

2016 CIO Agenda: A U.S. Perspective

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The 2016 Gartner CIO Survey indicates that U.S.-based CIOs find themselves in environments increasingly focused on the expansion of the digital business footprint. U.S. CIOs should reflect on current and desired role and actions, and ensure the organization is set up to deliver on its digital role.

Key Findings

- Digital business is a reality now and is expected to grow aggressively to an average of 36% of overall revenue in the next five years. The focus on digital business has been operational so far, but there is greater potential of more business through digital channels, engaging and empowering employees, and tighter partnerships.
- U.S. organizations have an average of 25% of IT projects and operations running in the second, faster mode.
- U.S. CIOs agree with their global counterparts that talent issues are their biggest barrier to achieving their digital objectives.
- 69% of U.S. CIOs believe that security and cyber-risk threats will be the greater threat to their organization over any new competitive or commercial threats. The right leadership is key to address the challenges faced.

Recommendations

In order to meet the challenge to deliver innovation; attract and retain talent; and have their products/services perceived as value-adding by customers, U.S. CIOs must:

- Shift to a platform-thinking approach to digitalization, establishing open innovation practices that engage collective intelligence networks to co-create value by leveraging:
 - **A bimodal delivery platform** to enable an innovative and flexible execution mechanism
 - **An evolving talent platform** that deviates from traditional methods to build skills and acquire talent to more radical and innovative approaches targeting capabilities and creating ecosystems

- **A digital leadership platform** to bring together a coalition of power, skills and strategic vision that can collectively lead the transformation

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Survey Objective

Every year, Gartner surveys CIOs to expose key priorities, opportunities and threats facing CIOs across the globe. This year's survey includes the views of 2,944 CIOs across 84 countries, representing approximately \$11 trillion in revenue/public-sector budgets and \$250 billion in IT spending.

The analysis in this research is a part of a series that analyzes the findings from a regional or industry angle — with this document focusing on the 951 responses from CIOs in the U.S. — as well as input obtained through Gartner's executive partners and their interaction with CIOs across the country.

The answers from the U.S. have been compared to those from the total of 84 countries (including U.S.) represented in the survey (referred to throughout this research as "global"), which is reflective of the total global responses inclusive of all survey respondents.

The data represents all major industry groups: energy, government — national/federal/defense, insurance (excluding health), hi tech and utilities. Respondents also ranged in size from less than \$100 million to \$50 billion or more.

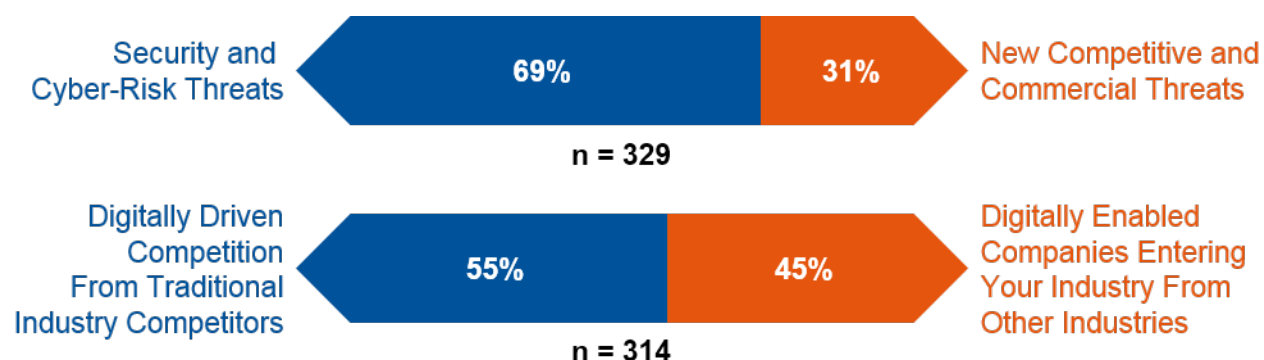
Data Insights

The Disruption of Digital

Disruption is taking place across all industries and in all geographies as many organizations are wading into digitalization, and getting even deeper. Technology is disrupting all areas of the business enterprise. This disruption is fueled by the convergence of social, mobile, cloud, big data and growing demand for anytime anywhere access to information.

In the era of digitalization, enterprises face key risks and barriers. According to the CIO survey, 69% of U.S. CIOs believe the greatest threat to business is the protection of valuable intellectual property and business information in digital form against theft and misuse. In addition, barriers to entry are diminishing as competition increases. Fifty-five percent of U.S. CIO respondents think that digitally driven competition from traditional industry competitors is the bigger threat versus 45% of respondents who feel that digitally enabled companies entering their industry from other industries is a bigger threat (see Figure 1).

Figure 1. Risks and Threats to Business



Source: Gartner (February 2016)

Digital represents a number of expected outcomes or impact of digital (see Figure 2). Both U.S. and globally, CIOs agree that the top three go-to-market digital impacts for their enterprise are more revenue through better operations, engaging and empowering employees, and more business through digital channels. Yet, how they prioritize No. 2 and No. 3 is a bit different.

Figure 2. Top Expected Outcomes and Impacts of Digital, U.S. vs. Global

	U.S. (n = 298)	Global (n = 941)
More revenues from better operations	65%	66% (No. 1)
Engaging and empowering employees	49%	40% (No. 3)
More business through digital channels	42%	48% (No. 2)
Tighter partnerships	40%	37%
Cost reduction	34%	39%
Creating new markets	26%	26%
Changing the basis of competition	24%	20%
Expanding to new geographies	9%	11%
Crossing industry boundaries	6%	9%

Source: Gartner (February 2016)

In summary, digitalization impact on enterprises can be seen as follows:

- Business competition threats: Digitization is reshaping business models. It is lowering barriers to entry and expanding market reach for enterprises.
- Business market strategies: Digitization is changing how companies build brands and products, communicate, and provide services to their customers.

In the face of the growing digit megatrend, organizations have to reinvent their business and create new business execution models to remain successful.

