



Department of Innovation and Technology

April 2016

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State of the State's Technology

State of the State's Technology

42 years' of
technical debt

Vulnerable
Security Position

Out of balance
Cost Structure

Illinois is ranked "C"
as a Digital State

1974 - 2016



A = 8

B = 30

C = 12

These challenges have caused lost opportunities for our customers to benefit from the power of their government...

Ease of doing business in
and with the State

Seamless engagement
Customer <> Government

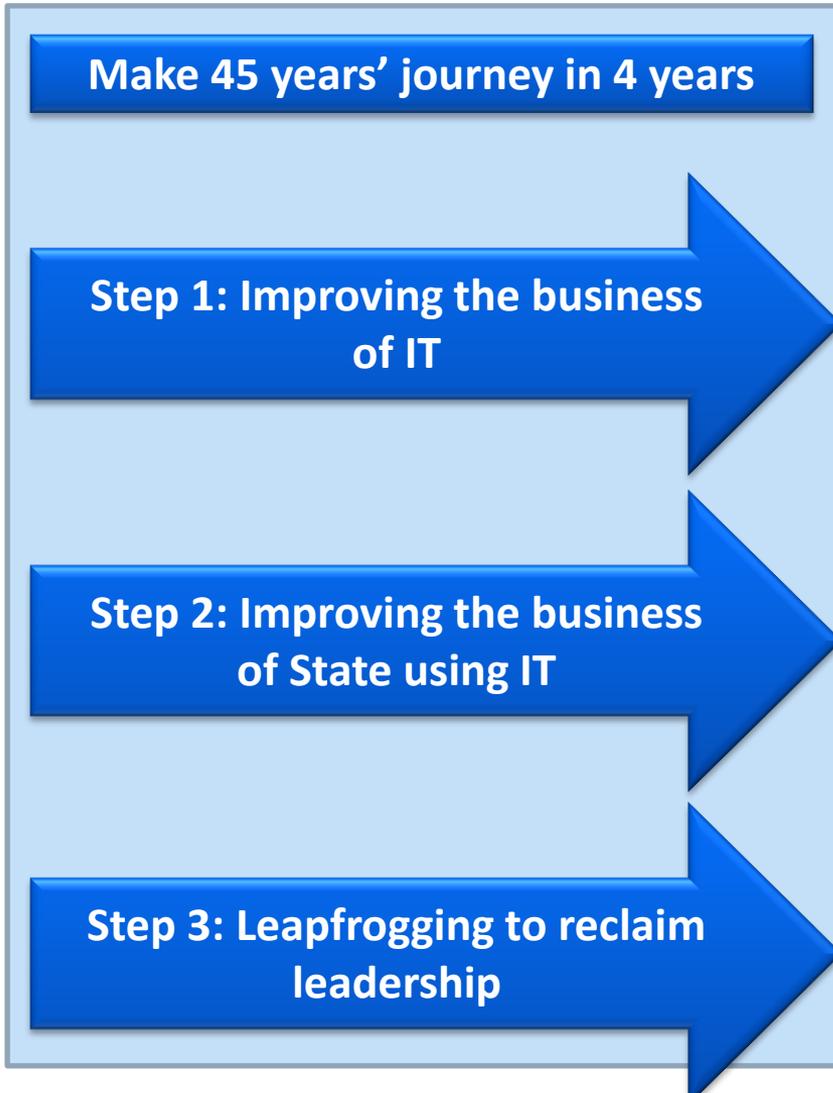
Improve workforce
productivity

Unleash value of data

Secure personal
information

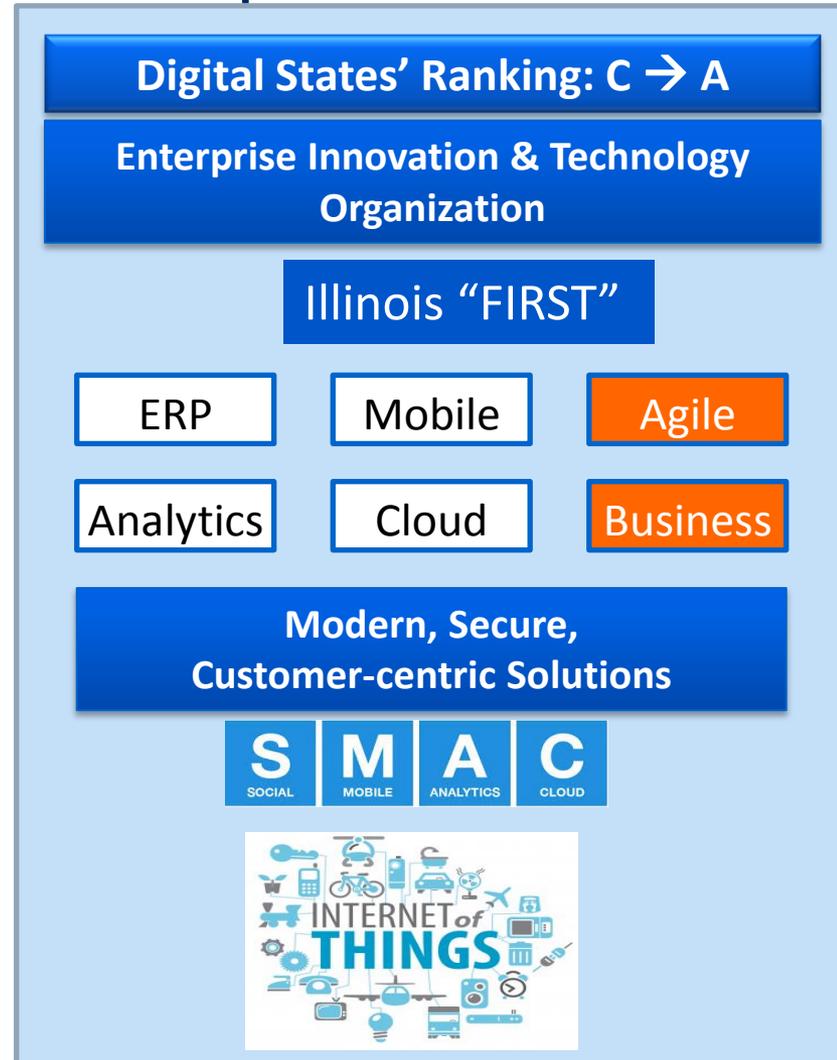
Illinois "FIRST"

