Gartner Executive Programs

Taming the Digital Dragon: The 2014 CIO Agenda

Insights From the 2014 Gartner CIO Agenda Report

Gartner

About the Gartner CIO Agenda Report

The annual Gartner CIO Agenda Report is informed by the world's largest annual CIO survey, which for the past 13 years has tracked how CIOs balance their business, strategic, technical and management priorities. The report comprises survey findings, case studies, expert analysis and actionable insight, enabling CIOs to compare their strategies and activities with the priorities and actions of their global peers, and get a glimpse into what the future may hold. The survey findings in their entirety form the foundation of the annual Executive Programs CIO research agenda.

This year's survey encompasses the views of 2,339 CIOs across 77 countries, representing more than $300 billion in corporate and public-sector IT spending.

Here are some of the key insights from this year's report.

IT in 2014: Facing a torrent of digital opportunities and threats

All industries in all geographies are being radically reshaped by digital disruption — a "digital dragon" that is potentially very powerful if tamed but a destructive force if not. It's a CIO's dream come true, and also a career-changing leadership challenge.

In reporting their top technology priorities for 2014, this year's CIO survey respondents reveal two complementary goals:
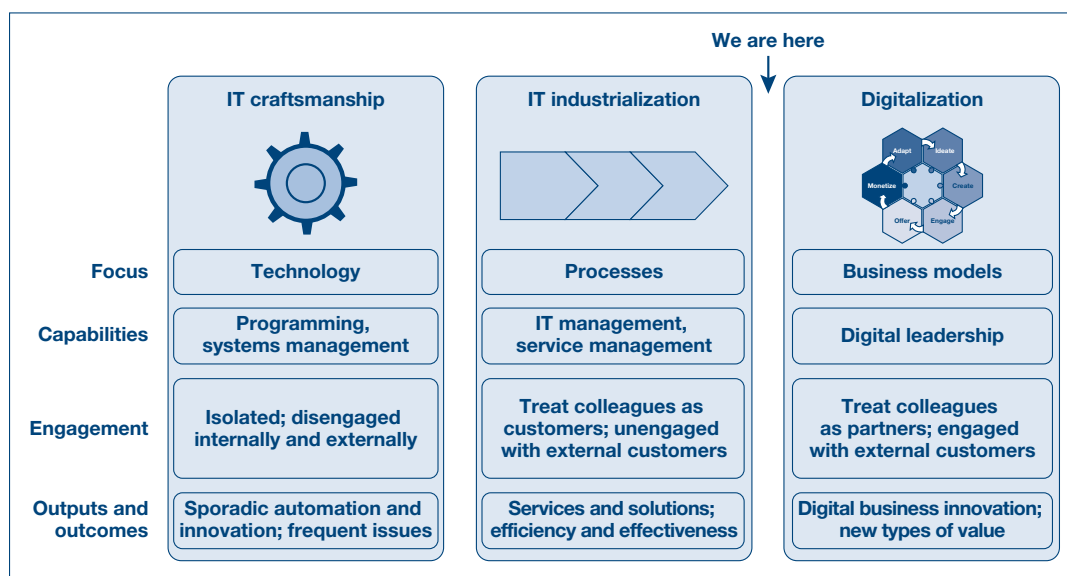
- Responding to ongoing needs for efficiency and growth by renovating the core of IT

- Shifting to exploit a fundamentally different, digital paradigm, including new technologies and trends

