Cognizant

Being Digital:
How and Why CIOs Are Reinventing Themselves for a New Age

The mandate to transform from 'doing digital' to 'being digital' has emerged as a top organizational imperative. However, remaining barriers blunt the CIO's ability to deliver IT services that drive innovation, our latest research reveals.

KEEP CHALLENGING™

Executive Summary

Today, companies of every size, in every industry, are striving to transform themselves for the digital age. Customers and partners are leading the way, demanding that business become more digital to improve organizational speed and decision-making, enhance operational agility, and deliver just-in-time market intelligence to create differentiated products, services, and customer and employee experiences.

Many "establishment" CEOs appear to be stepping up to guide their organizations from 20th century industrial structures into more extensible and fluid digital businesses. And despite the buzz about chief marketing officers and chief data/digital officers grabbing the reins, many CEOs are looking to senior technology managers, especially chief information officers, to deliver on the digital mandate – or at least coordinate disparate digital efforts across the enterprise. But despite this vote of confidence, many CIOs feel they are not receiving enough backing from the CEO and board of directors to take digital initiatives from blue-sky concept to bankable reality. This lack of support undermines the CIO's ability to demonstrate digital's transformative capacity and enhance business performance. Moreover, it also impedes the CIO's personal and professional development.

How do we know this? Late in 2015, we surveyed 200 North American CIOs and IT leaders within the banking, healthcare, pharmaceuticals and insurance industries to understand how their roles are evolving in today's digital environment (see Methodology, page 9). We explored:

- How CIO responsibilities are changing in response to their organizations' digital mandate.

- How CIO relationships with internal stakeholders are shifting, and why the relationship with the CMO is now especially critical.

- How and where CIOs are succeeding, and the inhibitors to their success.

Key Findings

Our study identified four essential elements for CIOs to win in today's digital age:

- **Leadership:** The CIO must play a major role in strategy setting and execution. Lacking that, the organization will be challenged to meet digital's lofty promise of faster, less expensive and more productive/intuitive ways of working, both internally (across functional silos) and externally (with customers and partners).

- **Organizational and financial readiness:** CIO success typically starts with a keen understanding of digital program costs and ways of measuring return on investment. To succeed in a world that moves at the speed of digital, CIOs must look beyond the annual planning process and find more expedient and effective ways to align IT with the business's overall digital objectives. Also critical is defining and deploying process standards and closing a widening skills gap – in everything from core technology competencies to big data analytics – in order to enable IT to deliver on digital's business potential.

- **Digital strategy ownership:** The CIO must be on point to cultivate and articulate a digital strategy that is consistent, aligned with business objectives and clearly understood across the organization. This won't be easy, given that the traditional CIO role has relied more on an engineering mindset than on marketing savvy and communications competencies.

- **Technology:** The IT organization must deliver on a dual mandate: build and deploy the foundational technologies required for the organization to meet business objectives (beyond keeping the lights on), and serve as a platform for developing innovative solutions. Reining in, or at least integrating, shadow IT systems as part of the fabric of the enterprise information architecture is another technology imperative that if effectively resolved can stimulate digital business innovation.

The Changing CIO Role and Responsibilities

As noted, CIOs we surveyed said the CEO is driving digital transformation at their organizations. In fact, nearly half (42%) of respondents said the CEO is the sponsor of major digital projects; only 24% said the CIO sponsors such initiatives (see Figure 1).

As a result of increased CEO involvement and the attendant strategic consequences, the CIO's responsibilities are radically shifting. Our study revealed that the CIO's role is broadening beyond the traditional "owner" of IT. As digital evolves from "nice" to "must-have" status, 89% of respondents agree the CIO is now a key contributor to business strategy. Accordingly, CIOs said they are spending more time aligning digital strategy with business needs, and increasing the amount of time they spend on cross-functional collaboration to develop and drive digital initiatives across the enterprise.