Strategy Execution



Internal and External Collaboration

Expected Future State



DoIT Vision Statement



***Empower Illinois
through high-value,
Customer-centric
technology.***



Illinois “FIRST” Strategy

Illinois <i>FIRST</i>	Theme	Result
1. One Team	Illinois “FIRST” mindset	One state, one budget, one high performing IT team
2. Service Delivery	Cost effective, trusted and timely services delivered to customers	Improved service delivery, higher customer satisfaction
3. Agency Innovation	Collaborative shared innovation across the entire state	Agencies drive innovation
4. Smarter Illinois	Smarter Illinois Focus	Security, Mobility, Analytics, Cloud, ERP with roughly right, agile, Internet of Things execution
5. Enterprise Platform	Common enterprise platform for computing (back-office/factory)	Cost efficiency and reduced risk
6. EPMO	Enterprise Program Management Office	Consolidated return on investment (ROI) focused budget, agency driven priorities and improved accountability

Illinois “FIRST” Based on 5 Strategic Actions

Vision:

build an efficient, effective, nimble professional technology organization to empower a more efficient, accessible and competitive Illinois.



The Illinois “FIRST” strategy is based on operating as a preferred one stop, one entity and one voice across the state for Information Technology. Focused on “*SMART Citizen*” enablement we must collectively improve services and experiences of all citizens, businesses, visitors and “everything” in, around and across the state.

Customer “FIRST”

Security “FIRST”

Collaboration “FIRST”

Service “FIRST”

Analytics “FIRST”

- Common Back office systems based on SAP

ERP



- Anytime, anywhere, anyone, anydevice

Mobile



- Easy to use, easy to access, mobile enabled

*.GOV



- Scale and Speed to enable

Cloud



- New solution speed – Way of living...way of delivering

Agile



- “Big-Data” visualization to predictive analytics

Analytics



Turn technology's focus outside-in

Customer"FIRST"



1. ERP implementation (ERPFIRST)
2. eProcurement solution
3. Complete applications rationalization and publish future state
4. MobileFIRST app pilots with EPA, DCFS, VA, Mobile Payments and *Illinois.gov
5. Collaboration tool upgrades including Office 365 Pilot, SharePoint expansion, video and web conferencing

Strengthen Cyber Security to mitigate risk

Security"FIRST"



1. Securing personal identifying information in state systems
2. Campaign to involve the Governor's Cabinet in cybersecurity oversight
3. Cybersecurity awareness training for all state employees
4. Implement advanced threat detection technology
5. Statewide adoption of the NIST Cybersecurity Framework

Transform and streamline statewide IT operations
Service"FIRST"



1. CloudFIRST strategy / implementation
2. Centrex to VoIP migration including ICN build-out and expansion
3. Establish enterprise architecture and publish future state
4. Expand data center virtualization and establish disaster recovery (DR) offering for state
5. Implement LEAN Service Delivery Management Improvements

Collaborate and Govern to become a world class technology shop (C+ to A)
Collaboration "FIRST"