Current enterprise IT is not set up to easily deliver on the second goal. Fifty-one percent of CIOs are concerned that the digital torrent is coming faster than they can cope, and 42% don't feel they have the right skills and capabilities in place to face this future.
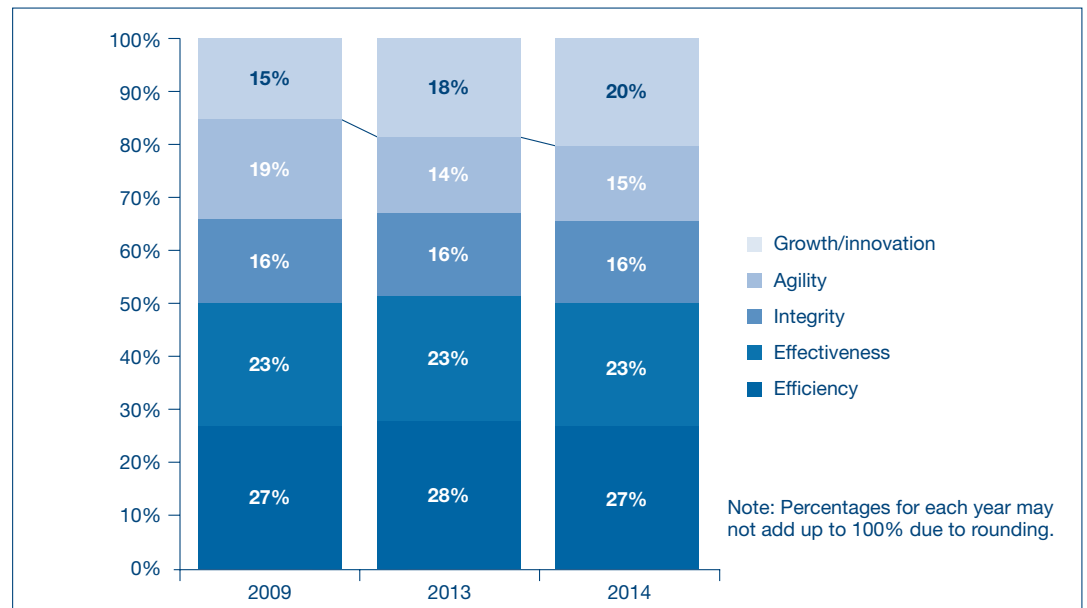
Entering the third era of enterprise IT

Y2K and the dot-com bust brought the first, "mad inventor" era of enterprise IT to a close and ushered in the second — an "industrialization" era of processes, services, standards and smart sourcing, making IT more reliable and professional, open and transparent, and treating the rest of the business as its internal customers.

CIOs now face the challenge of straddling the second era of enterprise IT and a new, third "digitalization" era — moving from running IT like a business within a business, into a period characterized by deep innovation beyond process optimization, exploitation of a broader universe of digital technology and information, more-integrated business and IT innovation, and a need for much faster and more agile capability.

	IT craftsmanship	IT industrialization	Digitalization
			We are here
Focus	Technology	Processes	Business models
Capabilities	Programming, systems management	IT management, service management	Digital leadership
Engagement	Isolated; disengaged internally and externally	Treat colleagues as customers; unengaged with external customers	Treat colleagues as partners; engaged with external customers
Outputs and outcomes	Sporadic automation and innovation; frequent issues	Services and solutions; efficiency and effectiveness	Digital business innovation; new types of value

Business leaders want growth and innovation, but budgets are up only slightly

In terms of management's mood, CIOs report a gradual but undeniable shift toward growth.

	2009	2013	2014
Growth/innovation	15%	18%	20%
Agility	19%	14%	15%
Integrity	16%	16%	16%
Effectiveness	23%	23%	23%
Efficiency	27%	28%	27%

Note: Percentages for each year may not add up to 100% due to rounding.

But despite the need to grow, there is pressure on budgets. The global weighted average expected change in CIO IT budgets is +0.2%. This lack of significant uptick presents challenges for the CIO and IT organization since there is a need to simultaneously renovate the core of IT systems and services, and exploit new technology options.

CIOs also report that a quarter of 2014 IT spending will happen outside the IT budget. And that is the spending they know about; the reality may be significantly higher — a direct result of the new digital opportunities that are more entwined with customer and colleague experiences.
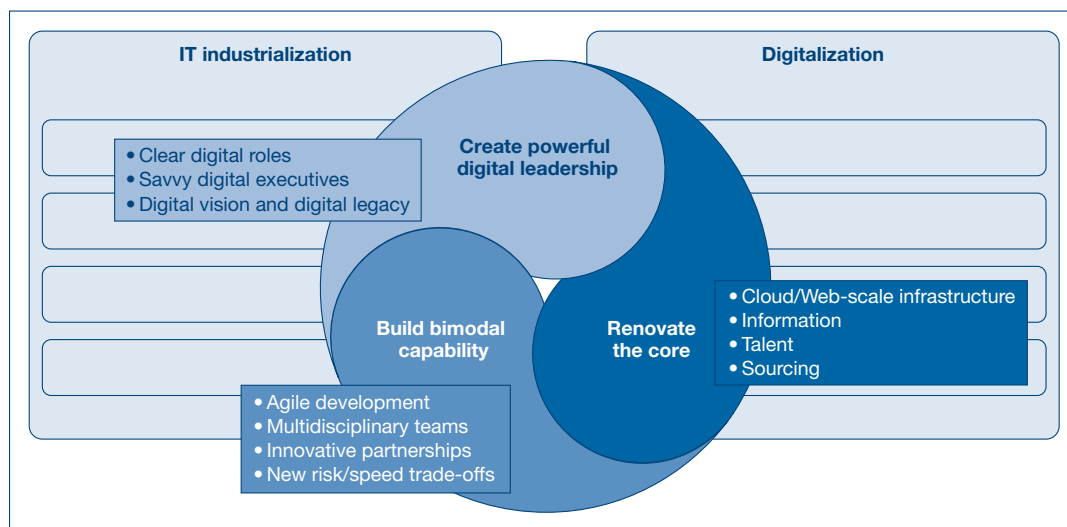
Meeting the digital future demands a three-part response

