

# the ADAPTABLE STATE CIO





## 2016 State CIO Survey

### Introduction:

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### Panel:

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### Facilitator:

Doug Robinson, NASCIO



# Agenda

- Survey background
- Individual survey topics
- Observations

# Survey Background

## Partnership between:

- NASCIO
- Grant Thornton LLP
- CompTIA

## This is our 7th annual survey:

- 2016 – The Adaptable State CIO
- 2015 – The Value Equation
- 2014 – Charting the Course
- 2013 – The Enterprise Imperative
- 2012 – Advancing the C4 Agenda
- 2011 – A New C4 Agenda
- 2010 – Perspectives and Trends From State Government IT Leaders

# About the Survey





- State CIOs or equivalent from 50 states and territories participated
- Summer 2016, with questions made available online
- Individual interviews with 18 CIOs
- 43 multiple choice and open-ended questions
- Anonymity assured

# Survey Topics






- **Business Models, Sourcing and the CIO as Broker\***
- **Agile and Incremental Software Delivery\***
- Independent Verification and Validation
- Legacy System Modernization
- Implementation of Cloud-based Solutions
- **Data Management and Analytics\***
- **IT Workforce\***
- Consolidation
- **Procurement\***
- Cross-Jurisdictional Collaboration
- Mobility
- Cybersecurity
- Privacy and Data Protection
- Internet of Things

*\* survey topics discussed by the panel*

# Business Models, Sourcing and the CIO as Broker




What business models and sourcing strategies does your state CIO organization currently use?	2010	2015	2016
Owns and operates all state IT assets and operations	32%	30%	31%
Owns and operates multiple data centers	58%	53%	54%
Owns and operates a consolidated data center 	55%	64%	68%
Outsources some of its IT infrastructure operations 	58%	58%	69%
Outsources some of its IT applications and services 	42%	79%	79%
Uses a managed services model for some or all IT operations 	50%	55%	63%
Uses an IT shared services model for some or all IT operations	66%	83%	74%

# Business Models, Sourcing and the CIO as Broker




How does your state CIO organization plan to deliver or obtain IT services over the next three years?		2015	2016
Expand existing IT shared services model		62%	72%
Outsource business applications through a SaaS model		55%	66%
Expand existing managed services model		53%	61%
Downsize state-owned-and-operated data center(s)		49%	28%
Expand outsourcing		43%	45%
Introduce a managed services model		26%	17%
In-source some operations that currently are outsourced		17%	19%
Introduce outsourcing as a new service model		15%	17%






# Business Models, Sourcing and the CIO as Broker

Does your organization intend to move toward a managed services model?		2015	2016
Yes, we are expanding our existing IT services to include a hybrid managed services model		59%	55%
Yes, we are contemplating moving in this direction but are only in the planning stages		24%	10%
Yes, we are currently implementing a completely managed services model		7%	15%
Yes, we are contemplating moving toward a managed services model in the next year		7%	7%
No, we have no plans to adopt a managed services model		2%	15%

# Agile and Incremental Software Delivery

How would you characterize the use of Agile or incremental software development approaches within your state?		2015	2016
Limited use, uncoordinated		34%	19%
Pilot/trial adoption on certain projects		32%	39%
Widespread use, but not subject to centralized oversight or guidelines		21%	19%
Widespread use, subject to centralized oversight or guidelines		9%	15%
No use		2%	2%
Do not know/does not apply		2%	6%

To the extent that Agile or incremental software development approaches have been followed on projects in your state, how would you characterize their success?		2015	2016
Too early to tell – not enough information to-date		62%	56%
These approaches were superior in success to Waterfall software development		22%	31%
These approaches were comparable in success to Waterfall software development		13%	16%
These approaches did not work for our state		2%	8%