Call to Action

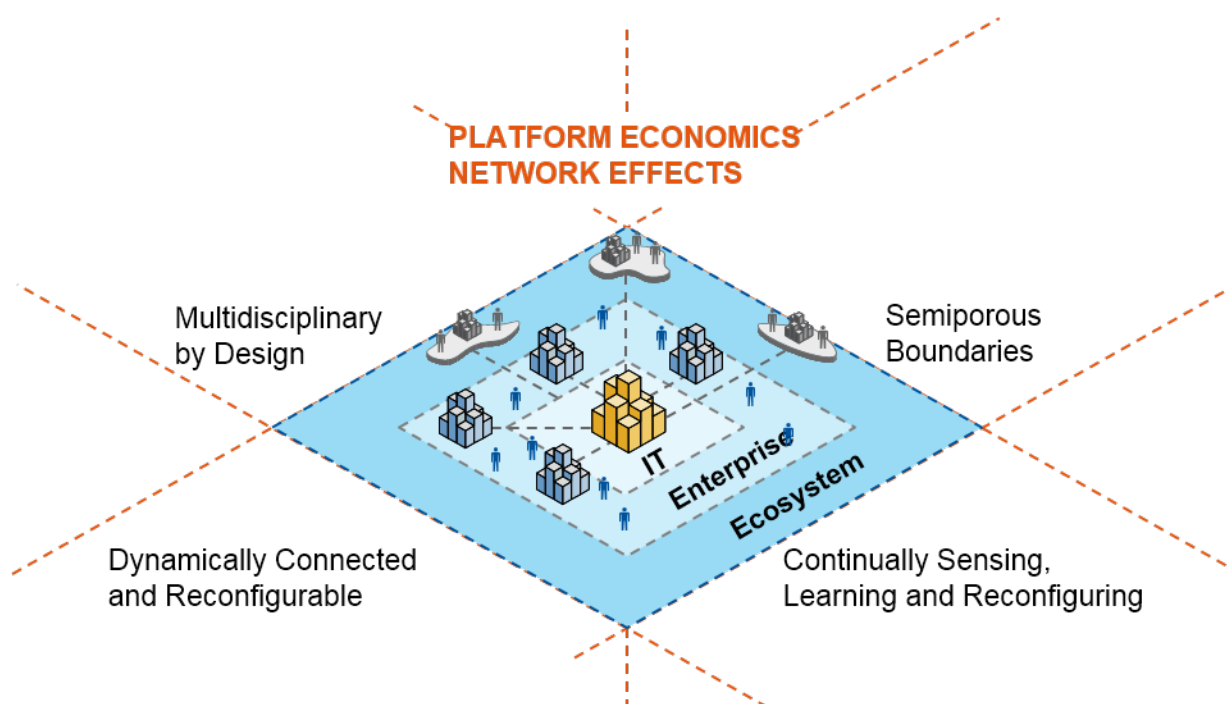
U.S. CIOs should:

- Review digital ambitions in the light of the above findings.
- Ensure they are ambitious enough and poised to gain the full range of outcomes of digitalization.

A Platform-Thinking Approach

Platforms are fundamentally a different business model. Unlike the pipe model of business, where value is a linear and single direction push to the customer, the platform model is something that allows everyone to share value with everyone (see Figure 3). Like the physical object, a platform business model is something tangible on which everyone can stand and benefiting all those on the platform. By building a digital platform, you can easily connect your business with others, as well as collaboratively build products and share services. A platform provides the business with a foundation where resources can come together dynamically for short or long periods of time to create value. These resources are like networks that may or may not be owned by your business, have customers as possible participants and allow learning to happen across the network.

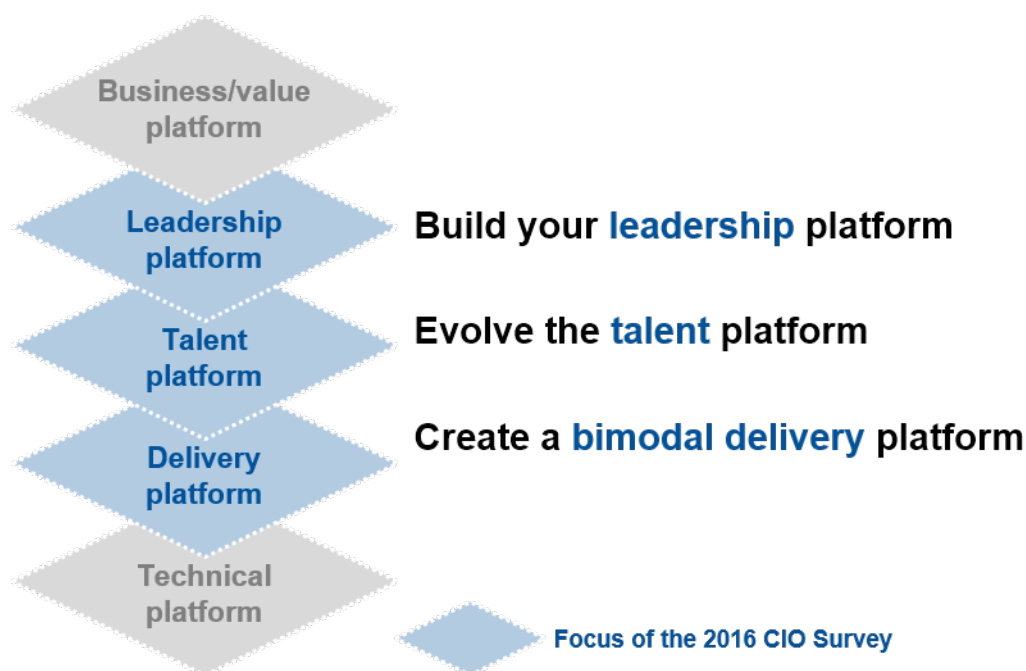
Figure 3. The Platform-Thinking Approach



Source: Gartner (February 2016)

Most enterprises associate the platform-thinking approach to the technology layer, focusing on highly modular, open information and architectures, for example, everything as a service. However, there is much more to this mode, which should be applied to all aspects of delivery, talent and leadership; and should include the organization as a whole, partners and customers (see Figure 4).

Figure 4. Components of Platform Thinking



Source: Gartner (February 2016)

This report focuses on the innovative approaches needed to succeed in delivery, talent and leadership in a digital business world.