IT as order taker is the wrong model for taming the digital dragon.

Digital innovation will require IT to ideate, or dream the digital dream, and execute in close partnership with colleagues, in an exploratory way, with understanding of the potential of new trends. Much of the innovation will come as major disruptions to the way we think about businesses. Processes will cease to be the whole story or even the main story.

This year's survey data and case study interviews show that leading businesses, governments and public-sector agencies are preparing for the digital future by innovating in three areas:

- Creating powerful digital leadership

- Renovating the core of IT
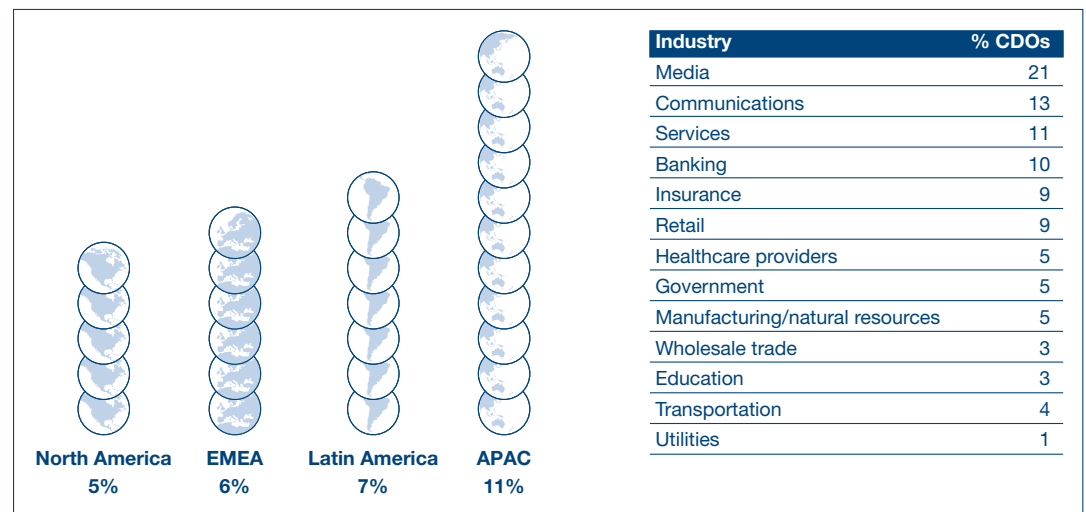
- Building bimodal capability

IT industrialization

- Clear digital roles
- Savvy digital executives
- Digital vision and digital legacy

Create powerful digital leadership

Digitalization

- Cloud/Web-scale infrastructure
- Information
- Talent
- Sourcing

Build bimodal capability

Renovate the core

- Agile development
- Multidisciplinary teams
- Innovative partnerships
- New risk/speed trade-offs

Creating powerful digital leadership

To exploit digital opportunities and ensure that core IT services are ready, CIOs must strive for clear digital leadership, strategy and governance; and help build a digitally savvy C-suite with proven approaches such as the use of digital nonexecutives, technology showcases, "hackathons," reverse mentoring, and examples and analogies from other industries.

Digital leadership is not a substitute for IT leadership; it's more an adaptation of business leadership to the digital context. Clarifying the coverage and scope of digital leadership, and integration with IT leadership, should be high on every CIO's 2014 agenda.

There is a fast-rising trend to hire chief digital officers (CDOs). Originally a marketing and media officer, this role has broadened over the past year. Around 7% of enterprises have a CDO, and they are spread across all geographies and a wide variety of industries.

