The Forces of Change: States and the Cloud

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About NASCIO

- National association representing state chief information officers and information technology executives from the states, territories and D.C.

- Founded in 1969

- NASCIO's mission is to foster government excellence through quality business practices, information management, and technology policy.
Fiscal recovery and IT budgets: CIOs still seeking IT operational cost savings, consolidation, innovations

Cybersecurity threats! New risks, governance is hard, funding inadequate

Transition: systems-centric to technology as a service; cloud services

Alternative sourcing options, lean and agile

Continuing IT workforce retirements, skills gap, recruiting challenges, talent management

Focus on SMAC stack: social, mobile, analytics, cloud
# Top Ten: State CIO Priorities for 2015

1. Security
2. Cloud Services
3. Consolidation/Optimization
4. Broadband/Wireless Connectivity
5. Budget and Cost Control
6. Human Resources/Talent Management
7. Strategic IT Planning
8. Mobile Services/Mobility/Enterprise Mobility
9. Disaster Recovery/Business Continuity
10. Customer Relationship Management

Source: NASCIO State CIO Ballot, November 2014
The Forces of Change
## Charting the Course: Business Models and Sourcing are Changing

What business models and sourcing strategies does your state CIO organization currently use?  

<table>
<thead>
<tr>
<th>What business models and sourcing strategies does your state CIO organization currently use?</th>
<th>2014</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owns and operates all state IT assets and operations</td>
<td>37%</td>
<td>29%</td>
</tr>
<tr>
<td>Owns and operates multiple data centers</td>
<td>58%</td>
<td>65%</td>
</tr>
<tr>
<td>Owns and operates a consolidated data center</td>
<td>65%</td>
<td>57%</td>
</tr>
<tr>
<td>Outsources some of its IT infrastructure operations</td>
<td>46%</td>
<td>51%</td>
</tr>
<tr>
<td>Outsources some of its IT application and services</td>
<td>81%</td>
<td>69%</td>
</tr>
<tr>
<td>Uses a managed services model for some or all IT operations</td>
<td>60%</td>
<td>65%</td>
</tr>
<tr>
<td>Uses an IT shared services model for some or all IT operations</td>
<td>70%</td>
<td>73%</td>
</tr>
</tbody>
</table>

Source: Charting the Course, 2014 State CIO Survey
Service Delivery in the Next Three Years?

How does your state CIO organization plan to deliver or obtain IT services over the next three years?

- Maintain the status quo
- Build new data centers
- Downsize state-owned-and-operated data center(s)
- Introduce outsourcing as a new service model
- Expand outsourcing
- Introduce a managed services model
- Expand existing managed services model
- Introduce an IT shared services model
- Expand existing IT shared services model
- Outsource business applications through a SaaS model
- Increase state IT staff

Source: Charting the Course, 2014 State CIO Survey
Forces of Change: Why Cloud?

- Cost savings and efficiency
- Flexibility and scalability
- Rapid provisioning
- Measured service
- Better data security
- Shift from capital spend to operating spend
- Reduced IT staffing and administration costs

This transition is disruptive to the traditional notions of state IT. It has serious implications for state budgeting, procurement, legal, audit, business processes, project and portfolio management.
# Adoption of Cloud Services

What is your state's status regarding cloud services?

<table>
<thead>
<tr>
<th>Status</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>The state is already highly invested in cloud services</td>
<td>6%</td>
<td>20%</td>
</tr>
<tr>
<td>The state has some applications in the cloud and is considering others</td>
<td>68%</td>
<td>73%</td>
</tr>
<tr>
<td>The state is still investigating cloud services</td>
<td>22%</td>
<td>6%</td>
</tr>
<tr>
<td>The state has considered cloud services but has rejected it</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>Other</td>
<td>2%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Source: 2013 and 2014 State CIO Survey
What categories of services have you migrated or do you plan to migrate to the Cloud? (select all that apply)

<table>
<thead>
<tr>
<th>Service</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-mail and collaboration</td>
<td>64%</td>
</tr>
<tr>
<td>Data Storage</td>
<td>48%</td>
</tr>
<tr>
<td>Geographic Information Systems</td>
<td>48%</td>
</tr>
<tr>
<td>Disaster recovery</td>
<td>44%</td>
</tr>
<tr>
<td>Program/business applications (e.g., licensing, unemployment insurance, workers' comp, etc.)</td>
<td>42%</td>
</tr>
<tr>
<td>Office productivity software (e.g., word processing)</td>
<td>37%</td>
</tr>
<tr>
<td>Digital archives/electronic records</td>
<td>31%</td>
</tr>
<tr>
<td>Citizen relationship management</td>
<td>25%</td>
</tr>
<tr>
<td>Open data</td>
<td>25%</td>
</tr>
<tr>
<td>Enterprise Resource Planning (ERP)</td>
<td>23%</td>
</tr>
<tr>
<td>Imaging</td>
<td>15%</td>
</tr>
<tr>
<td>Other</td>
<td>15%</td>
</tr>
</tbody>
</table>

Source: State CIO Survey NASCIO/TechAmerica/Grant Thornton
8. In the next 1-2 years do you plan to move any of your core systems to the cloud (State Government Only)

- 11% A. No, can’t get past security concerns
- 2% B. No, can’t get past the human resources implications
- 11% C. No, can’t get past procurement terms and conditions
- 37% D. Yes, assuming the budget and ROI get approved
- 39% E. Yes, no turning back now
Legal and Jurisdictional

- Lack of substantial legal precedence
- Anticipate what events can/will lead to litigation
- Where’s the data?
- Self-provisioning: risks/liabilities
- Whose laws apply?
- Access to E-records? E-discovery?
- What constitutes “reasonable effort” for security?
- Crafting multi-state collaboratives
What changes driven by technology create the most challenges to statewide policies in your state? (State CIOs)

17% A. Big Data
2% B. Internet of Things
17% C. Mobility
41% D. Public Cloud - XaaS
4% E. Private Cloud
11% F. Hybrid Cloud
7% G. Other