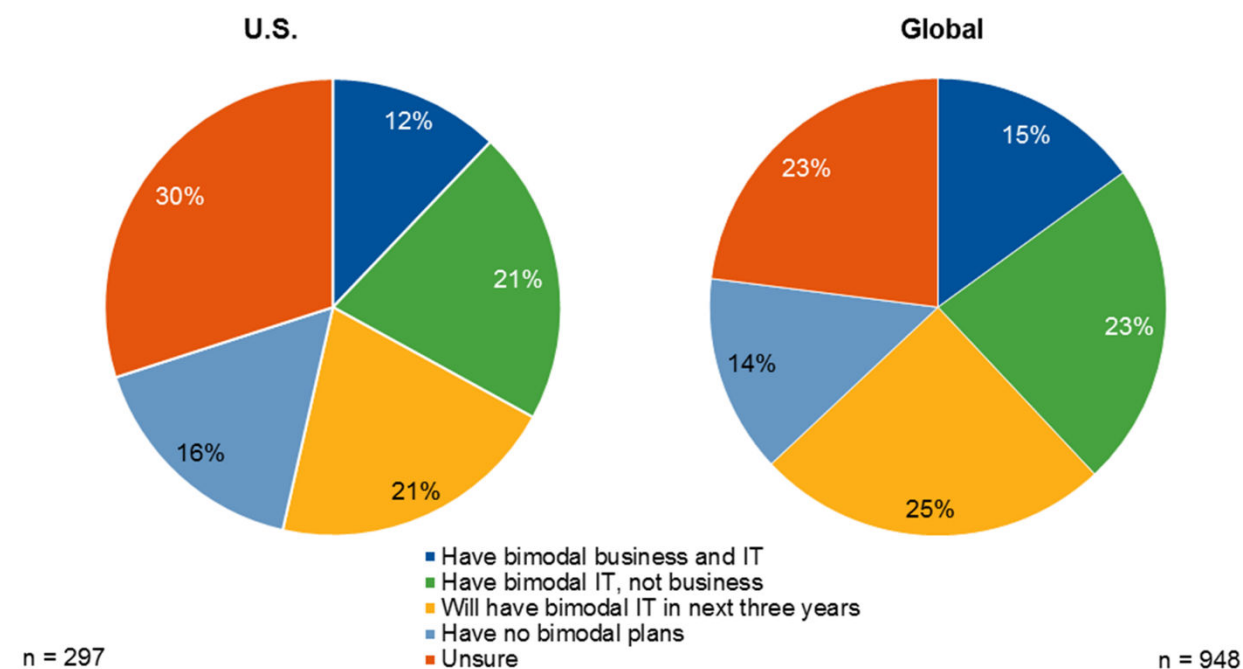
Create a Bimodal Delivery Platform

In "Taming the Digital Dragon: The 2014 CIO Agenda" we suggested that it is essential to have two modes of IT, and ultimately of the entire business, to deal with both predictable and exploratory work. Two years later, the 2016 Gartner CIO Survey suggests that the need to innovate is driving penetration and deepening of the bimodal construct. Product and service life cycles are shrinking and low barriers to entry and exit are creating competition where both upstarts and traditional players can come from nowhere and quickly gain dominance. In the digital era, enterprises need a way to create and sustain a competitive advantage in the face of a rapid, complex and volatile landscape by becoming agile, adaptive and aligned.

Bimodal IT is the practice of managing two separate, coherent modes of IT delivery, one focused on stability and the other on agility. Mode 1 is traditional and sequential, emphasizing safety and accuracy. Mode 2 is exploratory and nonlinear, emphasizing agility and speed.

The evidence shows that building a mature bimodal platform results in significantly better digital performance, but U.S. CIOs are lagging behind their global counterparts in implementing bimodal (see Figure 5). The survey results show 32% of U.S. respondents and 38% of global respondents have the bimodal IT and the bimodal IT plus business.

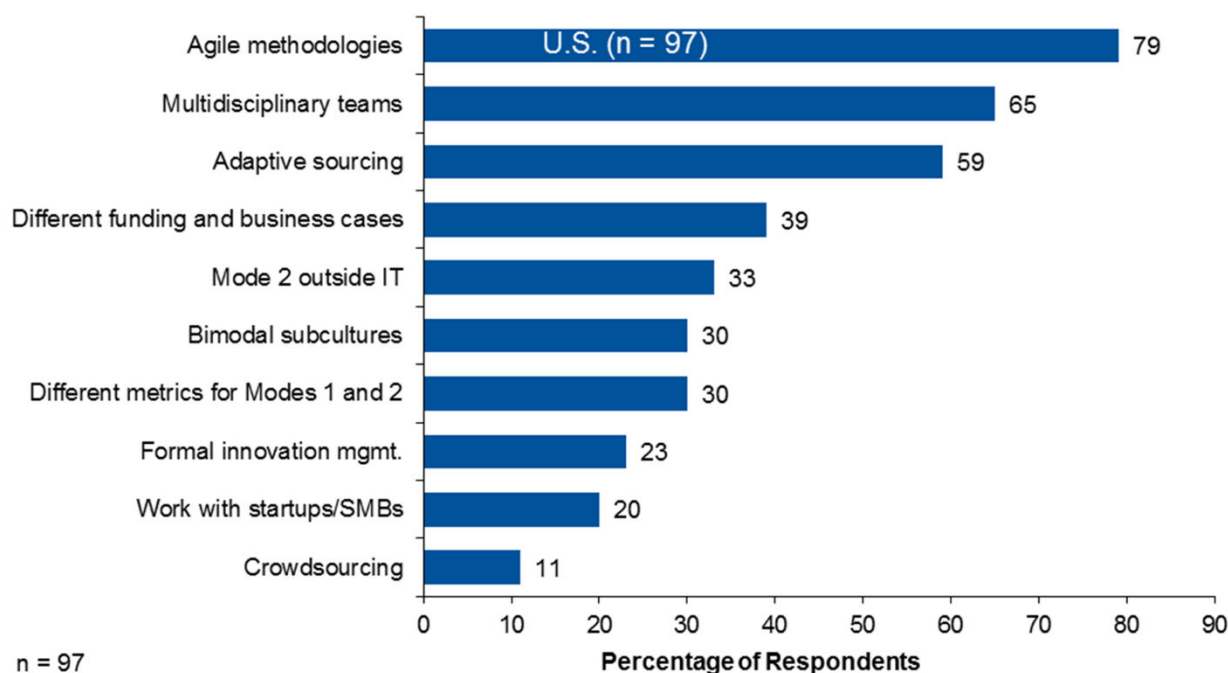
Figure 5. Use of Bimodal Tactics in Delivery, U.S. vs. Global



Source: Gartner (February 2016)

When it comes to using bimodal disciplines, the survey suggests that U.S. enterprises mirror their global peers focusing on what's easy rather than what's most effective. For example, crowdsourcing is associated with higher effectiveness in factoring digital considerations into strategy and planning, but is not widely used (see Figure 6).