Moreover, after years of unfulfilled promises, the CIO is also becoming more externally-facing, engaging with customers, partners and suppliers to ensure that foundational technology keeps pace, if not anticipates, market requirements emerging across the digital business ecosystem. Equally important is ensuring that the IT organization operates in a more agile and nimble manner. Great digital technology infrastructure cannot overcome outdated skills and rigid processes that don't advance business needs or undermine operational performance.

Sponsors of Digital Initiatives

Base: 200
Source: Cognizant Research Center
Figure 1

The Evolving CIO

Survey respondents recognize that successful CIOs have attributes and leadership qualities that reflect their new responsibilities. For instance, approximately 90% of respondents said the CIO should be a "chief inclusion officer" who promotes an open and innovative culture. Many also noted the CIO should be a "change agent" in leading a digital journey and transforming the business culture.

Moreover, the CIO should serve as a "chief influence officer" who collaborates and maintains excellent working relationships with other business leaders. And he or she should be an "IT evangelist" who can champion IT's role in digital strategy and business transformation.
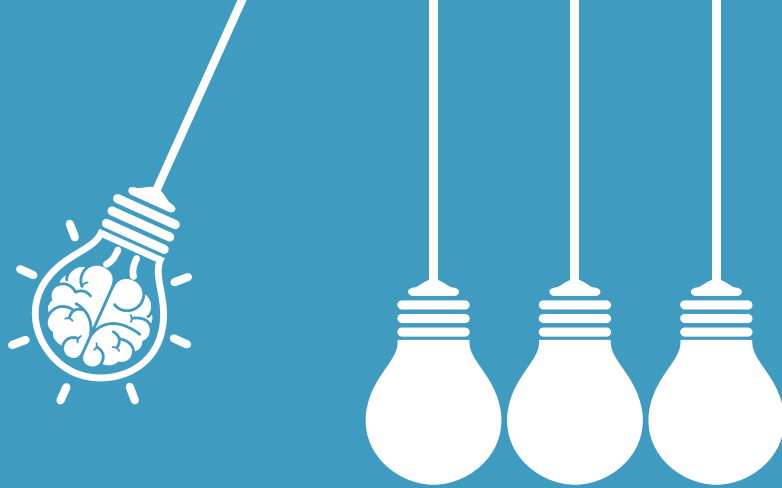
⇶Quick Take
The CIO as Digital Leader

How is the CIO role shifting? Respondents identified the following ways:

- **As a digital strategist.** CIOs are helping to develop the enterprise digital strategy, identify digital opportunities in the marketplace and develop go-to-market strategies and technologies.

- **As a transformational leader.** CIOs are articulating the digital business vision and helping to align digital initiatives with business goals.

- **As a functional leader.** CIOs are stepping up to build an organization that can more effectively find, evaluate and deploy new digital technologies. To accomplish this, CIOs must completely reassess their organizational role.

After managing for the better part of this millennium by "doing more with less," and prioritizing operational cost take-outs over innovation, CIOs are proactively creating an IT organization that is not only lean but is also equipped to transform the business into a highly automated and savvy — to the core — digital being.

