Gartner's 2014 CIO survey results clearly show that, as digital opportunities and threats pervade every aspect of business and government, the IT and digital agenda for each country, industry and enterprise is becoming more unique. This research explores the CIO agenda for the government sector.

**Key Findings**

- Federal and national government agencies, including defense, remain under pressure to cut IT program budgets and services (26% versus the global average of 17%).
- Governments are at risk of entering a long-term state of technological deficiency if they fail to develop and reward digitally savvy executives and IT professionals.
- Government CIOs recognize the transformative nature of mobile services, data analytics and digitalization of services to engage citizens and employees with retail-grade user experiences.
- Agility is the main reason government CIOs transition services to the cloud, but concerns about security and privacy, and requirements to keep data within a jurisdiction, have slowed investment in public cloud.
- Over 75% of government CIOs indicate they will change their technology and sourcing approach within the next three years.

**Recommendations**

- Restructure your IT portfolio by differentiating high-value IT solutions and products from the commoditized IT services typically associated with in-house IT organizations.
- Ensure continuous access to needed digital skills by partnering with startups, incubators, universities, crowdsourcing services, local small or midsize businesses, and citizen development services.
- Work with business executives to produce an enterprise digital strategy on which to develop an IT strategic plan and road map capable of delivering immediate and sustained business value.
- Continue to increase agility, innovation and efficiency by using public cloud as part of a hybrid enterprise infrastructure, application and service portfolio.
Combine your unique knowledge of government programs with the role of IT broker to promote architecture standardization, interoperability, robustness, agility and security, as well as the integration of nonlinear innovation into the fabric of internal IT competency.

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Analysis

Every year, Gartner surveys the membership of its Executive Programs to expose key priorities, opportunities and threats facing its members across the globe. Of the 2,339 respondents to the 2014 Gartner CIO Agenda Survey, 288 were from government at all jurisdictions, regions and domains, including defense.
Business and Financial Context

Management Focus

In 2014, government revenues and the size of the public sector workforce have largely stabilized, albeit at lower levels than before the Great Recession of 2007 to 2009. In the U.S., state, local and regional governments have adapted to the tightly constrained reality of the postrecession era, and many are projecting modest budget surpluses in fiscal 2014. The proportional areas of management focus — growth and innovation, agility, integrity, effectiveness and efficiency — remain virtually unchanged among government CIOs in 2014 when compared with 2013 (see Figure 1).

Figure 1. Management Focus: Government vs. Global, 2013 and 2014

IT Budgets

Reflecting the extended budget development and appropriation cycles that are typical of public sector institutions, 26% of government CIOs anticipate a budget decrease in 2014, as compared to the 27% who expected to be working with lower IT budgets in 2013 (see Figure 2). With nearly 75% of government CIOs reporting flat or increasing IT budgets for the second year in a row, many government CIOs have an ongoing opportunity to build capacity in high-value areas (such as mobile services and business analytics), while retooling IT portfolios to include more SaaS and public cloud solutions (see “Government CIO Agenda 2013: ‘Do Better With the Same’”).

Source: Gartner (March 2014)
The picture is less optimistic among those federal and national governments that remain under intense pressure to cut programs and services, including defense. Throughout 2013, rapid shifts in IT management, spend and sourcing took place most acutely at these levels of government, driven, in part, by mandated moves to low-cost, commercial alternatives (see "The Nexus of Forces Is Bringing Disruption and Opportunities to Government IT").

Overall, government CIOs estimate that at least 33% of IT expenditures are now being made by the business units, and outside the authority of the IT organization. This indicates a need for government CIOs to quickly and clearly differentiate their high-value IT solutions and products portfolio from the commoditized IT services traditionally associated with in-house IT organizations.

Regardless of how much IT spending happens outside of the IT organization, CIOs must address the presence of shadow IT by affirming their position as the designated and recognized point of IT management responsibility. This doesn't mean CIOs should attempt to restrict business-managed IT acquisitions and services. However, accountability for the information assets of a government agency cannot be distributed, and governance will ensure a corporate officer, the CIO, is at the table whenever or wherever an IT investment is being considered. To maintain organizational relevance in today's digital industrial economy, CIOs need to work in collaboration with executive peers to strike the optimal balance of grow and transform (innovation, agility) with running the business (integrity, effectiveness and efficiency).

Gartner observes that many government IT organizations have fewer resources with which to meet efficiencies and integrity expectations, and are cornered into delivering "business as usual" on "systems of record" type solutions. With this lesser organizational capacity, many government CIOs find it challenging to support, let alone lead, the organization to invest in "grow and transform" digital assets.
Figure 2. IT Budgets: Government vs. Global, 2013 to 2014

**Government**

- Average* IT budget change 2013 to 2014: -2.8%
- (At least) 33% of IT spend is outside the IT organization

**Global**

- Average* IT budget change 2013 to 2014: +0.2%
- (At least) 27% of IT spend is outside the IT organization

* Weighted by 2013 IT budget size

Numbers may not total 100% due to rounding.