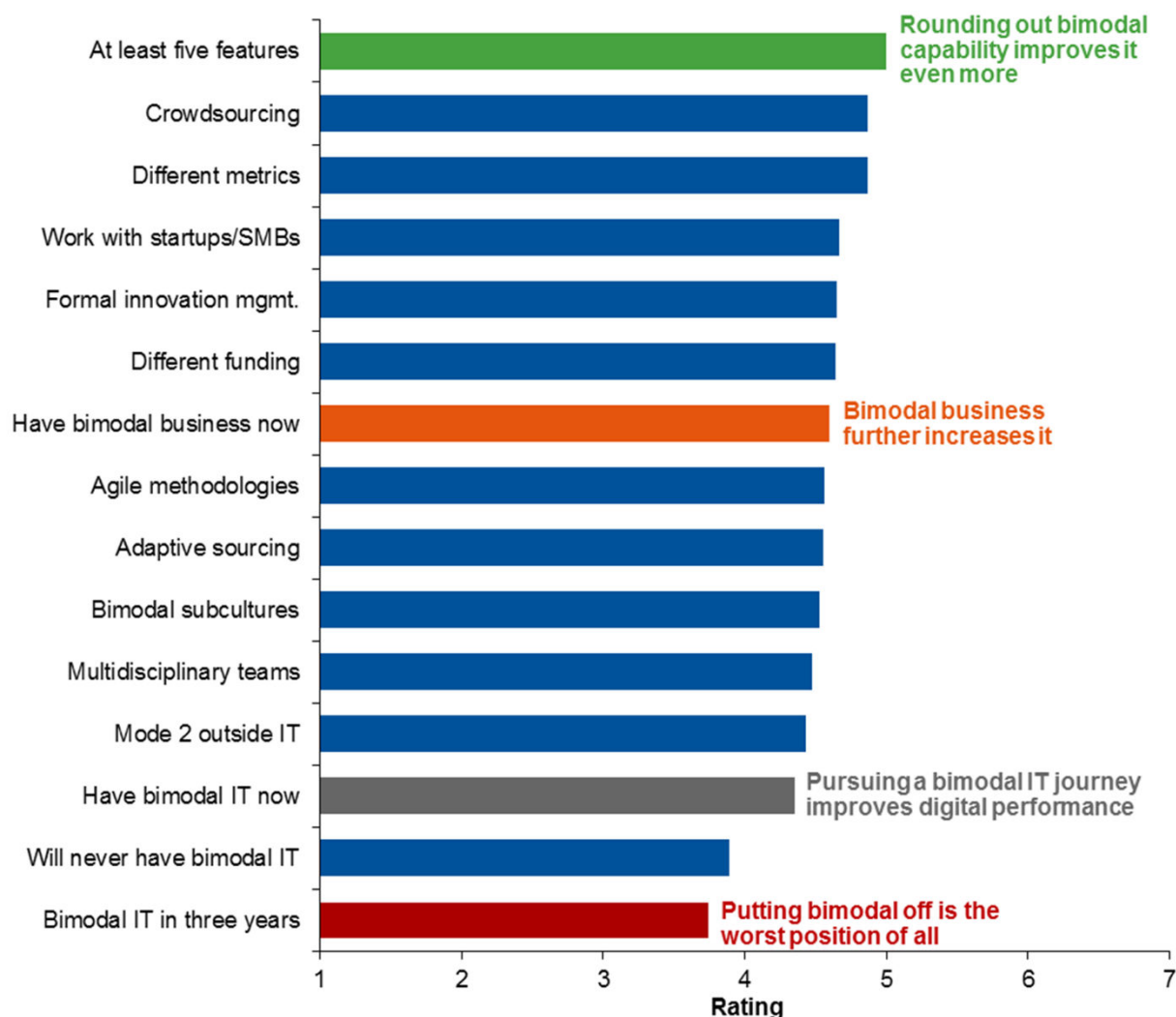
Figure 6. Adoption of Bimodal Tools by Those on the Journey



Source: Gartner (February 2016)

Perhaps most important is that having bimodal increases digital performance. We asked each of the 2,944 global survey respondent to rate their business's ability to factor digital considerations into strategy and planning — on a scale from 1 to 7, where 1 = very ineffective, and 7 = very effective (see Figure 7). CIOs who don't have bimodal IT and don't intend to get it score 3.9 for digital performance. CIOs who have bimodal IT now score 4.4, a significant uptick. More tellingly, CIOs who are moving slowly — planning to have bimodal in three years — score the lowest, with average digital performance of 3.7.

Figure 7. Bimodal Discipline Leading to Better Digital Performance, Global



Blue bars show average answer to: "How effective is your business at factoring digital considerations into strategy and planning?" (1 = very ineffective; 7 = very effective)

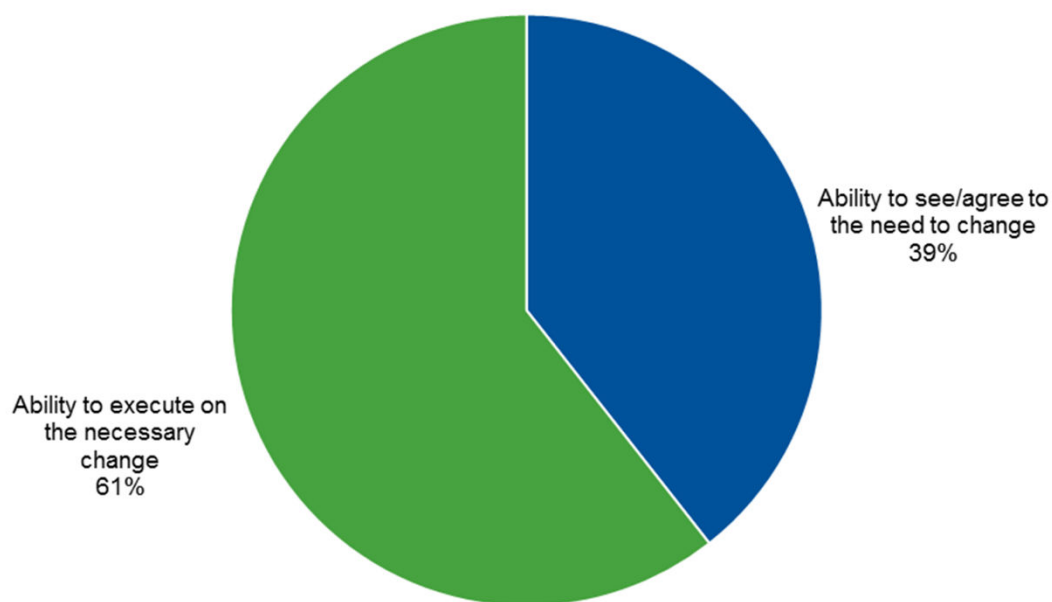
Results are isolated based on answers to bimodal questions.

