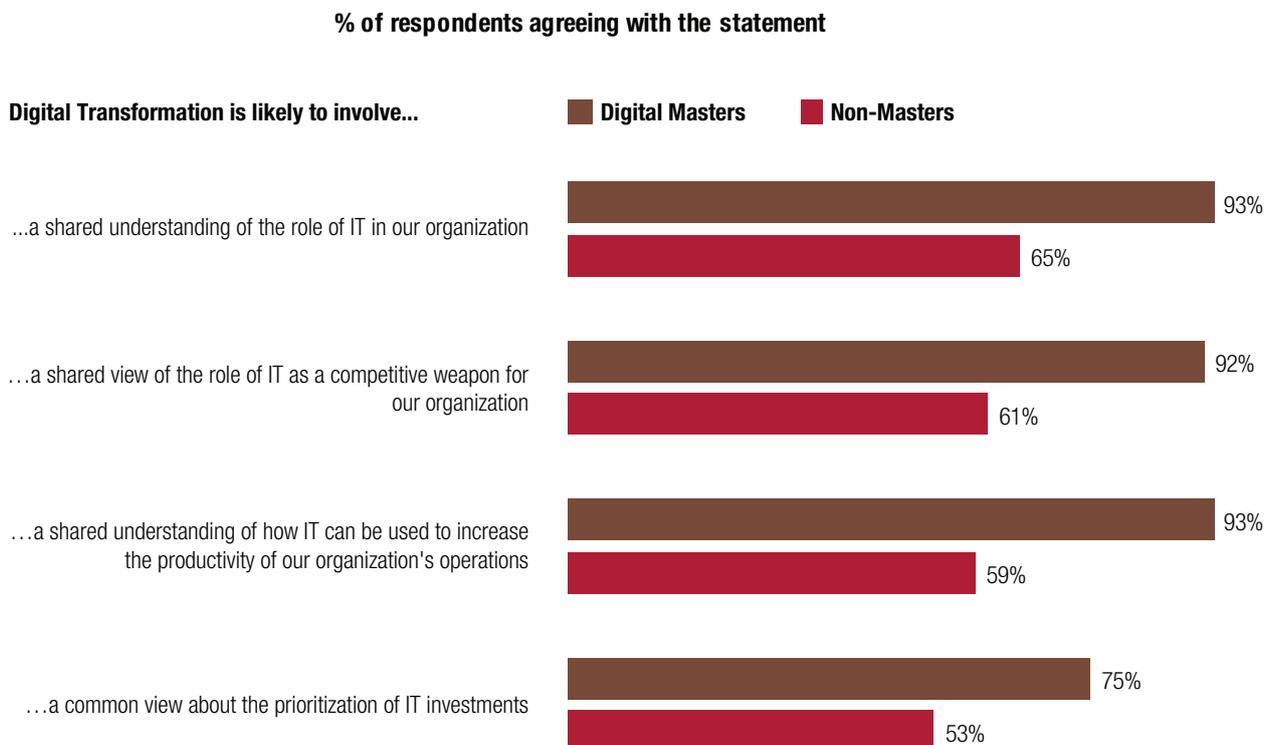
the IT team's technical expertise, in order to deliver a digitally enhanced customer experience at Starbucks stores¹. This was IT-business collaboration in action.

As the original architect of Digital Ventures², Gillett laid the foundations of a strong digital team. He hired Adam Brotman, an entrepreneur with experience in running digital startups. In the years that followed, Digital Ventures went on to deliver a range of innovations that played a pivotal role in Starbucks' turnaround. These included "Starbucks Digital Network" that gave in-store customers access to premium digital content, as well as a mobile payments program linked to the company's loyalty cards³.

After Gillett moved on from Starbucks in 2012, Brotman took over as Chief Digital Officer and head of Digital Ventures. Under Brotman, Digital Ventures has continued to drive Starbucks' digital ambitions. Today, the company's stock price has risen in value by more than 10-times in less than 6 years, from \$7.17 per share in November 2008 to \$75 per share in March 2014⁴.