The reactive style that worked for many CIOs (i.e., dutifully keeping the IT train on-track amid an onslaught of overwhelming and sometimes contradictory business requests) won't be enough to keep many in their roles much longer. This is becoming abundantly clear as business becomes increasingly technology-intensive and digital tools and techniques are tightly interwoven with business strategy and execution.
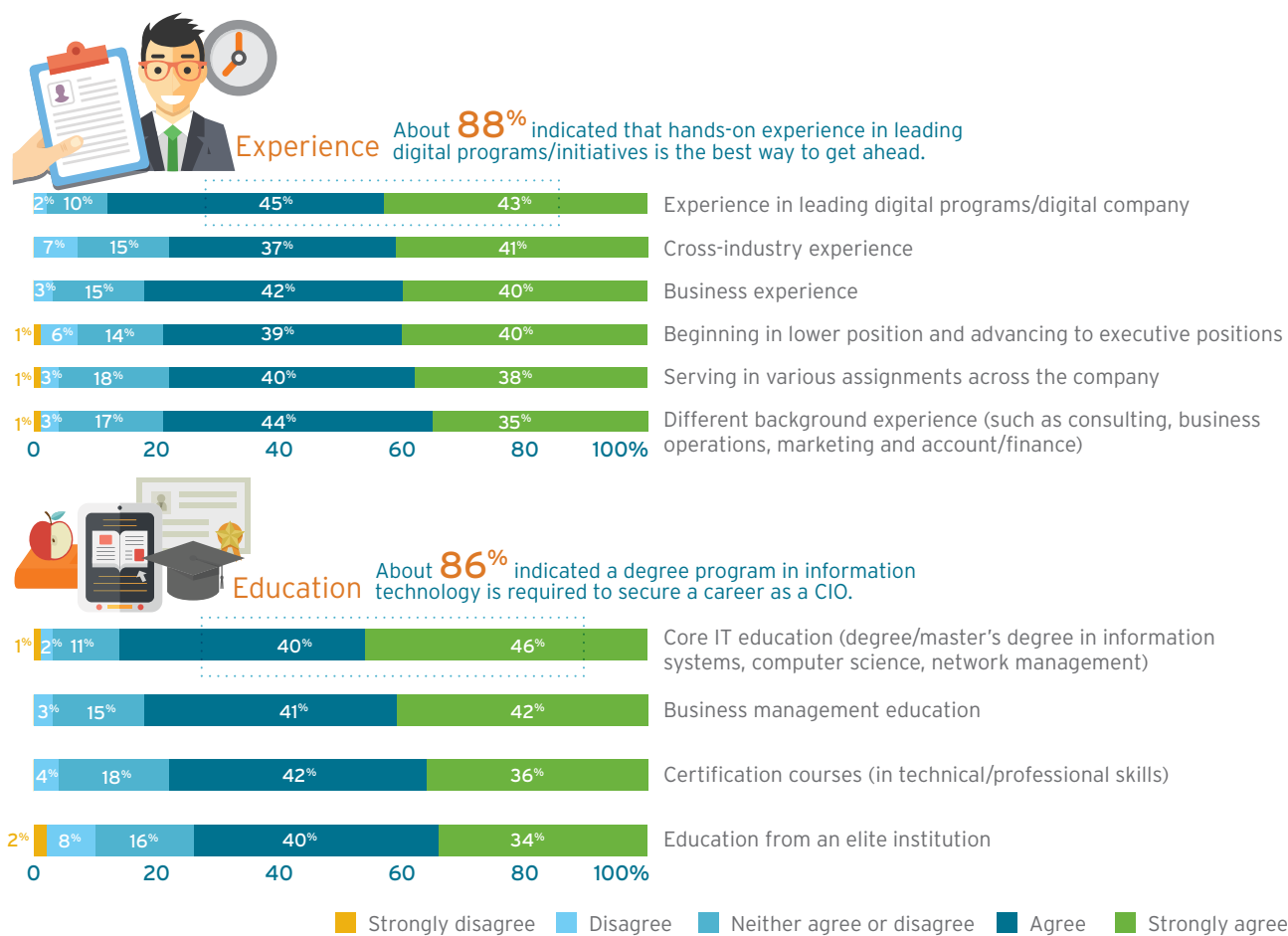

Beyond the CMO (see QuickTake, page 7), respondents also agree the CIO needs to build strong relationships with numerous internal stakeholders, starting, of course, with the CEO, and extending to the chief strategy officer, the chief sales officer, the chief financial officer and the chief operating officer. The collaborative CIO needs to be ready to support new digital programs from wherever they emerge. For this, new capabilities and skillsets will be required.

Respondents agreed that, above all, the digital CIO must be socially and politically savvy — effective at engaging stakeholders and able to intelligently push the transformation agenda. This won't come easily for many CIOs, particularly those less comfortable with engaging outside of traditional IT support boundaries.

CIOs also need to be "game changers" who reflect on challenges and opportunities to find the best way forward. And they should display "transformational leadership," capable of creating a shared vision, mobilizing commitment and working toward digital transformation.

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Education and Experience:
Is There an Ideal Mix for Becoming a Digital CIO?