Source: Gartner (February 2016)

Increased levels of digital effectiveness can be reached by adding bimodal features such as multidisciplinary Mode 2 teams, agile methodologies, differentiated subcultures and adaptive sourcing. We found that the most effective independent feature is the use of crowdsourcing, leading to digital performance of 4.9. Having at least five of the features resulted in the highest score of all: 5.0. The message: Round out your bimodal plans to ensure that you get the most effective digital performance.

The CIO must support the CEO to lay down the law of cross-functional collaboration, otherwise legacy attitudes and fear of losing fiefdoms will hold hostage the enterprise's ability to move forward with the digital strategy (see Figure 8).

Figure 8. Ability to Execute on the Necessary Change Seen as the Greater Threat



n = 330

Source: Gartner (February 2016)

Call to Action

To successfully shift to digital innovation and bimodal delivery model, U.S. CIOs need to:

- Focus more on the net business impact — that is, moving from cost-based to opportunity-cost considerations. In enterprises that follow this strategy, the role of IT is changing from simply delivering IT services that are focused on system availability, to facilitating IT outcomes that deliver real business value. Availability doesn't equal business success.
- Implement a broad-based (as in, based on multiple disciplines) bimodal IT to improve the digital effectiveness of the organization. Review your delivery platform and seek to implement a multiskills-based bimodal IT.

An Evolving Talent Platform

According to the survey, 71% of U.S. CIOs believe there is a talent scarcity reaching crisis in the world, and yet there is surprisingly little talent innovation. Many stakeholders recognize the issue of talent as a barrier to success, and Gartner believes that talent must also be treated as a platform.

Similar to their global counterparts, as the data in the Figure 9 shows, talent has now been recognized as the single biggest issue standing in the way of U.S. CIOs achieving their objectives. The No. 3 issue, culture, is strongly connected to it.

Figure 9. Organizational Barriers to CIO Success

	U.S. (n = 162)
Skills/Resources	28%
Funding/Budgets	15%
IT/Business Alignment	12%
Culture/Structure of Organization	11%
Management Sponsorship/Understanding/Relationships	7%
Capacity/Willingness to Change	7%
Technology Challenges (Legacy, Security, etc.)	6%
Time to Market	6%
Business Value of IT	4%
Process/Operations	1%
Pace of Change	1%
Risk/Impact of Change	1%

Source: Gartner (February 2016)

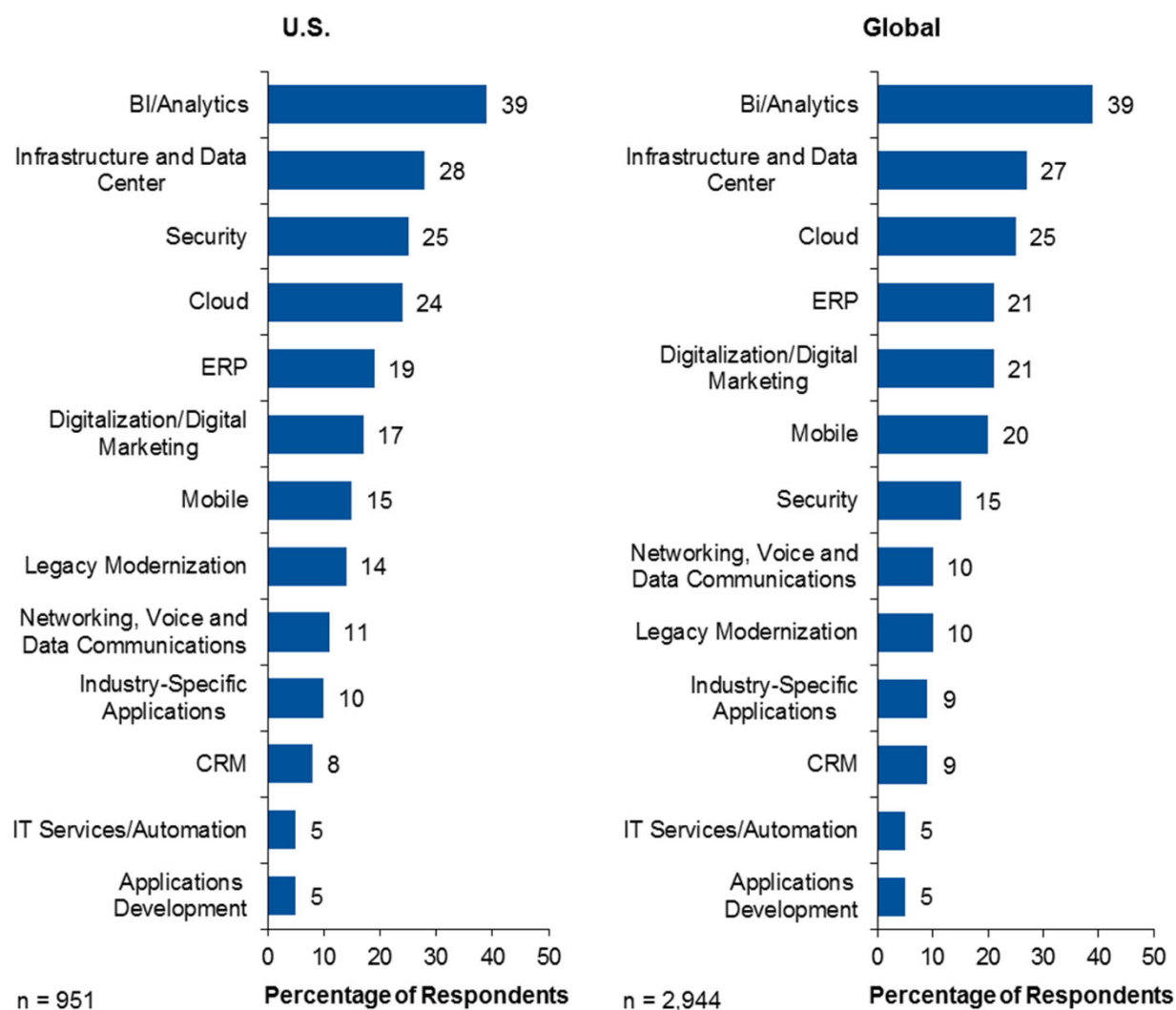
Unlike the past, the impact of these digital technologies and tools is felt not just in the IT department. This means that the magnitude of training and reskilling required is enormous. Moreover, each new technology cycle has brought forth new requirements, and these cycles are increasingly getting shorter. Employees must refresh their skills more frequently if they wish to stay relevant in this rapidly changing digital environment.