Starbucks' dramatic success is a powerful lesson in collaboration. As CIO, Gillett collaborated closely with Starbucks CMO Annie Young-Scrivner to develop technical as well as go-to-market strategies. In Gillett's words, "Collaboration means IT is integrated with customer offerings and loyalty programs. You need both sides of the business to bring these efforts to life."⁵

Figure 1: Role of the IT-Business Relationship in Digital Transformation – Comparison of Digital Masters and non-Masters



Digital Masters are companies that leverage digital technologies to transform their businesses

Source: Capgemini Consulting and MIT Center for Digital Business, 2012

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Digital Masters differentiate themselves from their peers by consciously striving to build a close relationship between IT and the business.
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Our 3-year research with the MIT Center for Digital Business also underscores the significance of a strong partnership between IT and the business in driving successful Digital Transformation⁶. Digital Masters, such as Starbucks, that leverage digital technologies effectively, differentiate themselves from their peers by consciously striving to build a close relationship between IT and the business. This relationship is founded on a shared understanding of the impact of IT on driving productivity and

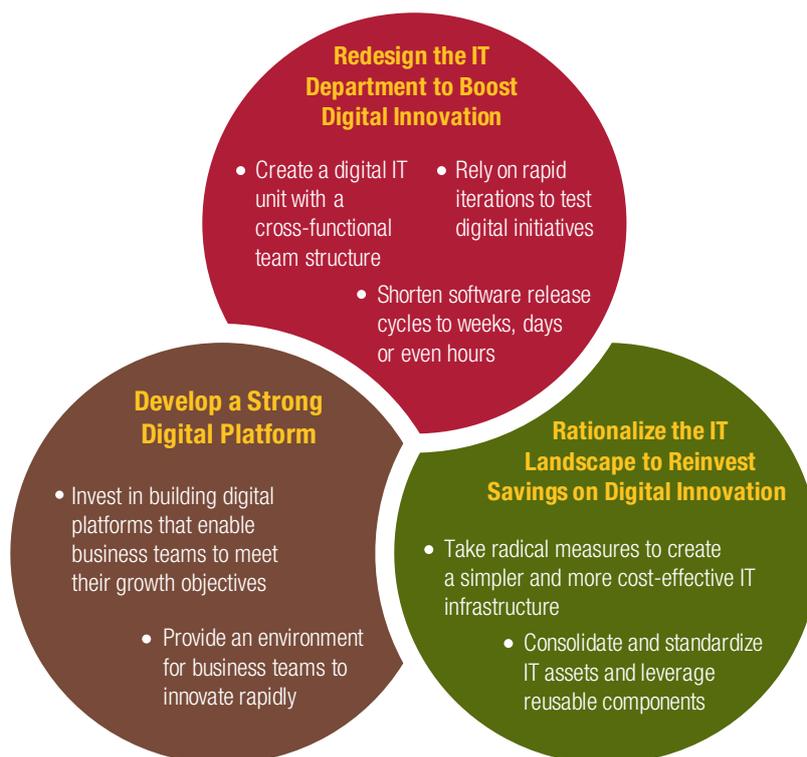
competitive advantage. Ninety-three percent of the Digital Masters in our research reported that their business and IT teams shared a common understanding about the role of IT in the organization, in contrast to 65% of non-Masters (see Figure 1).

However, Digital Masters are exceptions. The IT-business relationship in most organizations is often a fractious relationship rather than a marriage of equals. Business teams often find the IT department's high costs and long implementation timelines unacceptable. In addition, IT leaders are often faulted for not speaking the language of business. A recent survey highlights this disconnect. When CIOs were asked whether CEOs saw them as their company's digital leaders, 47% responded in the affirmative. However, when CEOs were asked about their company's digital leaders, only 15% named the CIO⁷. Such a disconnect contributes to business executives overlooking the IT department's role in Digital Transformation.

Leading CIOs take this disconnect head on and try and fix it. Our research shows that these IT leaders take three key actions to align the IT department with the needs of the business (see Figure 2). These actions help improve the IT-business relationship over time. We explore each of these actions in the sections that follow.

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47% of CIOs in a survey reported that their CEOs saw them as their company's digital leaders – however, only 15% of the CEOs in the same survey named the CIO as their company's digital leader.
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Figure 2: How Can CIOs Help Build a Strong IT-Business Partnership?