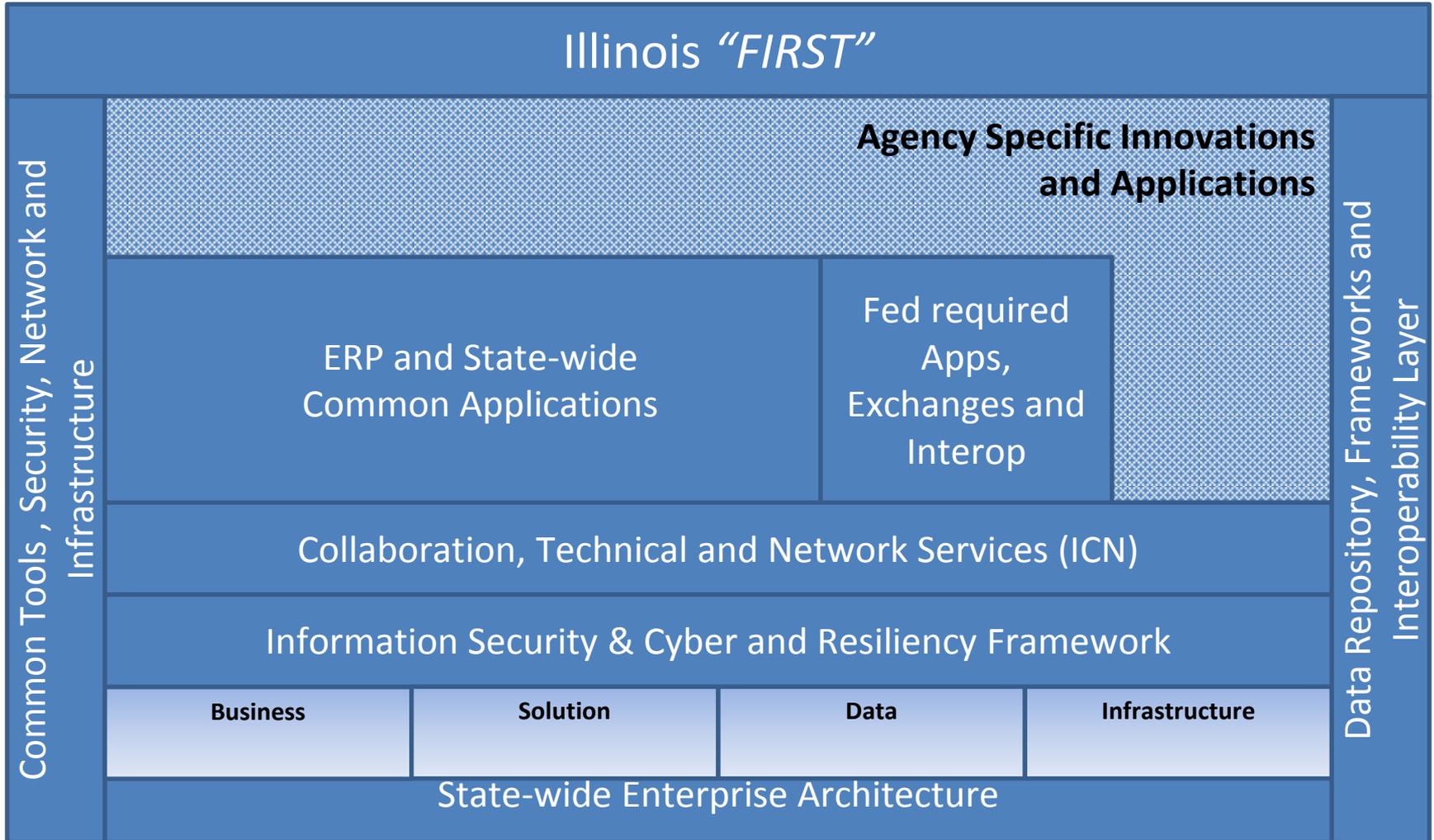


1. IT Transformation project including talent management strategy
2. CIO Council working groups - cross state collaboration
3. Establish high-functioning office of the CIO to lead IT across state
4. Implement enterprise program management and governance process
5. Vendor management - multi-step RFP award for IT solutions providers

Build vertical business systems with horizontal data interoperability
Analytics"FIRST"



1. Health and Human services transformation though data interoperability and analytics
2. Unify business tax service systems
3. Build statewide license management system
4. Build statewide case management system
5. Create statewide public safety and education data sharing framework





To deliver best in class innovations and technologies to enable and empower citizens and business collaboration across the state

Strategy on a Page

- Cybersecurity

CYBERSECURITY WORKING GROUP STRATEGY ON A PAGE FOR 2015 – 2016

Vision Statement - A secure and resilient cybersecurity environment which facilitates and protects the business of the state of Illinois, reduces risk and protects privacy, while promoting innovation, economic growth and transparency.

State of Cybersecurity in 2015

Top Characteristics of the Initial State

- Lack of measurable outcomes as applicable to cyber security which display value to stakeholders.
- Inconsistent executive support regarding the prioritization of cyber security. Lack of specific authority and processes to direct resources to address critical security controls at state agencies. Competing priorities between security and business resources. Lack of wide understanding of the criticality of enterprise information security.
- Lack of a comprehensive security awareness program.
- Cybersecurity efforts and teams are decentralized and lack common standards and direction.
- Lack of uniformity on how security standards are applied. Lack of implementation of critical security controls and lack of consistent inventory practices for cyber-assets across state agencies.
- Inconsistent practices and expertise across entities in identifying that an attack or incident is taking place or has taken place.
- Cyber-risk information is not consistently shared across the state as an enterprise.
- Lack of a statewide cyber response plan as part of the Illinois Emergency Response Plan
- Absence of consistent risk management practices across state agencies. Security risks are either not known or not addressed.
- Lack of standardized cybersecurity policies across the state.
- Lack of sufficient cybersecurity expertise.

Key Initiatives

Cybersecurity awareness training for all state employees
 Campaign to involve the Governor’s Cabinet in cybersecurity oversight
 Cybersecurity Strategic Plan which identifies funding and staffing needs.
 Cybersecurity Governance and Authority structure for the state of Illinois
 Strategy for the adoption of a common cybersecurity framework
 Proactive threat detection training and technology sharing and innovation
 Cybersecurity information sharing initiative (builds on STIC, MS-ISAC, FBI)
 Cyber Disruption Strategy integrated into the State Emergency Operations Plan
 Risk Management framework guidelines, policies and training for all state agencies
 Model cybersecurity policies deployment across all state agencies
 Illinois Cybersecurity Workforce Development Plan

Top Underlying Beliefs and Assumptions

Efforts to improve cybersecurity must properly reflect the borderless, interconnected, and global nature of today's cyber environment.
 Efforts to improve cybersecurity must be based on risk management.
 Efforts to improve cybersecurity must focus on awareness.
 Cybersecurity efforts must be able to adapt rapidly to emerging threats, technologies, and business models.
 Efforts to improve cybersecurity must leverage public-private partnerships and build upon existing initiatives and resource commitments.
 Efforts to improve cybersecurity must more directly focus on bad actors and their threats.
 Sufficient funding and resources will be provided to further the overall strategy.
 All agencies will participate toward the success of the cybersecurity strategy.