The demand for skills follow suit with key digital strategies and focus area of investment for enterprises. Currently, U.S. enterprises see the opportunity to monetize in big data, underpinned by the cloud.

Overall, business intelligence (BI) is still the highest priority for CIOs in the U.S. and globally, along with infrastructure and data center. The biggest differences are that U.S. CIOs place a high priority on security and on legacy modernization, reflecting the greater prevalence of legacy systems in these markets due to their maturity — whereas, globally, CIOs have a higher priority on digitalization/digital marketing. This year, security has shifted even higher in priority for U.S. CIOs by moving it up to be a top three priority for 2016 as compared to being sixth in 2015, while globally it still remains seventh.

As noted in Figure 10, the top three technology areas where company/business unit/government or public entity will be spending the highest amount of new/discretionary funding in 2015 in BI/analytics.

Figure 10. Key Areas of Enterprise Focus and Investment, U.S. vs. Global



Source: Gartner (February 2016)

In addition to skill, transforming talent management to a platform model involves leveraging social and digital technologies in ways that promote and enhance communication, collaboration and engagement — not just between an employee and the organization, but between and among employees themselves. It is time to think of talent as a platform and to innovate with it. The key is to focus on the platform characteristic of semiporous boundaries. That is, CIOs must look at digital talent beyond the boundaries of the IT organization, and indeed beyond the boundaries of the enterprise. Innovative talent management opportunities abound:

- Reversing into universities (as in, getting closer to universities by helping define and deliver university courses and projects, supporting internships, and so on)
- Initiating reverse mentoring
- Implementing job rotations
- Holding hackdays
- Building opt-in cultures

CIOs should also think of their partners as extensions of the talent pool, and consider to what degree each will be an inhibitor or an accelerator of the digital journey.

Call to Action

The growing demand and limited supply of digital talent is placing immense pressure on organizations to scale up on their digital skills. In order to plug the digital skills gap, organizations need to:

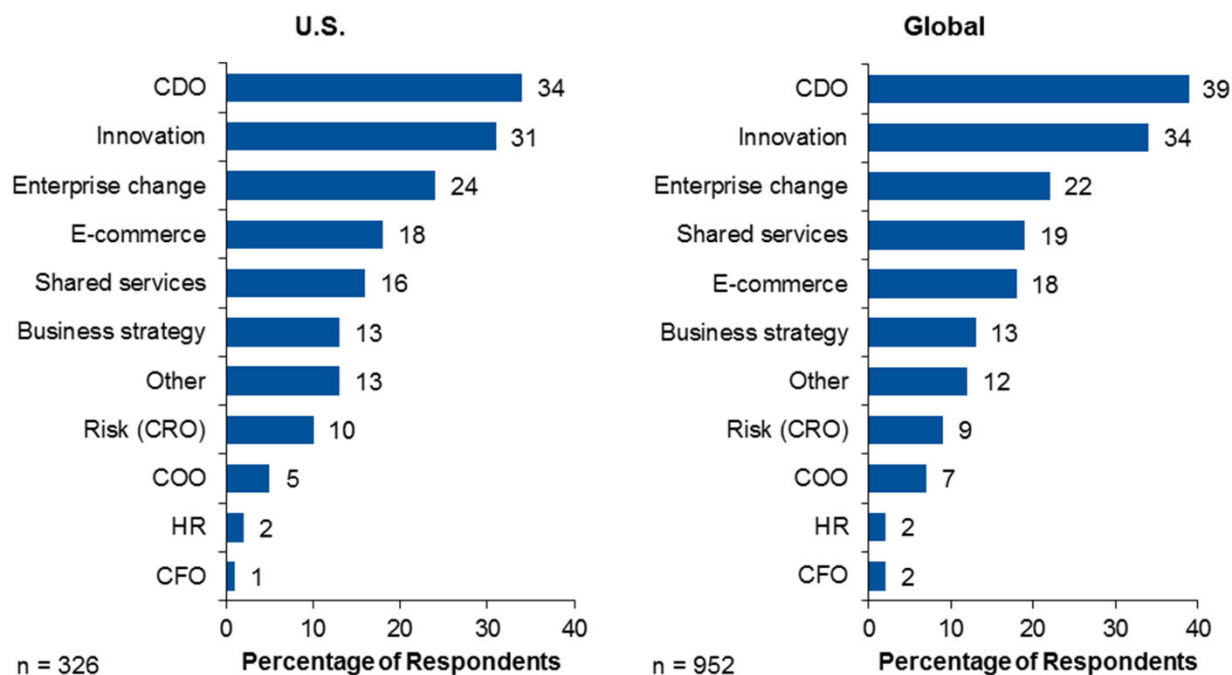
- Initiate training programs on digital tools.
- Look at innovative recruitment methods.
- Carry out targeted acquisitions.
- Enter into partnerships.
- Engage with the startup community.

A Leadership Platform

One thing that has not and will not change is that leadership is critical for all business success. IT and digital business are no different in that respect. Having strong and clear leadership as the IT and digital business worlds evolve continues to be critical.

CIOs are being given the opportunity to lead digital transformation, but they must adapt to build a powerful network of digital leadership that treats leadership as a team sport. Figure 11 shows responses when asked "In which areas are you/your CIO designated as the person in charge of any aspect of the business other than IT?" Thirty-four percent of U.S. CIOs responded that CIOs are CDO leaders of digital transformation in their enterprise, and 31% are the innovation leaders.