Source: Capgemini Consulting Analysis; “Leading Digital: Turning Technology into Business Transformation”, George Westerman, Didier Bonnet & Andrew McAfee, Harvard Business Review Press, October 2014

Redesigning the IT Department Unlocks Digital Innovation

Leading CIOs recognize that digital initiatives need to be run at a distinctly different rhythm compared to traditional IT programs. While traditional IT programs follow stable and predictable lifecycles that last several years, digital initiatives, especially those involving customer-facing processes, have a much shorter time-to-market and need to be more flexible and adaptive to change. Leading CIOs redesign the IT department so that it can run at dual-speed. In addition to ensuring that traditional projects continue to run reliably, they develop strategies that support the rapid rollout of digital initiatives.

Create a Digital IT Unit with a Cross-Functional Team Structure

Successful Digital Transformation requires that both IT and business teams work together towards a common vision and goal. This in turn requires a shift from the traditional IT-business working relationship, where the two teams operate separately, with business providing the requirements and IT delivering the technology. Digital initiatives call for a new working model that harmonizes the expertise of both teams and promotes greater dialogue and mutual understanding between them.

“*Digital initiatives call for a new working model that harmonizes the expertise of IT and business teams and promotes greater dialogue and mutual understanding between them.*”

Leading CIOs help create such a working model by setting up a digital IT unit with a cross-functional team structure. Members from both IT and business teams work together as part of the digital IT unit, with common budgets, KPIs and objectives. Such a cross-functional team structure brings a business focus to digital initiatives. It also serves to reduce costs and duplication of efforts, and speeds up time to market for digital initiatives⁸. UK-based Lloyds Banking Group, for instance, owes much of its success with digital retail banking to its digital services unit. The unit is led jointly by a senior IT executive and a senior business executive, which ensures that digital initiatives are developed holistically. Not only does the unit deliver the technology solutions for the bank's new digital retail banking initiatives, but it also ensures that business processes are adapted appropriately.

Use a Test-and-Learn Strategy for Digital Initiatives

Leading CIOs rely on experimentation to rapidly test the business impact of digital initiatives before they initiate large-scale deployments. For instance, in 2012, then Philips CIO Jeroen Tas set up the “Digital Accelerator Lab” to speed up digital innovation. The lab creates use-cases for connected products and rapidly builds prototypes of devices and apps⁹. These prototypes then go through user testing to gauge customer responses¹⁰. As head of the lab, Tas worked closely with business teams to develop and take new product ideas to market. The lab served to inter-connect various business units within Philips, which otherwise operated in silos. It brought together their expertise to develop solutions that offer customers a holistic connected experience¹¹.

“*The use of DevOps practices helps break down silos between IT development and operations teams and leads to more rapid deployment cycles.*”

Graduate to a Continuous Deployment Model for Digital Initiatives

Successful Digital Transformation requires a highly agile approach to software development. Software development methodologies such as DevOps¹² help organizations break down silos between IT development and operations teams so that they can collaborate more effectively. DevOps helps align development and operations processes to common business objectives. It ensures that both teams operate more smoothly together. This in turn leads to the early detection and correction of problems and results in more rapid software releases. A global survey of IT executives revealed that teams that were following DevOps practices for the longest duration shipped code up to 30 times faster than their peers¹³. For instance, the use of DevOps has enabled online payments firm PayPal to reduce the time taken to deploy apps from weeks to days¹⁴. At Lloyds Banking Group, which has more than 10 million Internet banking users and processes 110 million transactions each day¹⁵, the use of DevOps has helped accelerate the pace of Digital Transformation. Nick Stemp,

principal lead architect at Lloyds Banking Group highlights how the use of DevOps has improved software development efficiency at the bank: “We’re seeing more defects in development, which is where we want to see them. People doing the testing can do the fix, which saves us doing the fixes later in the lifecycle [where it is more costly]”¹⁶

A strong IT department, revamped to meet the needs of the digital age, provides a strong foundation for an organization’s future growth (see insert on UK Government Digital Service).

UK Government Digital Service: A Success Story in IT-led Digital Transformation

In late 2010, the UK Government embarked on a Digital Transformation journey when it announced that public services should be delivered by default through digital channels. The government’s decision was in response to a report published by Martha Lane Fox, then UK Digital Champion and one of the most influential leaders in UK IT. The report called for a radical improvement in the government’s online services to provide higher quality and more convenient 24/7 services to users.