North America 5%	EMEA 6%	Latin America 7%	APAC 11%

Industry	% CDOs
Media	21
Communications	13
Services	11
Banking	10
Insurance	9
Retail	9
Healthcare providers	5
Government	5
Manufacturing/natural resources	5
Wholesale trade	3
Education	3
Transportation	4
Utilities	1

We predict a tripling of the prevalence of CDOs and similar roles in the next year.

Renovating the IT core

The IT core — infrastructure, applications, information and sourcing — was built for the IT past. CIOs report much of their new technology spending going toward improving core systems and capabilities.

Needed renovations to ensure fit for purpose and being "digital ready" include moving to a more loosely coupled "postmodern-ERP" paradigm, deploying public and private clouds, creating the information architecture and capabilities to exploit big data, and augmenting conventional sourcing with more innovation, including sourcing from, and partnering with, smaller and less mature enterprises.
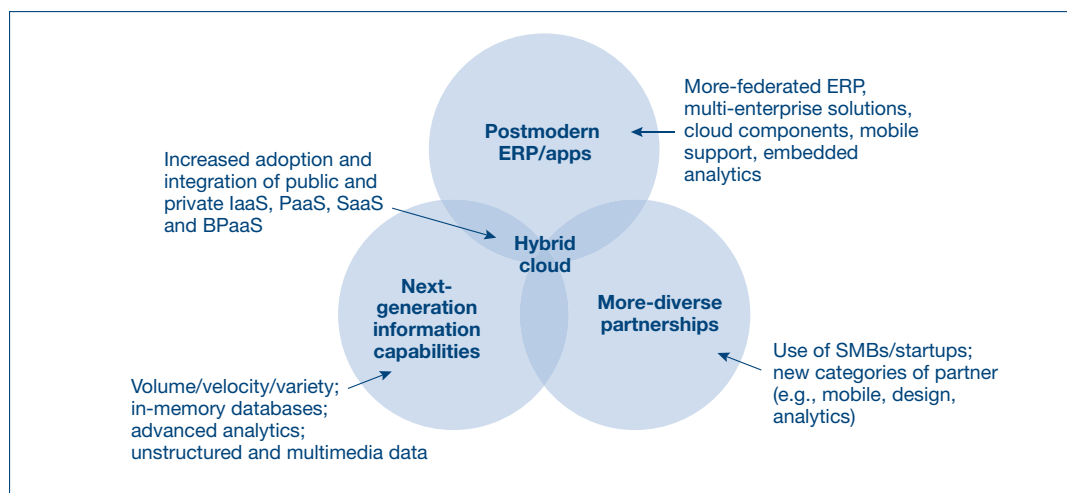
CIOs have big concerns around the talent to execute on these renovations, especially when it comes to agile skills such as digital design, data science, "digital anthropology," SMB/startup engagement and agile development: 43% said improvements were needed, with 39% saying IT could use a major talent overhaul.
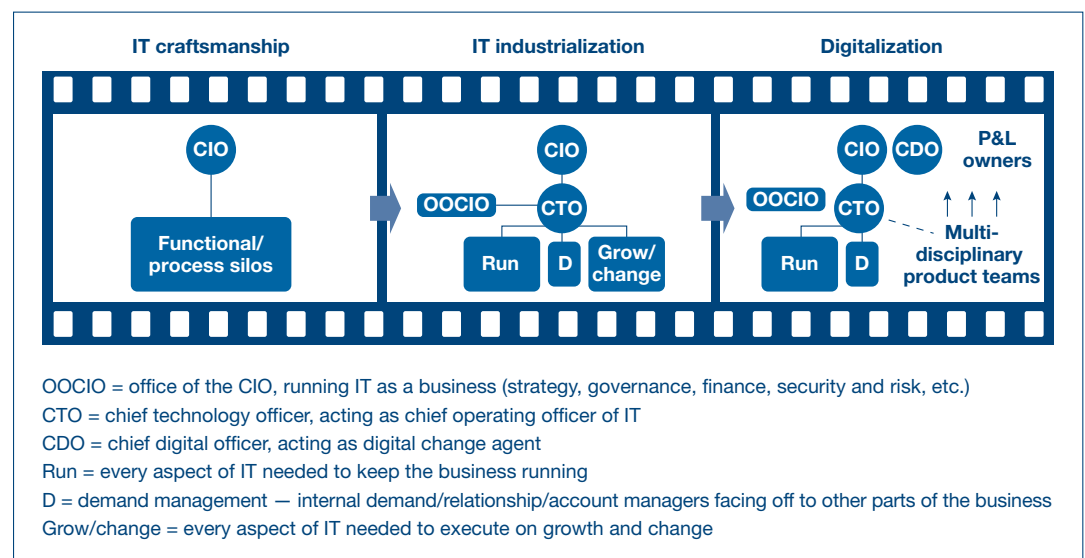
Building bimodal capability — Two-speed IT

To capture digital opportunities, CIOs must deal with speed, innovation and uncertainty. This increasingly requires operating two modes of enterprise IT: conventional and "nonlinear."