State of Cybersecurity in 2016

Top Characteristics of the End State

- Illinois' cybersecurity strategies and programs are continually aligned with the business strategies of Illinois agencies, boards and commissions as well as the enterprise as whole.
- Cybersecurity programs and initiatives are developed based on a sound and consistent Risk Management Process across all state agencies.
- A culture of cyber-risk awareness at all levels of state government has been created and is continually enhanced.
- Illinois utilizes a common framework for cybersecurity across all state agencies.
- Illinois has developed and maintains a proactive approach to threat and attack detection and rapidly and effectively responds to mitigate the threats and reduce the impact to the state.
- Cybersecurity planning is prevalent during all phases of the solution development
- Emerging information security threats and vulnerabilities are appropriately shared across Illinois agencies, boards and commissions in a reliable and timely manner.
- Illinois' response to a significant cyber disruption is fully defined, exercised and effective. Cyber response is governed by the Cybersecurity Response Annex in the Illinois Emergency Operations Plan.
- Effective and consistent cybersecurity policies are in place across all state agencies.
- Illinois' cybersecurity workforce is well-trained and continually developed.

Statement of Risk - The lack of a comprehensive and consistent approach to cybersecurity strategy across the state poses an immediate threat to the State of Illinois and places the confidentiality, integrity and availability of critical information in jeopardy and poses risks to privacy assurances our citizens expect and deserve.

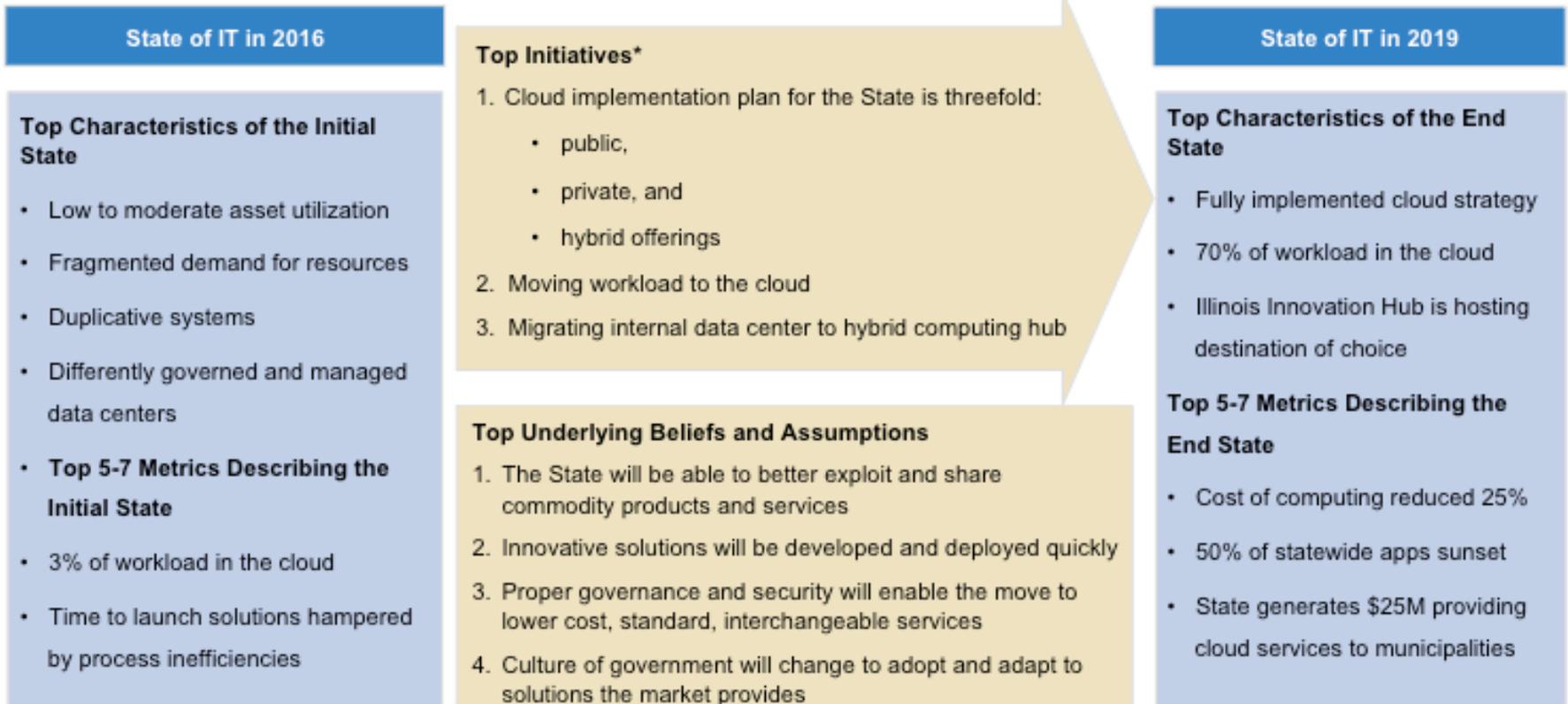
Strategy on a Page

- Cloud Services

Strategy on a Page – Cloud Services

WORK GROUP STRATEGY ON A PAGE FOR 2016 – 2019

Work Group Strategy and Value Proposition: To develop and implement a cloud computing strategy for the State of Illinois, which will improve performance, security and applicability of technology solutions while also being more cost effective.