Source: Gartner (March 2014)
Recommendations:

- Restructure your IT portfolio by differentiating high-value IT solutions and products from the commoditized IT services typically associated with in-house IT organizations.

- Increase innovation, flexibility and responsiveness in your organization by developing adaptive sourcing capabilities (see "Master Multisourcing Competencies Will Bolster Outsourcing Success").

Key Priorities

Global survey results, combined with case study interviews, revealed three key priorities, published in "Taming the Digital Dragon: The 2014 CIO Agenda":

- Developing digital leadership
- Renovating the core of IT
- Building bimodal capability

Developing Digital Leadership

Government organizations with chief digital officers (CDOs) stand at nearly 5% in 2014, lagging slightly behind that of the global result (see Figure 3). This is neither surprising nor unexpected. In the public sector, it is extremely difficult to make the business case and to obtain sustained funding for any new IT or business C-level position. Yet, in municipalities where the digital acumen of elected officials is high, and economic development is a top priority, there is a willingness to hire the digitally savvy talent needed to support initiatives such as Digital Brisbane or FastFwd in Philadelphia.

The exponential availability of government open data fuels a burgeoning marketplace of services and apps that exploit the unprecedented convergence of citizens, information, business and things.
Recommendations:

- Sustain this initial burst of innovation, while ensuring accountability for the management of government’s information assets, by establishing clear boundaries among the roles of CIO, CDO and chief technology officer (CTO), even when these duties are the responsibility of one person (see “Beyond the Government CIO: Chief Data or Digital Officers?”).

- Increase the digital leadership competency of government program executives by featuring the successes of digital innovation in similar business services, or by introducing technology showcases, “hackathons,” and reverse mentoring.

Renovating the Core of IT

Technology Focus

The future of digital government depends on its ability to use data analytics and mobile services to engage citizens, employees and the crowd with compelling and coordinated retail-grade user experiences (see "Use the 'Serious Crisis' of HealthCare.gov to Boost Digital Leadership in Government"). Ultimately, smart government will emerge from the pervasive digitalization of all government business processes and information. Government CIOs recognize the transformative nature of these three levers of innovation, ranking them as the first, second and ninth technology priorities among a list of 12 (see Figure 4).

While government CIOs are moving to take advantage of these emerging capabilities, a large amount of attention is also being directed at renovating the core of IT, so that government is
positioned to be "digital ready." A tension naturally arises between IT and the business when CIOs are primarily focused on infrastructure, security, architecture and modernization of enterprise IT applications (such as ERP), but are expected to increase innovation and responsiveness within an inflexible and brittle technology environment, as well.

A clear digital business strategy and effective governance are essential for government CIOs to successfully deliver recognized business value in the short term, while building IT capacity according to a long-term technology road map (see "Government Context: ‘Master the Six Essential Elements of a Digital Strategy’").

When compared to global survey results, it is clear that government CIOs have a strong focus on making sure government IT assets are "fit for purpose." However, capabilities such as collaboration and customer relationship management — in addition to mobile, business intelligence (BI)/analytics and digitalization — are crucial to succeed in an era of radical digital disruption. With so many resources now directed at renovating core technologies, governments are at risk of entering a long-term state of technological deficiency if they fail to attract, develop, retain and reward digitally savvy leadership.

**Figure 4. Technology Focus: Government vs. Global**

<table>
<thead>
<tr>
<th>Government</th>
<th>Global</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Infrastructure and Data Center</td>
<td>1 BI/Analytics</td>
</tr>
<tr>
<td>2 BI/Analytics</td>
<td>2 Infrastructure and Data Center</td>
</tr>
<tr>
<td>3 Mobile</td>
<td>3 Mobile</td>
</tr>
<tr>
<td>4 Cloud</td>
<td>4 ERP</td>
</tr>
<tr>
<td>5 ERP</td>
<td>5 Cloud</td>
</tr>
<tr>
<td>6 Security</td>
<td>6 Networking, Voice and Data Communications</td>
</tr>
<tr>
<td>7 Networking, Voice and Data Communications</td>
<td>7 Digitalization/Digital Marketing</td>
</tr>
<tr>
<td>8 Legacy Modernization</td>
<td>8 Security</td>
</tr>
<tr>
<td>9 Digitalization/Digital Marketing</td>
<td>9 Industry-Specific Applications</td>
</tr>
<tr>
<td>10 Industry-Specific Applications</td>
<td>10 Customer Relationship Management</td>
</tr>
<tr>
<td>11 Architecture</td>
<td>11 Legacy Modernization</td>
</tr>
<tr>
<td>12 Enterprise Applications</td>
<td>12 Collaboration</td>
</tr>
</tbody>
</table>

**Recommendations:**

- Provide meaningful professional development that supports career advancement opportunities, and advocate for government IT wage parity, as necessary, to narrow the talent gap between the public and private sectors.
Partner with startups, incubators, universities, crowdsourcing services, local small or midsize businesses (SMBs) and citizen development services to ensure continuous access to digital skills.