The second era of enterprise IT has been about planning and doing IT right, being predictable and creating value, while maximizing control and minimizing risk. The third "digitalization" era poses additional, nonlinear challenges, such as the need to:

• Absorb disruptive new business models, enabled by new digital technologies

• Scale up and down in Internet time

• React quickly to capture "business moments"

• Flex painlessly to support business model innovations

• Explore and evolve solutions that are surrounded by uncertainty

Meeting these needs with one speed of IT is impossible. Forty-five percent of this year's CIOs have already built some agile software development capability into their grow-and-change function — using iterative and agile methodologies and tools, and typically involving very short cycles and high levels of collaboration with users and sometimes external customers, throughout the life cycle.

OOCIO = office of the CIO, running IT as a business (strategy, governance, finance, security and risk, etc.)
CTO = chief technology officer, acting as chief operating officer of IT
CDO = chief digital officer, acting as digital change agent
Run = every aspect of IT needed to keep the business running
D = demand management — internal demand/relationship/account managers facing off to other parts of the business
Grow/change = every aspect of IT needed to execute on growth and change

Required in 2014: The CIO's bold vision

A combination of powerful digital and societal forces — the digital dragon — has created much broader and deeper opportunities and threats than the scope of traditional enterprise IT covers. CIOs need to act fast and smart to protect their companies, their public-sector agencies, their IT organizations and themselves.

This is a fundamental change in the way information and technology show up in the enterprise — a rethinking of the role of the CIO and the IT organization, and the rest of the business's expectations, getting unstuck, and shifting to the third era of enterprise IT. And it needs to happen as the important work of delivering and improving existing enterprise IT continues.

If the dragon isn't tamed, businesses could fail and the relevance of the IT organization will almost certainly disappear. If this transition succeeds, massive new value can be created, and with it, a renewed role and greater credibility for the CIO and the IT organization.

Gartner Executive Programs: Membership leads CIOs and their teams to success

With Gartner Executive Programs you can be certain you are making the best possible decisions for your enterprise. Backed by CIO experts who work with thousands of CIOs each year, members of Executive Programs receive specialized insight, tools, benefits and concierge-level services that empower them and their teams to drive greater business success.

Extend your vision, achieve your goals.

Make decisions with confidence, from significant technology selection and governance modeling, to advising your C-level peers about IT's role in driving competitive advantage. No CIO can do it alone. Benefit from Gartner insight delivered in your context, the world's largest community of CIOs, and unparalleled insight into the CIO role.

Deliver exceptional business results.

Interact with subject matter experts who will equip you with proven methods, tools and techniques for driving IT's business contribution and communicating it through your team and to all levels of the organization, including the board of directors.

Utilize our capabilities within the way you work.

CIOs manage a full agenda, which is why your Gartner Executive Programs relationship team designs an engagement plan specifically for your priorities. Your CIO expert maps our research and capabilities to your immediate and long-term objectives and delivers value throughout your membership.

Tap into the largest community of CIOs in the world.

Reduce risk and save time by leveraging the insight and experience of other CIOs who have addressed similar problems and opportunities both inside and outside your industry.

To learn more, contact your Gartner account executive or visit gartner.com/cioagenda.

About Gartner

Gartner, Inc. (NYSE: IT) is the world's leading information technology research and advisory company. We deliver the technology-related insight necessary for our clients to make the right decisions, every day. From CIOs and senior IT leaders in corporations and government agencies, to business leaders in high-tech and telecom enterprises and professional services firms, to technology investors, we are the valuable partner to clients in over 13,000 distinct organizations. Through the resources of Gartner Research, Gartner Executive Programs, Gartner Consulting and Gartner Events, we work with every client to research, analyze and interpret the business of IT within the context of their individual role. Founded in 1979, Gartner is headquartered in Stamford, Connecticut, USA, and has 5,800 associates, including more than 1,450 research analysts and consultants, and clients in 85 countries.

Visit gartner.com/cioagenda.

Gartner.