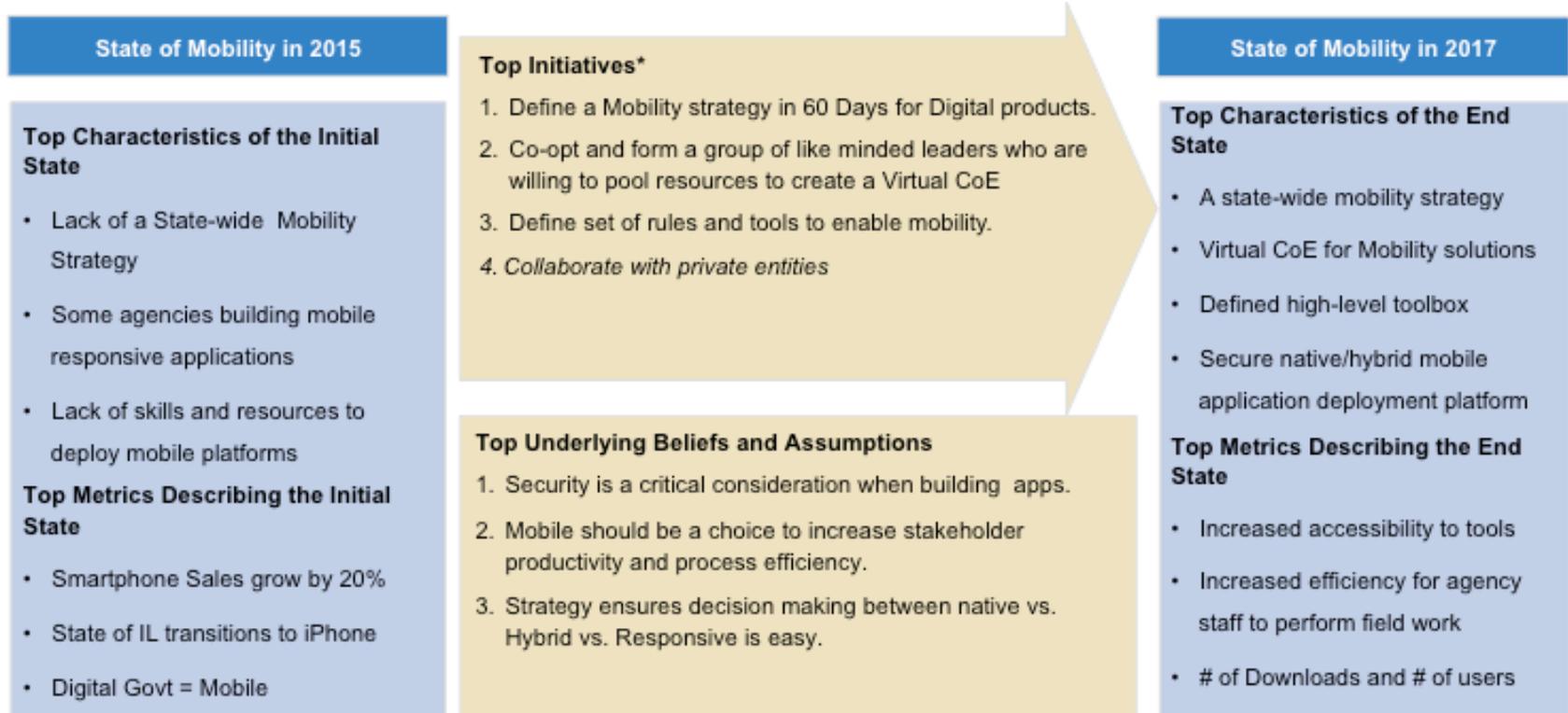
Statement of Risk: With cloud computing there are standard risks that must be mitigated through due diligence (e.g., data classification, segregation and recoverability), vendor management, information security, and business continuity planning.

Strategy on a Page

- Mobile

MOBILITY WORKING GROUP STRATEGY

Work Group Strategy and Value Proposition: Increase accessibility to digital tools and web properties using a state-wide mobility strategy.



Statement of Risk: Ability to create and execute a mobility strategy requires the availability of resources with appropriate skills and experience.

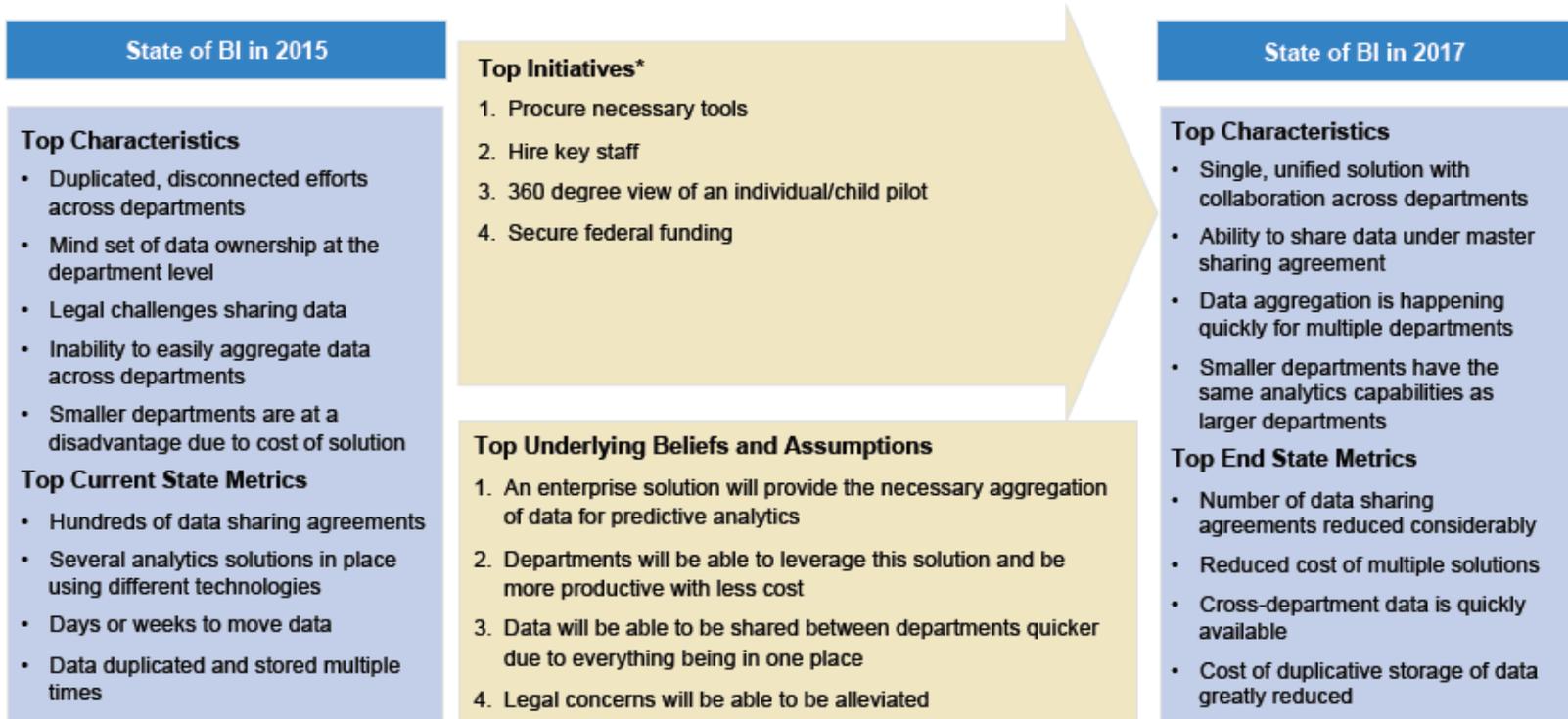
* Details in the business case per initiative