Defining a Clear Digital Strategy and Vision: The government set up the Government Digital Service (GDS) in 2011, by merging its existing, disparate digital teams. GDS was built with the vision to be “the center for digital government in the UK, building and championing a ‘digital culture’ that puts the user first and delivers the best, low cost public services possible.”

Laying Down a Strong Governance Framework for Transformation: Central to GDS’ governance strategy was the setting up of a dual-speed IT structure. GDS consisted of two distinct teams - the digital unit, which was tasked with the delivery of digital services, and the technology team, which was responsible for running traditional or “Mission IT”. Mission IT comprised Line of Business applications that ran the internal processes of individual departments. GDS also developed a comprehensive framework for the management of the two teams and their interactions.

Adopting a Highly Agile Approach to Software Development: GDS needed to move swiftly in order to meet its ambitious goal of fully digitizing 25 of the most crucial public services by March 2015. To achieve its goal, GDS developed a comprehensive “Government Service Design Manual”. The manual offered customized resources to all digital teams, on the merits of using methods such as DevOps and Agile to achieve operational excellence. In addition, Agile coaches were employed to complement the work of transformation teams. As a result of these initiatives, the GOV.UK website saw more than 1500 application updates in its first year alone.

The GDS has so far transformed 22 of the most significant UK public services. The overall transformation is expected to deliver between £1.7 billion and £1.8 billion in annual savings to the government as well as service users.

Source: GOV.UK Press Release, “Digital by default proposed for government services”, November 2010; Computer Weekly, “UKtech50: The most influential people in UK IT – the top 10”, November 2010; GOV.UK Blog, “Introducing the Government Digital Service”, March 2011; GOV.UK Policy Paper, “Government Digital Strategy”, November 2012; Government Digital Service Blog, “Rebalancing technology across government”, October 2013; GOV.UK, “Digital Transformation”, October 2014; GOV.UK Corporate Report, “Government Digital Strategy: annual report 2013”, December 2013; GOV.UK Corporate Report, “Government Digital Strategy: quarterly progress report October 2014”, October 2014; GOV.UK, “Digital by Default Service Standard”, 2012; GOV.UK, “Government Service Design Manual”, 2012; GOV.UK Research and Analysis, “Digital Efficiency Report”, November 2012

A Strong Digital Platform gives Digital Initiatives a Shot in the Arm

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At Kellogg's, CIO Brian Rice collaborated closely with the CMO to build a standardized, global web-based platform that helps marketing teams target customers more effectively.

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In recent years, a successful platform has emerged as a key source of competitive advantage for organizations.

A successful example of the power of a platform is Amazon. By organizing itself internally around a service-oriented architecture, Amazon ensured that internal teams as well as external partners could rapidly build their own applications using Amazon's open APIs. A platform-focused strategy has helped Amazon create a vast ecosystem of services, allowing it to scale much more rapidly.

Enable Business Teams to Rapidly Rollout New Digital Initiatives

Leading CIOs invest in building successful platforms that can act as engines of growth for their organizations. At Kellogg's, for instance, CIO Brian Rice collaborated closely with Kellogg's CMO to build a standardized, global web-based platform that supports the marketing teams at Kellogg's in numerous ways. For instance, the

Lloyds Banking Group: Reinventing IT for the Digital Age

In 2006, Lloyds Banking Group (then Lloyds TSB) began to realize that its online retail platform could not scale to meet its future needs. Soon after, following a merger with Halifax Bank of Scotland, the bank's online banking customer base expanded dramatically from 1.5 million to 5 million. At this point, the bank was faced with two options. The first option was to undertake a re-platforming exercise that would modernize critical aspects of the platform so that it could meet current requirements. The second option was to build an entirely new platform that would last for decades but require a huge upfront investment. The bank chose the second option. The decision proved to be the right one as the platform has played a vital role in the bank's Digital Transformation success. Today, Lloyds Banking Group has more than 10 million active digital customers and accounts for £1.5 trillion in digital commercial client transactions per year.

Lloyds Banking Group's Digital Transformation journey offers many useful lessons. These include:

Realizing the Central Role of IT in Digital Transformation: It is no longer sufficient for IT to just align its priorities with business objectives. IT must be central to a firm's Digital Transformation journey. LBG's executive team realized this very early. They asked a senior IT executive, Zak Mian, and a senior business executive, Ashley Machin, to set up a digital team and work together to speed-up digital innovation.