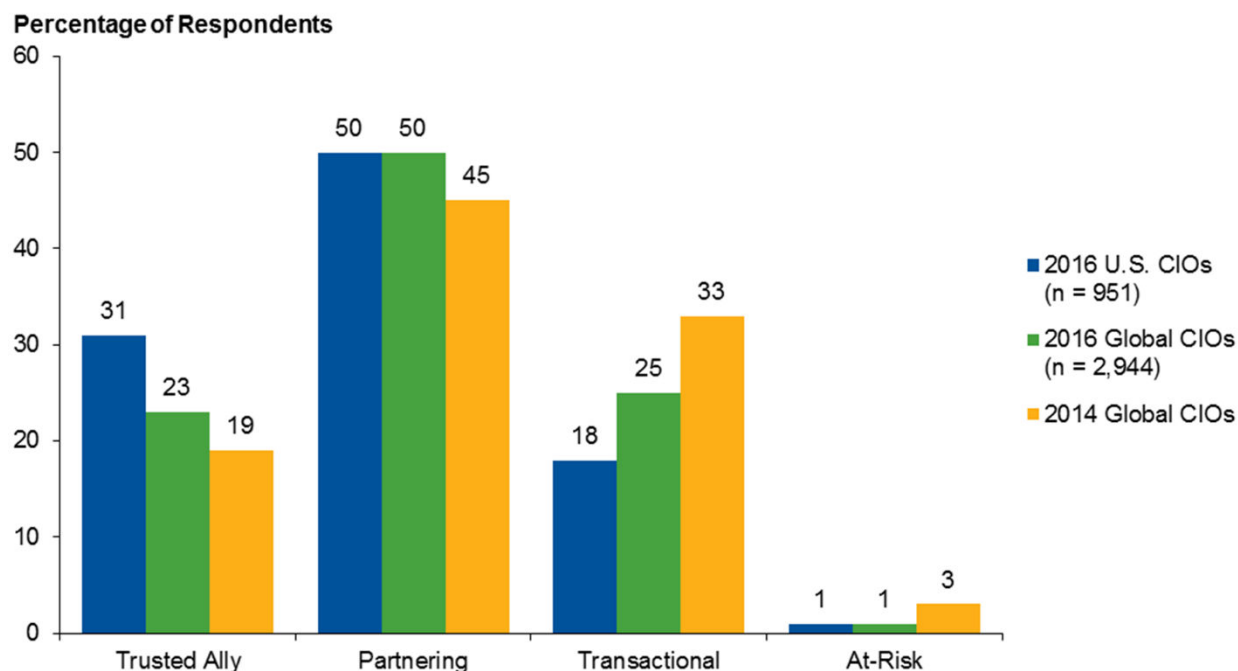
Figure 11. Leading Transformation, U.S. vs. Global



Source: Gartner (February 2016)

When asked the question, "How would you describe the current levels of influence and power of the CIO and IT?", 31% of U.S. CIOs believe they are trusted allies and partners of the CEO. This is significantly higher than the 23% of CIOs globally (see Figure 12).

Figure 12. CIOs Gain Influence, U.S. vs. Global

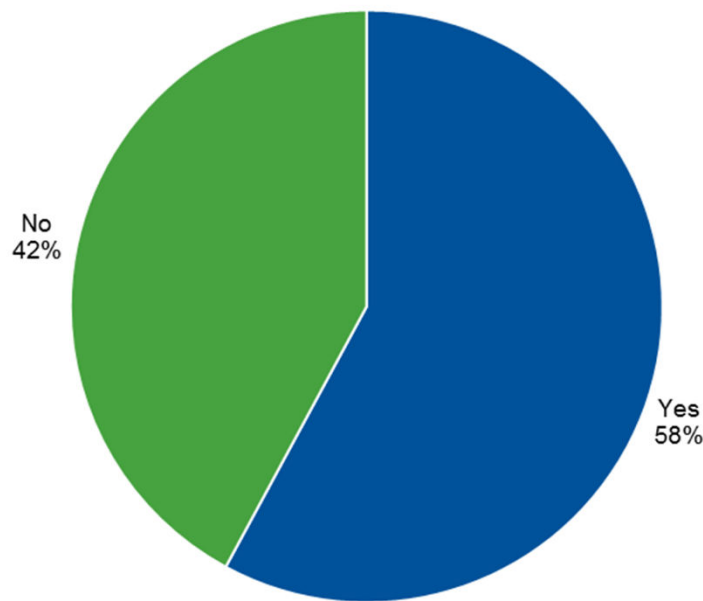


Source: Gartner (February 2016)

Bear in mind, however, that the 2015 Gartner CEO Survey revealed that CEOs expect CIOs to be the "first among equals" in digital leadership. CIOs must, therefore, adapt their style to exploit platform effects in leadership, building a network of digital leadership inside and outside the enterprise.

In addition, companies are increasingly facing digitally driven ethical issues when dealing with the digital world, such as balancing freedom and safety, or balancing personalization of services versus respecting customers'/citizens'/employees' privacy. When asked, "Has your company/business unit/government or public entity faced an ethical question when dealing with the digital world?", 58% U.S. CIO respondents answered yes (see Figure 13).

Figure 13. Organizations That Have Faced Ethical Issues When Dealing With the Digital World



n = 302

Source: Gartner (February 2016)

It is easy to think of digitalizing the business in a cold, clinical, logical way. But becoming more digital actually represents a continuum of personal risk for the CIO, and business risk for the entire enterprise. It involves stepping into the unknown, at least in terms of company knowledge and experience, and sometimes even a net-new experience of the whole world. Most important, the company and the CIO must actively decide how courageous they are willing to be, and how much risk they are willing to take. Despite these challenges, U.S. CIOs enjoy many aspects of their new role in the organization. As seen in Figure 14, leadership, being a change agent and impacting business outcome are the top three areas that appeal most to CIOs.

Figure 14. What CIOs Love Most About Their Role

	U.S. (n = 296)
Leadership/Responsibility	17%
Change Agent	17%
Impact Business Outcomes	16%
Strategy/Planning	8%
Collaboration/Problem Solving	7%
Engagement/Diversity	7%
Innovation	6%
Challenges	6%
Transformation	4%
Technology	4%
Impact Customer/User	4%
Operational Excellence	1%
Autonomy	1%

Source: Gartner (February 2016)

When asked the question, "What do you dislike most about your role?" CIOs named politics, personnel and workload as the top three, which is all increased with additional digital complexities (see Figure 15).