# Agile and Incremental Software Delivery

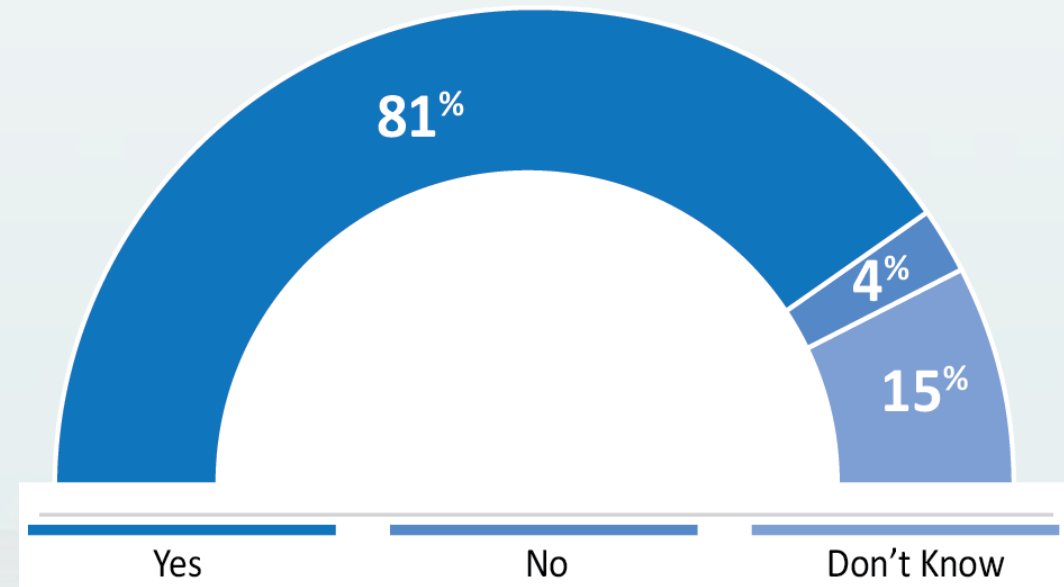
Where you have employed Agile or incremental software development approaches on projects, what were the top three critical success factors?	2015	2016
Picking the right type of projects on which to employ Agile	78%	79%
Customer involvement and commitment	NA	64%
Effective training of staff	70%	48%
Agile-specific project management methods and tools	68%	46%
Use of experienced Agile coaches	43%	34%
Use of supporting software tools to provide supporting data and metrics	14%	9%
Agile-specific procurement and contract management methods and tools	8%	9%

# Agile and Incremental Software Delivery

Has your state implemented the practice of DevOps to support the entire service life cycle?



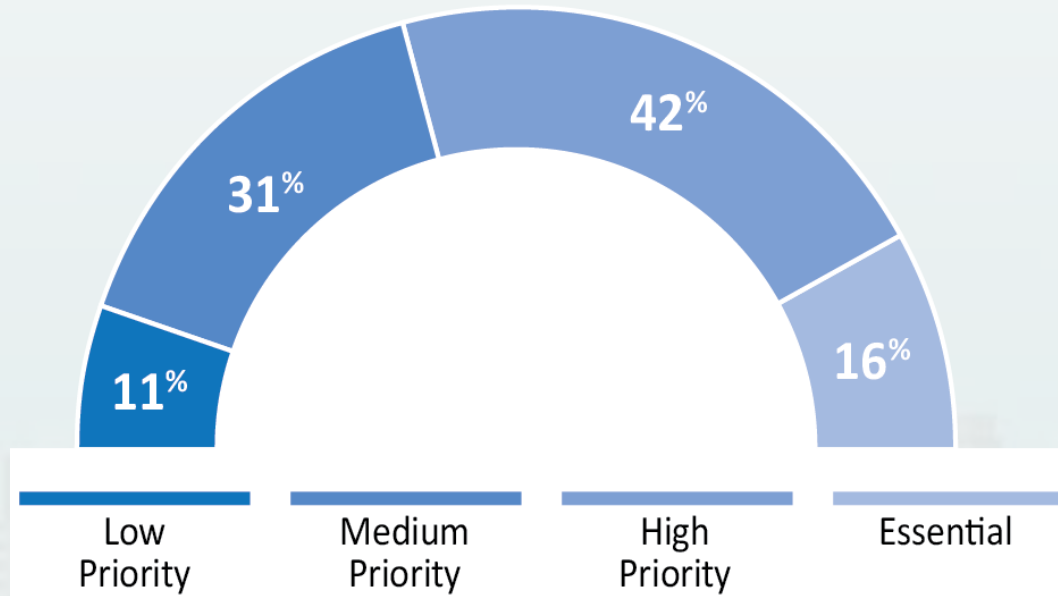
Do you anticipate increased use of agile or incremental software development approaches in your state within the next 12-24 months?