Experience

About **88**% indicated that hands-on experience in leading digital programs/initiatives is the best way to get ahead.

2% 10%	45%	43%	Experience in leading digital programs/digital company
7% 15%	37%	41%	Cross-industry experience
3% 15%	42%	40%	Business experience
1% 6% 14%	39%	40%	Beginning in lower position and advancing to executive positions
1% 3% 18%	40%	38%	Serving in various assignments across the company
1% 3% 17%	44%	35%	Different background experience (such as consulting, business operations, marketing and account/finance)

0   20   40   60   80   100%

Education

About **86**% indicated a degree program in information technology is required to secure a career as a CIO.

1% 2% 11%	40%	46%	Core IT education (degree/master's degree in information systems, computer science, network management)
3% 15%	41%	42%	Business management education
4% 18%	42%	36%	Certification courses (in technical/professional skills)
2% 8% 16%	40%	34%	Education from an elite institution

0   20   40   60   80   100%

■ Strongly disagree ■ Disagree ■ Neither agree or disagree ■ Agree ■ Strongly agree

Base: 200
Source: Cognizant Research Center
Figure 2

IT leaders should also have experience in other parts of the organization, and perhaps a background in other disciplines or types of businesses, such as consulting, business operations, marketing and finance, our respondents said. Not surprisingly, respondents expect the CIO to have a solid IT education; additionally, they also recommend business management education (see Figure 2).

Being Digital: Opportunity for a New Way Forward

The findings make clear that while CIOs are valued for their technological acumen and vision, a more fundamental organizational shift needs to take place to enable the IT organization to advance the digital business mandate beyond marketing and across the entire enterprise.

Ultimately, what's needed is a new organizational paradigm built for innovation and agility that spans technology platforms, people and processes and is carried out under a unified vision. This means shifting away from the traditional ROI-based model that favors large initiatives that are sponsored by the CEO and approved by the board, and replacing it with an organizational model capable of supporting smaller digital initiatives that can either quickly succeed or fail. To enable this, the CIO can and must play a central role.
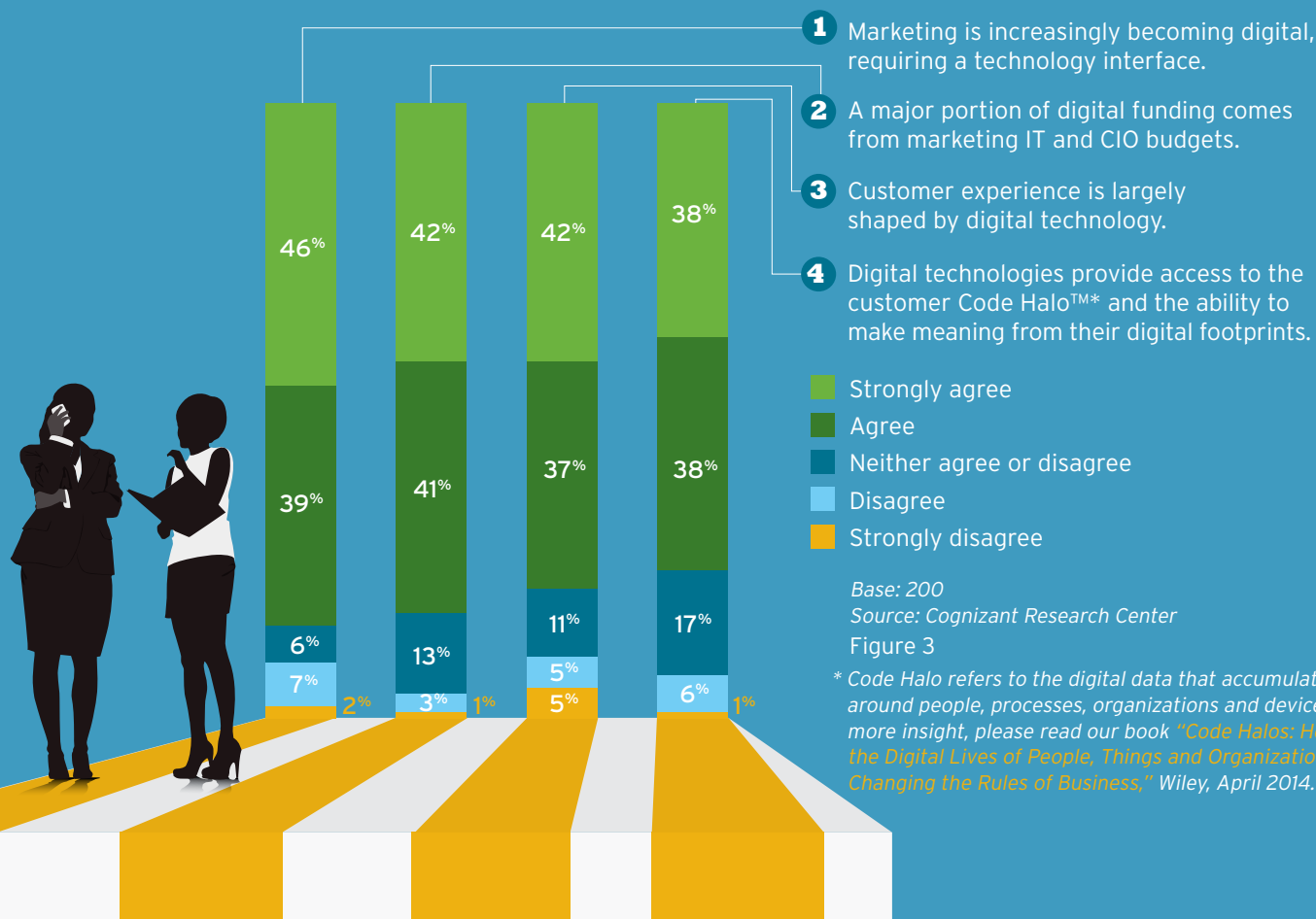
CIO-CMO Alignment: A Competitive Necessity