Creating a Successful IT-Business Relationship: Having business and IT work together on digital initiatives ensured that they were both equally involved in creating the blueprint for the bank's Digital Transformation. It brought down the "walls" that traditionally existed between the teams, promoted dialogue and created greater mutual understanding and trust between IT and the business. This in turn reduced costs and process delays, and accelerated time-to-market for digital initiatives.

Building a Successful Digital Platform to Drive Future Growth: The digital team built a scalable digital platform as the first step towards the bank's Digital Transformation. The team then extended the platform to new digital services, such as credit card processing. The success of the platform initiative led to other businesses, such as mortgages and commercial products, seeking out Mian and Machin to help with the Digital Transformation of their businesses.

Source: Leading Digital: Turning Technology into Business Transformation", George Westerman, Didier Bonnet & Andrew McAfee, Harvard Business Review Press, October 2014; Harvard Business Review Blog Network, HBR Blog "Do You Have the IT For the Coming Digital Wave?" by Didier Bonnet, August 2013; Lloyds Banking Group, "Group Overview", 2014; Lloyds Banking Group, "Strategic Update, Presentation to analysts and investors", October 2014

platform provides marketing teams with a single view of all customer data, which allows them to target customers with more personalized messaging. The platform also enables marketing teams to rapidly rollout new company-wide initiatives. For instance, the platform has enabled Kellogg's to expand its loyalty program online, which allows consumers to redeem their reward points electronically¹⁷.

At Lloyds Banking Group, senior IT executive, Zak Mian, worked closely with senior business executive, Ashley Machin to build a platform that has played a foundational role in the bank's digital retail banking success (see insert on Lloyds Banking Group).

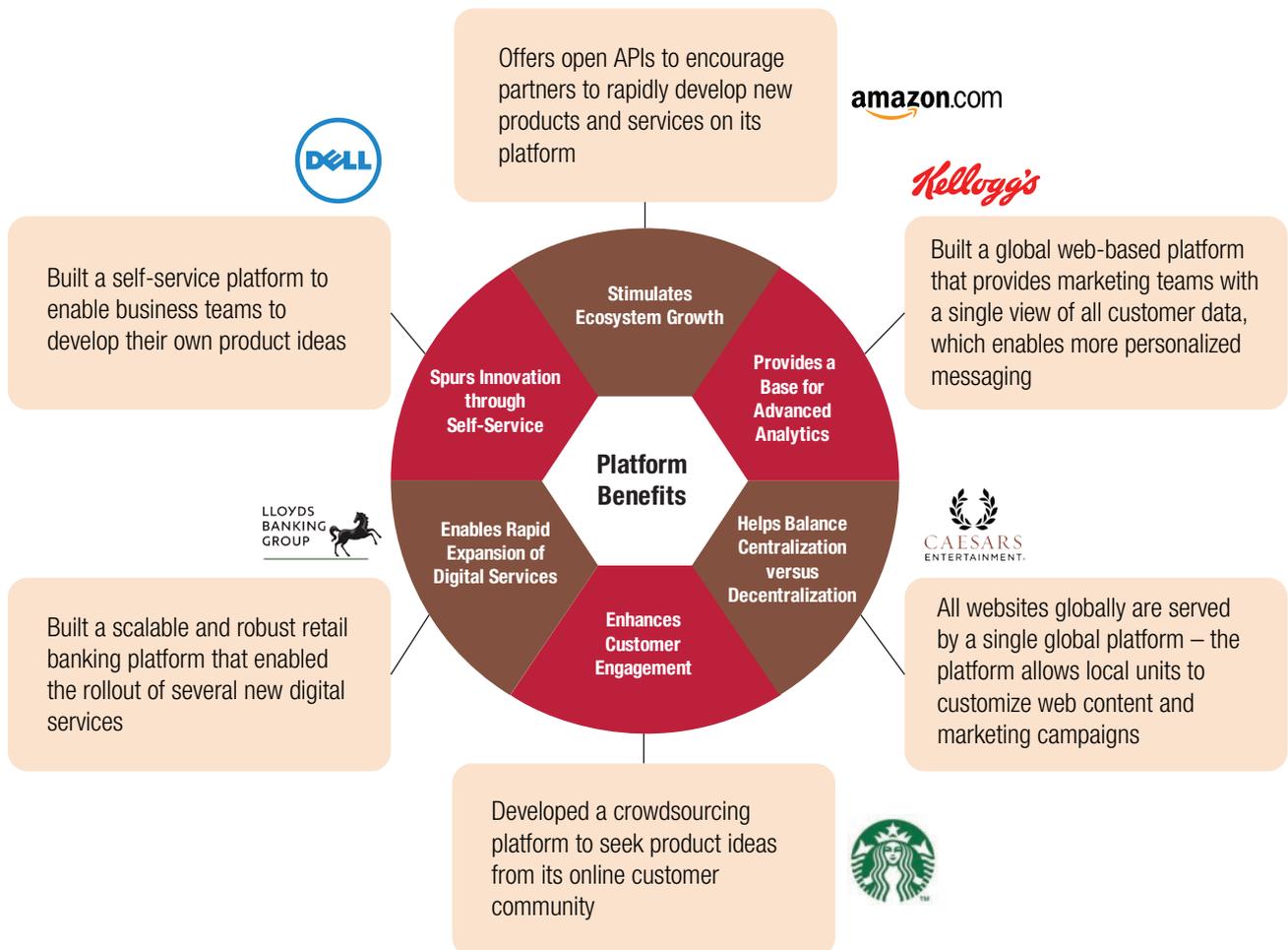
Provide an Environment for Business Teams to Test and Build Digital Solutions