Attitudes Toward Public Cloud

Adoption of public cloud by government agencies is running 10% and three years behind that of the global view (see Figure 5). Heightened concerns among government agencies about security, privacy and requirements to keep data within a jurisdiction serve as a drag to public cloud adoption. While 50% of government CIOs are moving to the cloud to increase organizational agility, just 25% of respondents cite cost and financial considerations as main reasons for investing in public cloud services.

The survey results seem to indicate that government CIOs see public cloud offerings in SaaS, platform as a service (PaaS) and infrastructure as a service (IaaS) as a more agile and innovative way to address their IT service provision responsibilities. The implication is that government CIOs view cloud as a means to unshackle their organizations from maintaining costly legacy and on-premises solutions. Gartner predicts that by 2017, public cloud offerings will grow to account for more than 25% of government business services in domains other than national defense and security (see "Predicts 2014: Government CIOs Are Key to Moving the Digital Enterprise Forward").
Figure 5. Attitudes Toward Public Cloud: Government vs. Global

### Government

- **Main Reason**
  - 7% Other
  - 11% Financial Considerations
  - 9% Quality
  - 14% Cost
  - 9% Innovation
  - 50% Agility

- **Have made significant cloud investments**
  - 15%

- **Cloud Services**
  - SaaS: 73%
  - IaaS: 34%
  - PaaS: 50%
  - BPaaS: 7%

### Global

- **Main Reason**
  - 25% Other
  - 12% Quality
  - 10% Innovation
  - 13% Cost
  - 14% Agility

- **Have made significant cloud investments**
  - 25%

- **Cloud Services**
  - SaaS: 72%
  - IaaS: 47%
  - PaaS: 43%
  - BPaaS: 17%

Numbers may not total 100% due to rounding.

Source: Gartner (March 2014)
Recommendation:

- Deploy the public cloud as part of a hybrid enterprise infrastructure, application and service portfolio, in order to increase agility, innovation and efficiency.

Attitudes Toward Sourcing

A significant portion of respondents (63%) indicate they manage a "mixed model" of providers (see Figure 6). The survey respondents from government indicated a proportion of sourcing approaches consistent with the global view. With 76% of government CIOs reporting that they will change their technology and sourcing approach within the next three years, Gartner concludes that the need for the role of IT broker will significantly increase. At the same time, government CIOs are restructuring their IT portfolios to provide higher-value-added business services and technology capabilities, such as advanced analytics and business process management (BPM).

Competition from commercial IT service providers that can offer government program managers with fast "time to value" solutions at affordable prices are forcing CIOs to demonstrate they can deliver similar levels of performance and value (see "Three Sourcing Options for Government Shared Services"). Where this is not possible, government CIOs must either explain why paying a premium for subpar IT value is acceptable, or proactively take steps to act as the agency's designated broker for external IT services.
Figure 6. Attitudes Toward Sourcing, Current and Expected: Government vs. Global

76% will change their technology and sourcing approach in the next two to three years.

Numbers may not total 100% due to rounding.

Source: Gartner (March 2014)
**Recommendation:**

- Manage IT effectively in an increasingly diverse ecosystem of vendors and solutions by combining your specialized knowledge of government business practices and policies with your executive role, in order to promote architecture standardization, interoperability, robustness, agility and security.

**Building Bimodal Capability**

The percentage of respondents from government sector operating with bimodal approaches is pleasingly consistent with the global responses (see Figure 7). This suggests that many government agencies have found the need and means to move beyond a singular and traditional approach to delivering IT services (see Note 1).

Government CIOs are adjusting to the demands of — and pursuing the opportunities associated with — the Nexus of Forces (social, mobile, cloud, information and analytics) and the Internet of Things (integrating sensor networks, government information networks and technology in products and consumer devices, with enterprise IT). Notable examples include Australia’s [Centrelink and Medicare Express Plus](#) mobile apps, the U.K.’s [Jobcentre Plus app](#) for iPhone and Android and [MyLA311](#) mobile smartphone app, offered by the City of Los Angeles.