Many respondents said they are joining forces with their marketing counterparts to collaborate on digital transformation. This is because, as the majority of respondents agree, the customer experience is a point at which CIO and CMO responsibilities intersect. This is critical given the degree to which digital experience expectations are shaped by the technology that pervades our personal lives.

As a result, marketing is becoming increasingly digital and data-driven, thanks to the insights enabled by collecting, analyzing and strategically activating transactional data housed in traditional systems of record, and interactional data gleaned from the social Web. This requires CMOs and their marketing teams to seek timely and elevated technology assistance from the CIO and technology leadership team — beyond the shadow IT environ-

ments that have proliferated throughout marketing and other functional areas. Since funding for digital initiatives often originates from the collective (but separately delineated) budgets of marketing IT and the CIO, tighter collaboration between the two organizations has become a practical necessity, respondents noted (see Figure 3).

And while the CIO and CMO should be co-architects of digital strategy, such coordination remains a work in progress at most companies. As the CIO of a life sciences company told us: "Today, CIOs are in a unique position to drive their organization's approach to digital by virtue of having a cross-enterprise perspective. The role of CMO and CDO in our decision-making is mutual."

Top Reasons for Greater CIO-CMO Alignment

1 Marketing is increasingly becoming digital, requiring a technology interface.

2 A major portion of digital funding comes from marketing IT and CIO budgets.

3 Customer experience is largely shaped by digital technology.

4 Digital technologies provide access to the customer Code Halo™* and the ability to make meaning from their digital footprints.

- Strongly agree
- Agree
- Neither agree or disagree
- Disagree
- Strongly disagree

Bar 1: 46%, 39%, 6%, 7%, 2%
Bar 2: 42%, 41%, 13%, 3%, 1%
Bar 3: 42%, 37%, 11%, 5%, 5%
Bar 4: 38%, 38%, 17%, 6%, 1%

Base: 200
Source: Cognizant Research Center
Figure 3

Code Halo refers to the digital data that accumulates around people, processes, organizations and devices. For more insight, please read our book "Code Halos: How the Digital Lives of People, Things and Organizations is Changing the Rules of Business," Wiley, April 2014.