Strategy on a Page

- Analytics

DATA ANALYTICS, BUSINESS INTELLIGENCE AND DATA INTEGRITY WORK GROUP STRATEGY

Charter: Establishing a single, enterprise analytics solution that can be leveraged across agencies and aggregated for state-wide metrics, reporting, dash boarding and predictive analytics.



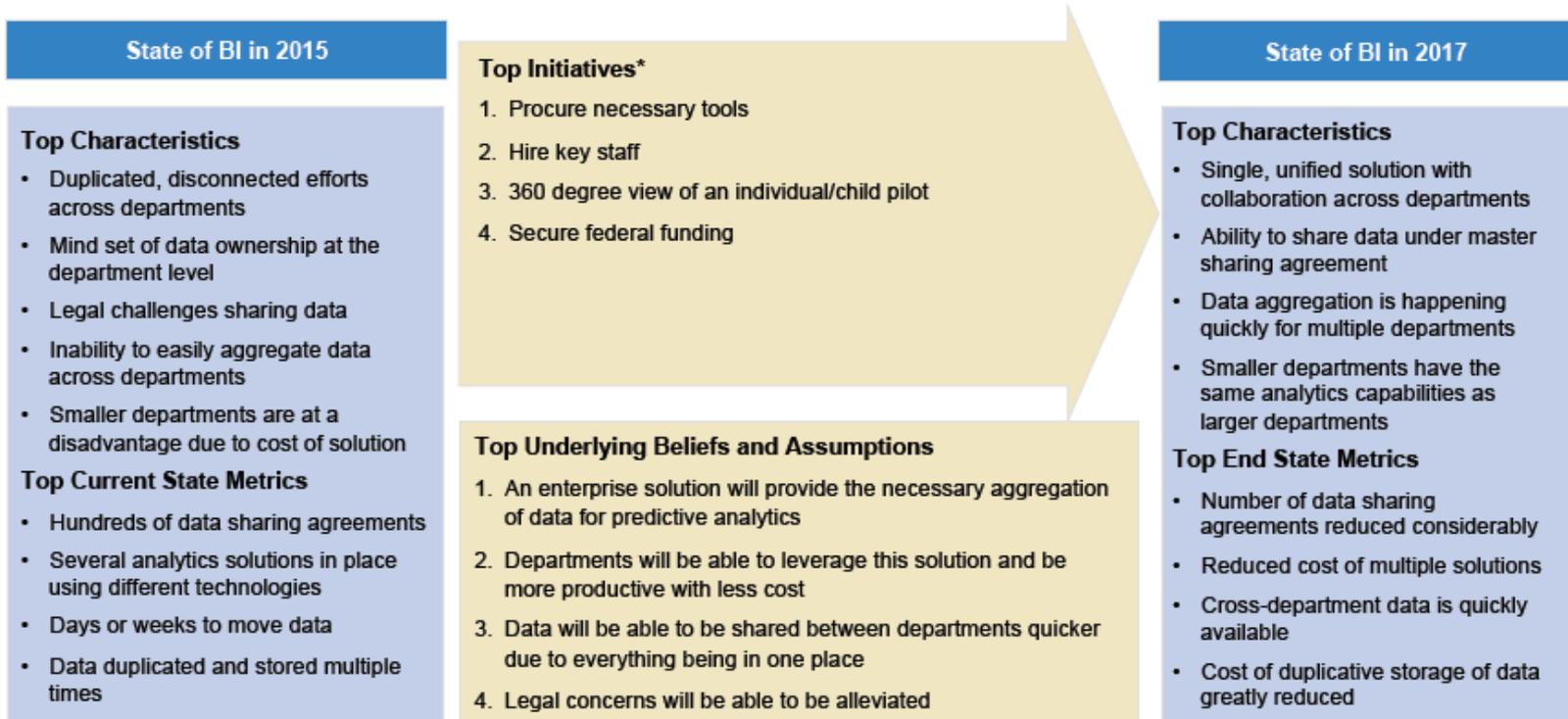
Statement of Risk: The current mind set of data ownership being at the department level and overall security concerns of the data and system not being managed by department staff will create challenges with adoption of a single, enterprise solution.