The digitalization of government will stretch the traditional capabilities of IT organizations. As the global economy enters its first truly "digital decade," enterprise IT in government will need to support disruptive new service delivery models that can scale up and down in Internet time to capture and react at the speed of digital civic moments (see Note 2 and "Three Fundamental Ways Strategy Is Changing in the First Digital Decade, and How CIOs Should Respond").

This implies government must operate at two modes to provide safe, reliable and integrated enterprise IT, while also being able to create those civic moments that define the use cases of digital government: conventional and "nonlinear."
Figure 7. Enterprises That Have Two Modes of IT: Government vs. Global

**Have Two Modes of IT**

<table>
<thead>
<tr>
<th>Global</th>
<th>45%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>45%</td>
</tr>
</tbody>
</table>

Source: Gartner (March 2014)

**Recommendations:**

- Build bimodal capability by establishing clear principles on what is required by conventional IT, and on what goes into nonlinear innovations. Default criteria would be: need for speed, need to innovate and need to address high levels of uncertainty.
- Design all components — structure, staffing, sourcing, governance, metrics and tools — to form a consistent nonlinear environment.
- Extend your role as an IT broker of nonlinear innovation by reaching out to a broad range of partners: startups, incubators, universities, crowdsourcing services, local SMBs and citizen development services.

**Recommendations**

Government CIOs and IT leaders should:

- Restructure your IT portfolio by differentiating high-value IT solutions and products from the commoditized IT services that typically associated with in-house IT organizations.
- Provide meaningful professional development programs that support career advancement opportunities and advocate for government IT wage parity, as necessary.
- Ensure continuous access to needed digital skills by partnering with startups, incubators, universities, crowdsourcing services, local SMBs and citizen development services.
- Work with business executives to produce an enterprise digital strategy on which to develop an IT strategic plan and road map capable of delivering immediate and sustained business value.
Continue to increase agility, innovation and efficiency, by using public cloud as part of a hybrid enterprise infrastructure, application and service portfolio.

Combine your unique knowledge of government programs with the role of IT broker to promote architecture standardization, interoperability, robustness, agility and security, and the integration of nonlinear innovation into the fabric of internal IT competency.

Gartner Recommended Reading

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

"Government CIO Agenda 2013: 'Do Better With the Same'"

"The Nexus of Forces Is Bringing Disruption and Opportunities to Government IT"

"Master Multisourcing Competencies Will Bolster Outsourcing Success"

"Taming the Digital Dragon: The 2014 CIO Agenda"

"Beyond the Government CIO: Chief Data or Digital Officers?"

"Use the 'Serious Crisis' of HealthCare.gov to Boost Digital Leadership in Government"

"Government Context: 'Master the Six Essential Elements of a Digital Strategy'"

"Predicts 2014: Government CIOs Are Key to Moving the Digital Enterprise Forward"

"Three Sourcing Options for Government Shared Services"

"Three Fundamental Ways Strategy Is Changing in the First Digital Decade, and How CIOs Should Respond"

Note 1 Building Bimodal Capability to Support Digital Government

Government CIOs can meet business expectations to provide safe, reliable and integrated enterprise IT, while also being able to create instantaneous "digital civic moments" by experimenting with, and capturing value from, new technologies, and societal and industrial trends, at digital speed. To manage run-the-business IT, and grow-and-change-the-business IT, government IT organizations must operate in two modes: conventional service delivery and "nonlinear" innovation. This bimodal capability encompasses and surpasses the responsiveness of agile software development. It includes creating separate multidisciplinary digital innovation teams, working with small businesses and startups, and adapting governance and metrics for a lightweight, second-stream capability. Bimodal capacity also depends on overhauling IT procurement regulatory constraints, and on streamlining procurement practices.
Note 2 Digital Government Moves at the Speed of Digital Civic Moments

Digital civic moments are transient opportunities that come as quickly as they go, and are exploited dynamically to deliver personalized, context-aware citizen services or heightened situational awareness. The digital civic moment is mutable, according to the government domain, program or service use case. Digital civic moments depend on the nexus of mobile, social, cloud and information (data analytics) technologies — supplemented by the Internet of Things, where applicable. For example, the loss of employment immediately triggers a data-driven response that activates the cross-boundary coordination of multiple government, nonprofit and commercial business services. The singular outcome associated with this digital civic moment is the reduction of lost income through the swift return to a suitable job.

More on This Topic

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

- The 2014 CIO Agenda: Global Perspectives
GARTNER HEADQUARTERS

Corporate Headquarters
56 Top Gallant Road
Stamford, CT 06902-7700
USA
+1 203 964 0096

Regional Headquarters
AUSTRALIA
BRAZIL
JAPAN
UNITED KINGDOM

For a complete list of worldwide locations, visit http://www.gartner.com/technology/about.jsp

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