Ultimately, what's needed is to shift away from the traditional ROI-based model that favors large initiatives that are sponsored by the CEO and approved by the board, and replace it with an organizational model capable of supporting smaller digital initiatives that can either quickly succeed or fail.

- **First, the CIO and his or her team should be directly engaged and embedded in key digital initiatives,** advising and serving as a key influencer or "center of excellence" for all things digital. This includes specifying new tools, technologies and techniques, and suggesting business model and process changes that not only breathe new life into existing ways of working but also advance the business innovation agenda.

- **At the same time, CIOs must ensure their IT organizations are moving toward digital maturity,** evolving and enhancing the legacy IT portfolio with the speed of digital transformation. This transformation won't come easily, particularly as the fail-fast digital credo contravenes IT's traditional go-slow approach to rationalize, if not cost-justify, the investment in new tools, processes and people.

- **IT should also serve as the primary channel through which digital products and services are realized.** This means the CIO must play a central role in the development and commercialization of these initiatives, even if they originate somewhere else in the organization. This will come in handy as the CIO's organization is tasked to better integrate shadow IT initiatives into the enterprise information architecture.

"Being digital" will require a strong push from the CIO; it won't happen on its own. Concurrently, the dynamic between the CIO and CEO must change. The CIO needs to complete the shift to digital change agent, becoming a catalyst for business transformation, a true digital champion and a trusted advisor to the CEO. In our view, as the executive sponsor, the CEO needs to adopt the role of venture capitalist, reading the needs of the marketplace, securing funding for promising initiatives and working with the CIO on a collaborative roadmap for digital maturity.

The CEO needs to adopt the role of venture capitalist, reading the needs of the marketplace, securing funding for promising initiatives and working with the CIO on a collaborative roadmap for digital maturity.

None of these changes will be easy to make. These shifts require proactive change led by CIOs prepared to assert themselves in new ways – perhaps in ways for which past experiences and training hasn't prepared them.

At the same time, CIOs will be stepping forward at a time of increasingly high expectations. They must perform a balancing act, helping to elevate the business while continuing to deliver on the traditional imperatives – managing IT efficiently and containing, if not reducing, costs. By doing so, they can earn their seat at the table alongside their fellow digital leaders.

The good news, as our study shows, is that many of these changes are already underway. Now it's time for CIOs to take the next step – to fully commit to a new way of thinking and truly transform themselves for being digital in the new age of business.

Afterword

This report is the first in a series of white papers and related materials that will be published throughout 2016, chronicling the barriers to success of digital CIOs across the banking and financial services, insurance, healthcare and life sciences industries. These white papers will also detail the attributes that make for a successful digital CIO and the strides that winning CIOs are taking to make good on the digital business mandate.

Methodology

This study was fielded in November 2015 to 200 North American CIOs and those with similar IT leadership job titles across the banking, P&C insurance, healthcare and life sciences industries.

The questionnaire was instrumented by the Cognizant Research Center (CRC) and conducted via phone by our partner E2E Research. The interviews allowed time for open discussion, and verbatim comments were recorded with respondent approval. The findings (split equally across the aforementioned industries) were jointly analyzed by CRC and Cognizant Business Consulting.

Note: Code Halo™ is a trademark of Cognizant Technology Solutions.

About the Author

Rob Asen leads Cognizant Business Consulting's North American Strategy & Transformation Practice. His primary areas of client service include CIO advisory, the digital IT organization, M&A/post-merger integration and business/IT transformation, focused on delivering measurable client business value. Over a 25-year career, Rob has led multiple client programs with over $100 million budget, served as advisor to IT leaders and organizations, more recently as related to the digital mandate, and led varied industry and technology strategy consulting practices on a national scale. Rob received his bachelor's and master's degrees in computer science from the University at Albany (SUNY). He can be reached at Robert.Asen@cognizant.com / LinkedIn: https://www.linkedin.com/in/robasen.

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About Cognizant

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