Leading CIOs empower business teams to build their own solutions. Rather than trying to own all IT and implementation decisions, CIOs such as Dell's Adriana Karaboutis are comfortable with sharing control with business teams. At Dell, Karaboutis's team built a self-service platform that allows business teams to test their own product ideas. The IT department then helps business teams take their ideas to production. Karaboutis describes the rationale behind her focus on self-service in these words: "The line between IT and business is blurring fast. The CIO who tries to maintain walls and

tries to own everything is the CIO who will go down quickly. This is now about a CIO who enables environments and allows choice and self-service as we move forward and look at the next best innovations.¹⁸"

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At Dell, CIO Adriana Karaboutis's team built a self-service platform that allows business teams to test their own product ideas.
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Figure 3: What are the Benefits that CIOs can drive with a Strong Digital Platform?



Rationalizing IT Infrastructure Provides Sustained Funding for Digital Initiatives

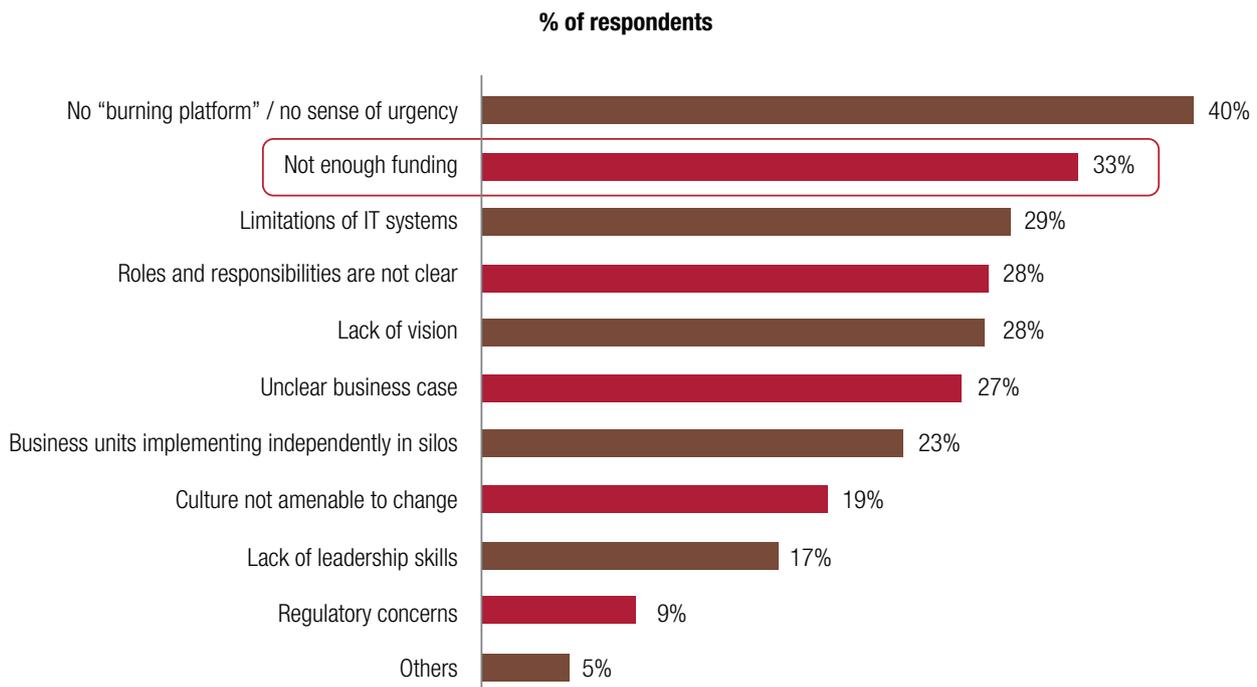
Digital innovation requires sustained funding. Our research with the MIT Sloan Management Review shows that lack of funding is one of the most significant organizational barriers to Digital Transformation (see Figure 4)¹⁹.