Strategy on a Page

- Business Intelligence

DATA ANALYTICS, BUSINESS INTELLIGENCE AND DATA INTEGRITY WORK GROUP STRATEGY

Charter: Establishing a single, enterprise analytics solution that can be leveraged across agencies and aggregated for state-wide metrics, reporting, dash boarding and predictive analytics.



Statement of Risk: The current mind set of data ownership being at the department level and overall security concerns of the data and system not being managed by department staff will create challenges with adoption of a single, enterprise solution.

Strategy on a Page

- Workflow Automation

WORK GROUP STRATEGY ON A PAGE FOR 2017 – 2017

Work Group Strategy and Value Proposition: Recommend strategies to make technology platforms available that will enable State agencies to more easily automate enterprise workflows.

Current State 2016	Top Initiatives*	Future State 2016 -17
<p>Top Characteristics of the Initial State</p> <ul style="list-style-type: none"> • Most State Agencies continue to rely on paper-based workflows to gather information, signatures, reviews and approvals. • Most workflows are manually intensive, lack standardization, data integrity, repeatability and lack efficiency. • Many data intake processes used by citizens and business for government services are not easy to navigate and use. <p>Top Metrics Describing the Initial State</p> <ul style="list-style-type: none"> • Number of transactions per unit of time • Number of staff required to complete transactions • Customer response time • Customer satisfaction • Cost of manual processes 	<p>Top Underlying Beliefs and Assumptions</p> <p>Automating workflows:</p> <ul style="list-style-type: none"> ➢ Lowers overall costs ➢ Improves data accuracy ➢ Eliminates duplicative data entry ➢ Increases worker efficiency and overall productivity 	<p>Top Characteristics of the End State:</p> <ul style="list-style-type: none"> • Availability of two to three cost-effective technology platforms for fast and efficient delivery of workflow automation initiatives. • Establishment of tools and mechanisms to assist agency business units to build effective business cases that include ROI calculations and metrics for workflow automation initiatives. <p>Top Metrics Describing the End State</p> <ul style="list-style-type: none"> • Reduced cost of employee salaries associated with previous manual based workflows • Reduced annual cost of paper • Reduced content creation, packaging, publishing • Customer satisfaction with reduced response and cycle times. • Customer and internal employee satisfaction with new automated processes

Statement of Risk: Process re-engineering of existing workflows must be done prior to workflow automation to gain the greatest efficiencies. Cost effective technologies and effective implementation and support mechanisms must be in place to speed the delivery of automation throughout the enterprise,.

* Details in the business case per initiative

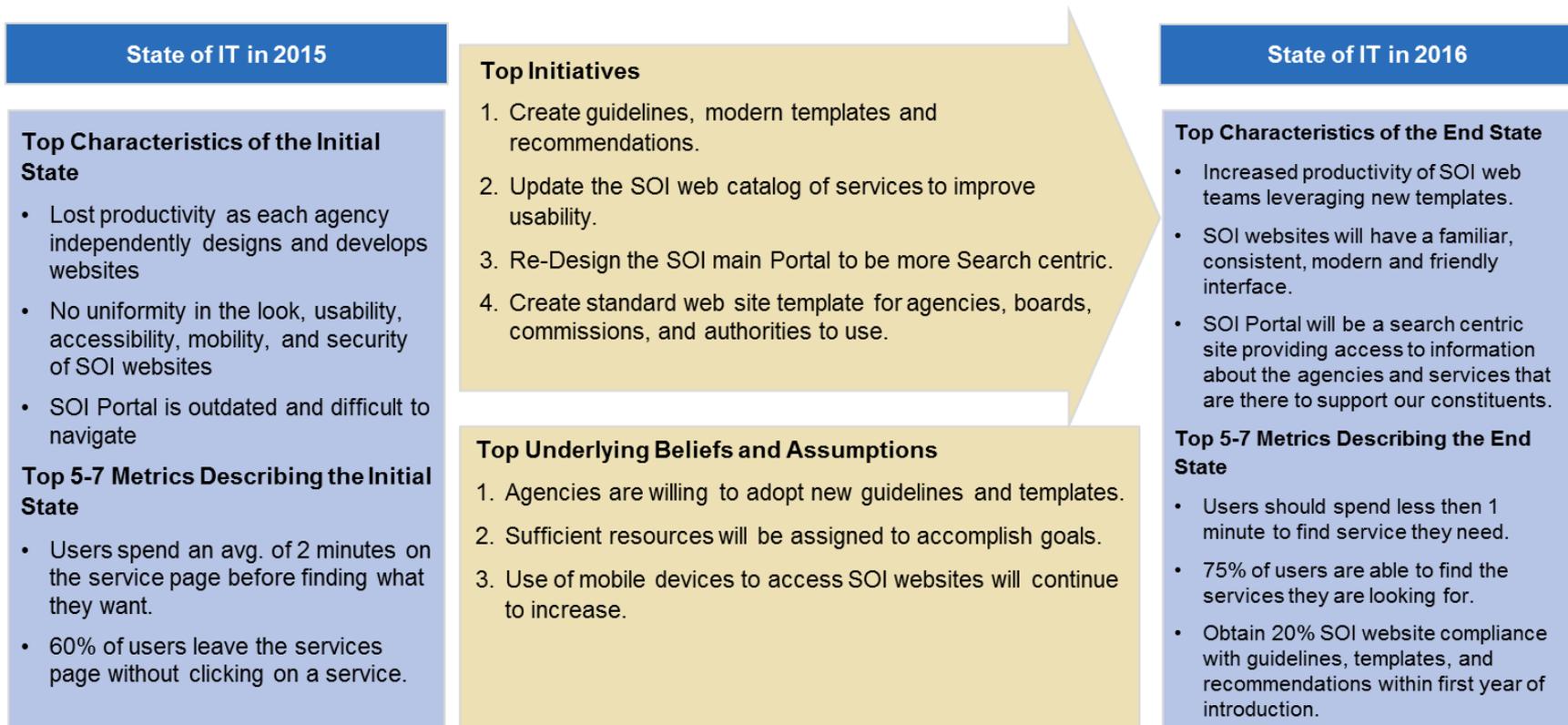
Strategy on a Page

- Website Technology

Strategy on a Page – Website(s)