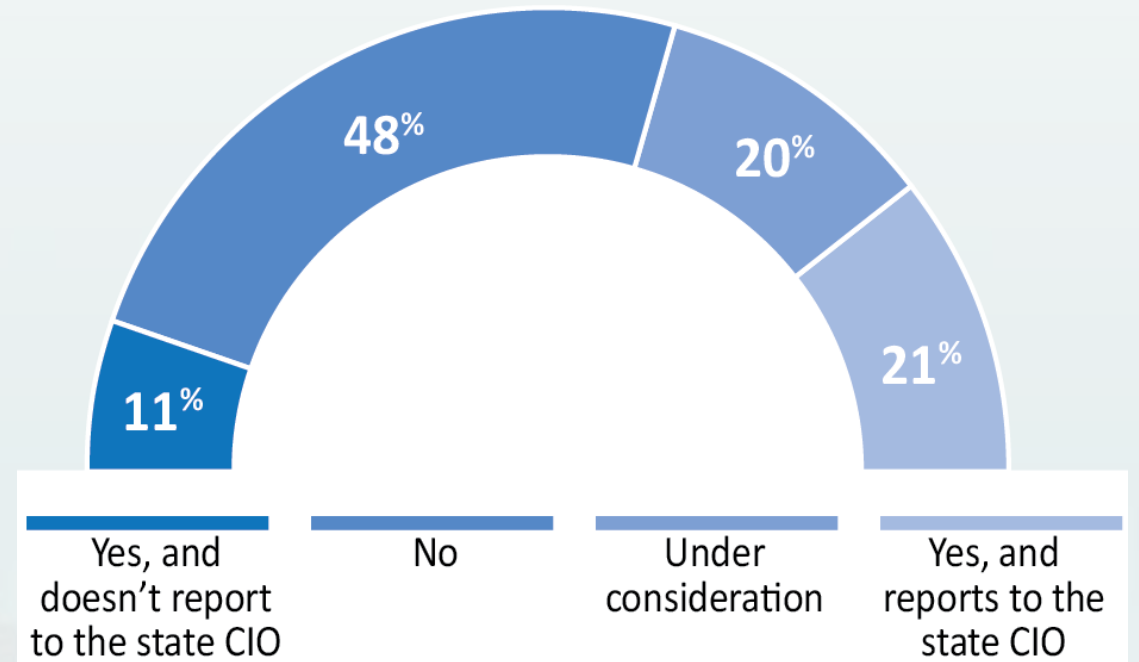


# Data Management and Analytics

Within the state CIO's strategic agenda and operational plans, how would you characterize data governance and management?



Does your state have a Chief Data Officer (or equivalent)?