Figure 15. What CIOs Dislike Most About Their Role

	U.S. (n = 296)
Politics	14%
Personnel/Workforce	9%
Stress/Pressure/Workload	8%
Admin/Bureaucracy	7%
Resource Reduction/Constraints	7%
Financial Constraints/Budgeting	6%
Pace of Change	6%
Governance and Compliance	6%
Change Management	5%
Operational Issues	4%
Business as Usual	4%
IT Stigma	3%
Lack of Leadership	2%
Managing Expectations	2%
Alignment	2%
Vendor Management	2%
Leadership	2%

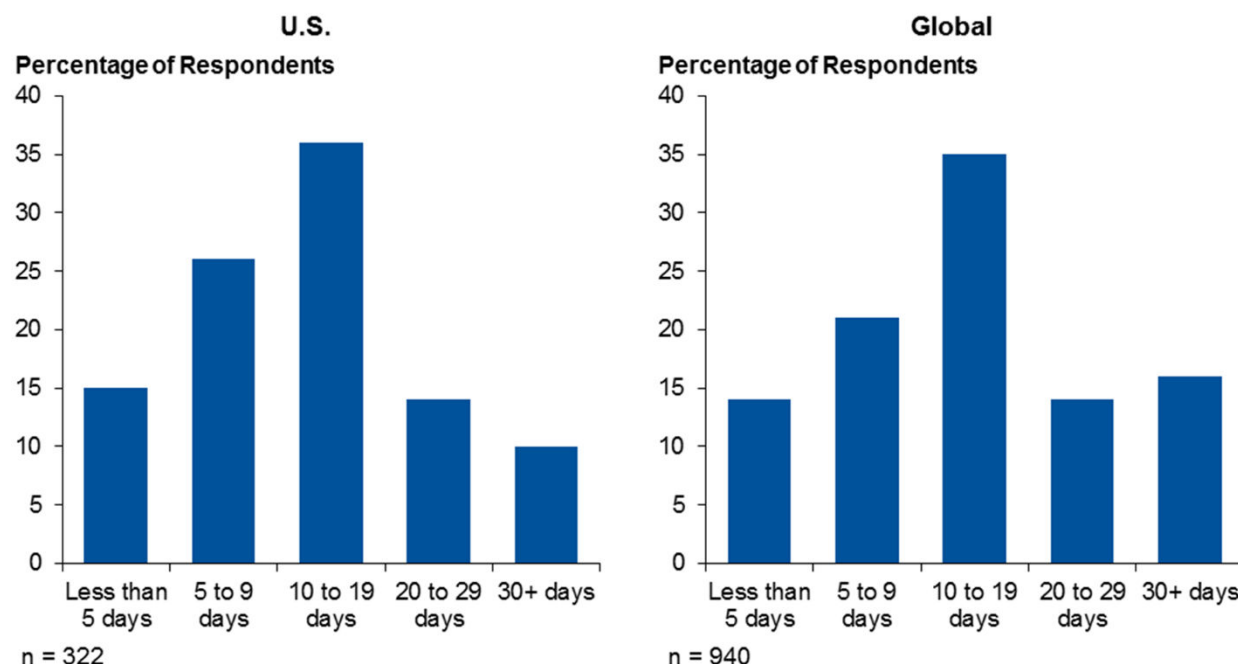
Source: Gartner (February 2016)

In addition to ethics, CIOs must manage politics. CIOs are enjoying opportunities to lead change, but must handle the politics and make space/time.

As with the talent and delivery platforms, CIOs need to evolve their leadership platform to move forward with the enterprise digital direction. That means active development of personal leadership capabilities, and the digital leadership skills of the IT organization and business as a whole.

When asked, "How much of your time did you invest in personal development last year (in days)?", CIOs spend a significant amount of time — a median of 10 days per year — on developing themselves (see Figure 16).

Figure 16. Time Spent on Personal Development, U.S. vs. Global



Source: Gartner (February 2016)

Interestingly, CIOs who have the best relationship with their CEO (as a trusted ally) spend that same amount of time on personal development. But they spend it on different things: less on technical development and conventional management development; more on training to be a board member, on corporate ethics and the like. That is, leading CIOs focus on C-level leadership training and on training in net-new areas that are of importance to the business. The message is clear: Personal development is critical, less is more and focus is everything.

Call to Action

U.S. CIOs need to:

- Decide which roles they want to take.
- Equip themselves to deal with the challenges such as ethics.
- Set up the necessary structures to deal with the less preferred actions of their job.

Conclusion

Not all businesses and government agencies are becoming platform businesses in terms of industry dynamics, today or even in the near future. But the opportunities and threats mean that all enterprises need to understand and exploit platform effects throughout the business to remain competitive. If platform effects are not considered in any aspect of the business — such as

leadership, talent or delivery — this represents a bottleneck in the enterprise's ability to deliver; to attract and retain talent; and to ultimately be perceived by customers as value-adding. Build a plan to evolve all five layers of your business's platform.

Methodology

This research is based on data collected for the 2016 CIO survey. Using an online survey, Gartner canvassed Executive Programs members and other IT leaders between 4 May 2015 and 24 July 2015. Gartner collected input from 2,944 CIO respondents in 84 countries, and across major industries and the public sector. Together, these organizations represent approximately \$11 trillion in revenue and public-sector budgets, and \$250 billion in annual IT spending.

Gartner designed the survey to prove or disprove a series of hypotheses devised by a core team of Gartner research analysts and Executive Programs representatives. The research involved extensive review prior to publication. The findings from the total dataset were published in their entirety as ["Building the Digital Platform: The 2016 CIO Agenda."](#)

Gartner Recommended Reading

Some documents may not be available as part of your current Gartner subscription.

"Trust and Resilience: The Future of Digital Business Risk"

"Flipping to Digital Leadership: The 2015 CIO Agenda"

"Bimodal IT: How to Be Digitally Agile Without Making a Mess"

"Taming the Digital Dragon: The 2014 CIO Agenda"

"Toolkit for IT Executives: Job Description for the COO of IT"

"What to Do If Your Digital Business Strategy Violates Culture, Ethics or the Law"

"Hit the Bimodal IT Highway Now — Considerations for Structuring and Staffing"

"Digital Workplace Key Initiative Overview"

"A Bimodal Enterprise Needs Three Subcultures"

"Get Ready for Digital Business With the Digital Business Development Path"

Evidence

This research is based on data findings from the 2016 Gartner CIO Survey. The original survey data was collected online from 2,944 members of Gartner Executive Programs and other IT leaders between 4 May 2015 and 24 July 2015.

More on This Topic

This is part of an in-depth collection of research. See the collection:

- 2016 CIO Agenda: Global Perspectives on Building the Digital Platform

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