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Leading CIOs radically rationalize existing IT infrastructure, so that the resultant cost savings can be diverted to digital innovation.
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Leading CIOs focus on improving the efficiency of traditional IT operations, so that the resultant cost savings can be diverted to digital innovation. They do so by radically rationalizing existing IT infrastructure in order to reduce the complexity of the IT landscape. This complexity stems from the large number of redundant and heavily customized systems and applications that organizations accumulate over time. In fact, in a survey of senior IT leaders conducted by Capgemini in 2014, 48% of respondents reported that their organizations had more applications than the business actually required²⁰. In order to reduce complexity dramatically, leading CIOs opt for massive IT consolidation and simplification initiatives. Consolidation involves a planned reduction in IT assets either by centralization of infrastructure or by the use of fewer, more efficient systems. IT simplification, on the other hand, involves the standardization of applications and tools, and the use of reusable assets as far as possible.

For Phil Jordan, Group CIO at Telefonica, consolidation and simplification of IT infrastructure have been two of the key pillars of Telefonica’s global IT strategy. Under Phil’s leadership, Telefonica decommissioned 1,139 applications in 2013 alone. The number of systems in use has reduced from 7,000 to 4,200 in three years. Phil has also launched programs on multi-country consolidation of IT assets, as well as one of the largest private Cloud implementations in Europe. The use of off-the-shelf Cloud-based solutions has helped Telefonica cut costs significantly²¹. Jordan’s focus on IT rationalization has contributed to a €14 billion debt reduction for Telefonica which helped the company return to revenue growth²². It has also helped drive business transformation at Telefonica by strengthening the company’s digital capabilities in self-care and marketing²³.

Figure 4: Organizational Barriers to Digital Transformation



Source: Capgemini Consulting and MIT Sloan Management Review, "Embracing Digital Technology: A New Strategic Imperative", October 2013

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Under CIO Phil Jordan's leadership, Telefonica decommissioned 1,139 applications in 2013 alone.
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At semiconductor major Analog Devices, CIO Peter Forte launched a three-year effort to rationalize the company's legacy infrastructure in order to deliver savings that could be used for new product development. Forte's focus on virtualization resulted in millions of dollars of savings, which were poured back into innovation. As a result of the CIO's efforts, the proportion of the IT budget spent on maintaining legacy infrastructure has reduced from over 80% to 62%²⁴.

The role of IT in enabling Digital Transformation cannot be overstated. However, it is only when IT and business come together that true Digital Transformation can be achieved. CIOs can play a vital role in making this possible. By continually striving to align the IT department with the needs of the business, CIOs can contribute significantly towards strengthening the IT-business relationship and helping their organizations advance confidently into the digital future.



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The authors would like to thank **Pierre Hessler**, Capgemini Fellow, for his valuable inputs. The authors would also like to acknowledge the contributions of **Ron Tolido**, Senior Vice President and CTO Application Services, Capgemini, and **Amol Khadikar** from the Digital Transformation Research Institute.

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