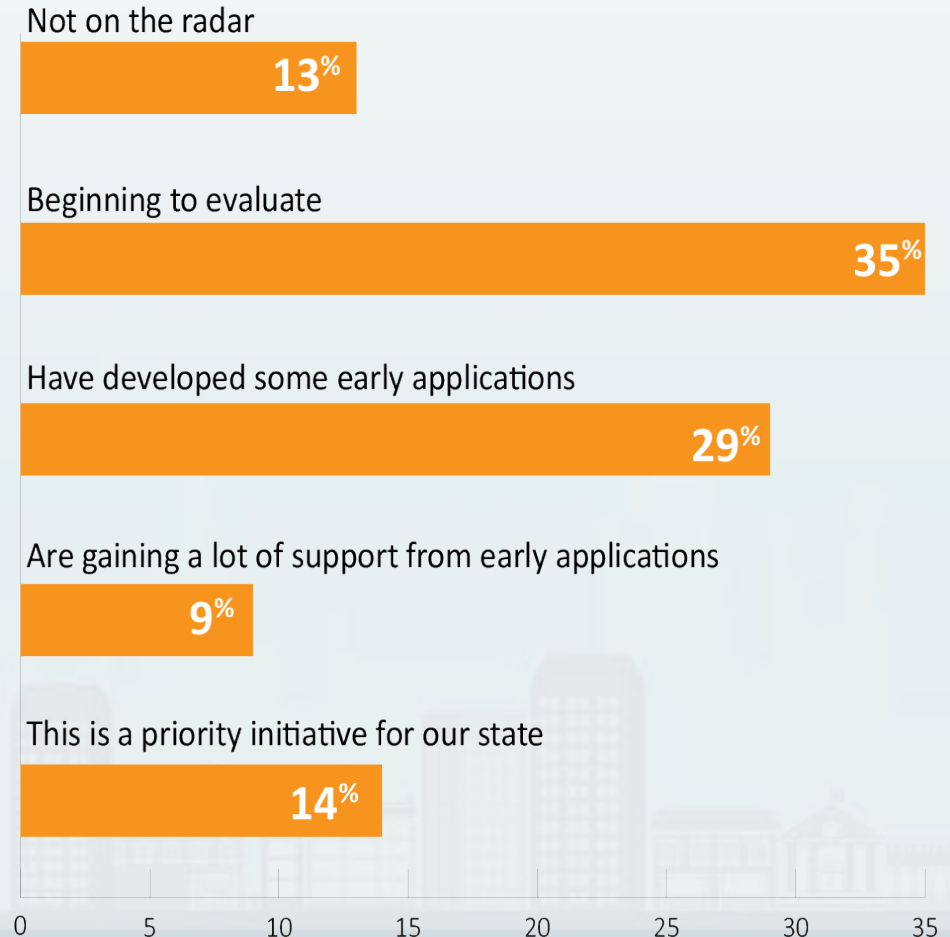


# Data Management and Analytics

Does your state have a statewide (or centralized) Master Person Index (“golden record”) initiative to facilitate sharing of core citizen records across agency boundaries?

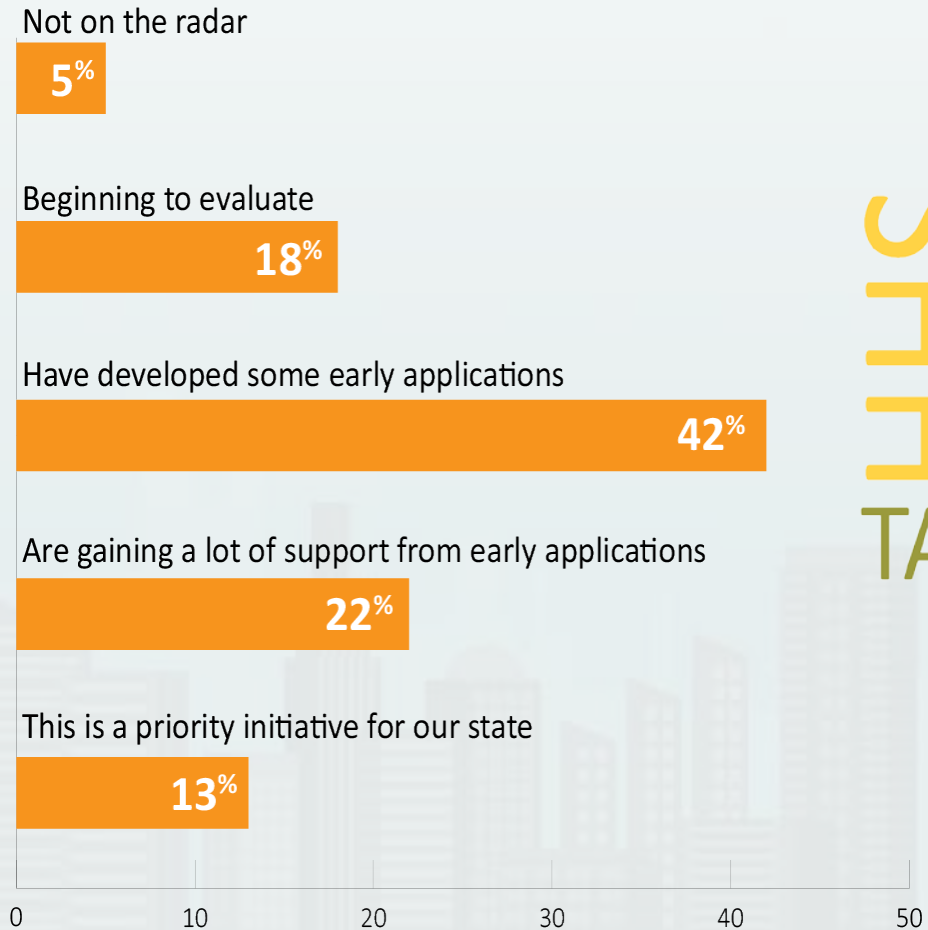


What is the status of any strategies regarding use of data analytics to leverage big data in order to develop business insights and inform policy decisions from the data?



# Data Management and Analytics

What is the status of any strategies regarding use of data analytics to combat fraud, waste, and abuse (FWA)?



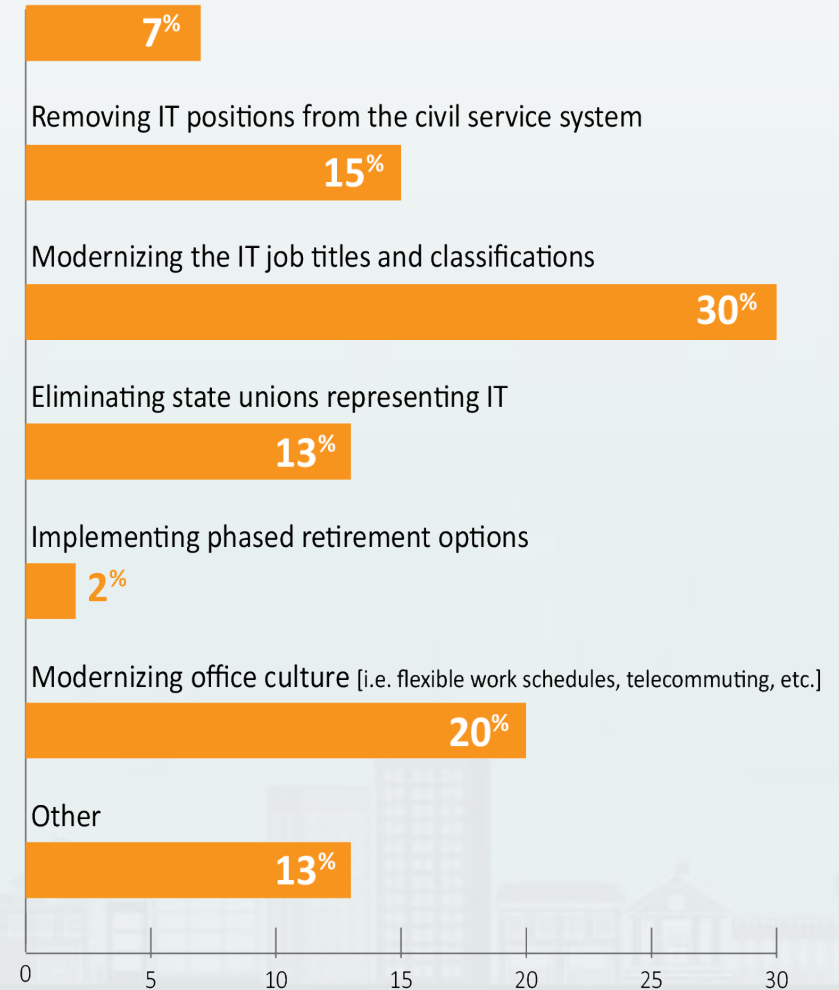


# IT Workforce

What innovative/out-of-the-box strategies and tactics has your state used in attracting and retaining a highly qualified IT workforce?	
Promoting non-salary benefits like greater stability and diversity of experience	<b>75%</b>
Call to public service	<b>64%</b>
Public/private internships	<b>39%</b>
Sponsoring community awareness events (i.e. hackathons, robot build events, speaking at STEM schools)	<b>35%</b>
Building "talent networks"	<b>31%</b>
Emphasizing location (i.e. working in state capital)	<b>29%</b>

## What single personnel reform could be implemented that would be the most impactful in reforming your state IT workforce?

Streamlining the hiring process and reducing time to hire



# the ADAPTABLE STATE CIO

## Questions?