WEBSITE WORK GROUP STRATEGY ON A PAGE FOR 2015 – 2016

Work Group Strategy and Value Proposition: To enhance the website experience of SOI constituents and other website users by improving efficiency and effectiveness through a familiar, consistent, and branded interface.



Statement of Risk: Availability of technical resources with sufficient skills.

Strategy on a Page

- GIS

GIS WORKING GROUP STRATEGY ON A PAGE FOR 2015 – 2016

Work Group Strategy and Value Proposition: to work collaboratively with agencies to identify and support statewide initiatives aimed at enhancing the use of geospatial data & technologies. Prime objectives of all work group initiatives will be to increase agency and public "location awareness" relative to State of Illinois services and activities.



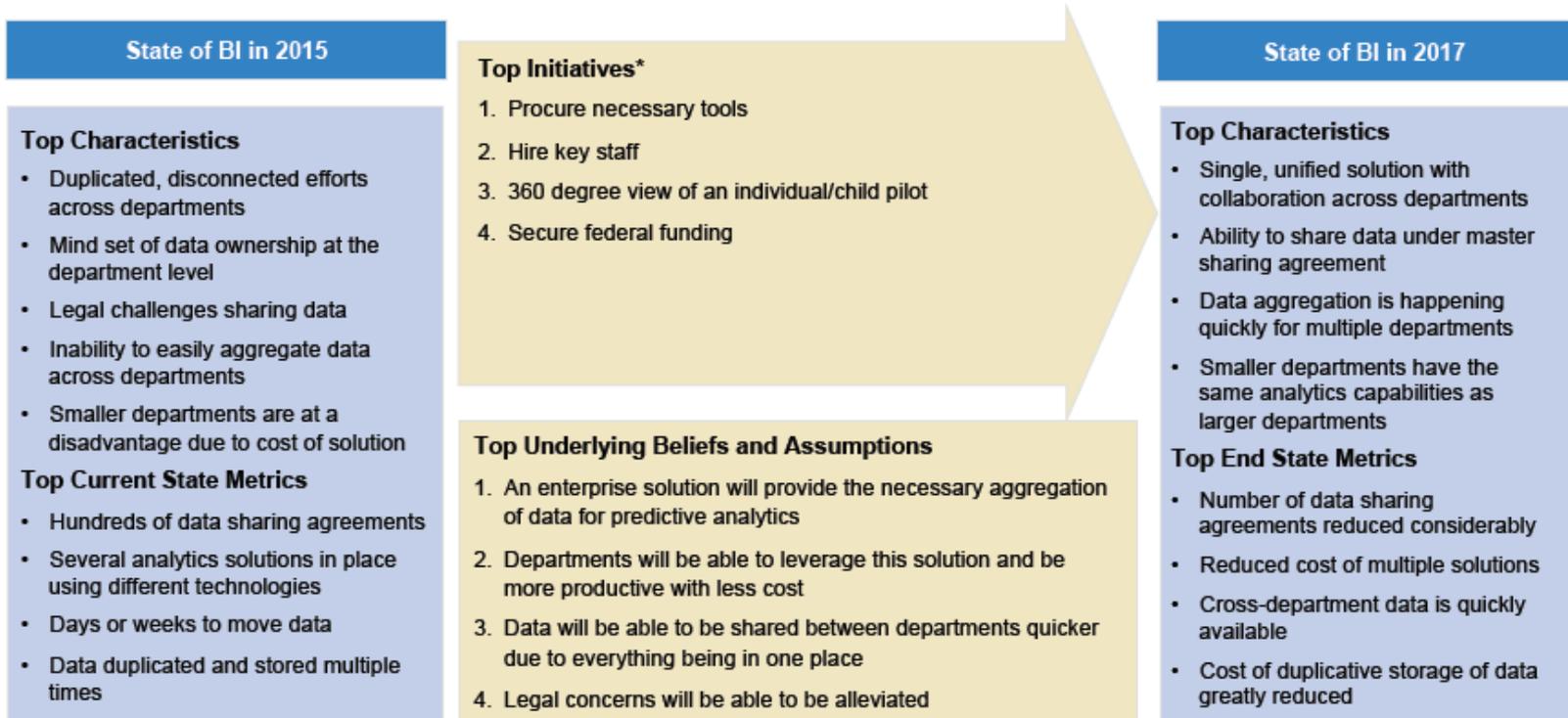
Statement of Risk: Resistance to Change at Organizational or Individual Level; inability to add spatial attributes alongside business data in legacy data stores.

Strategy on a Page

- Data Integrity

DATA ANALYTICS, BUSINESS INTELLIGENCE AND DATA INTEGRITY WORK GROUP STRATEGY

Charter: Establishing a single, enterprise analytics solution that can be leveraged across agencies and aggregated for state-wide metrics, reporting, dash boarding and predictive analytics.



Statement of Risk: The current mind set of data ownership being at the department level and overall security concerns of the data and system not being managed by department staff will create challenges with adoption of a single, enterprise solution.

Q&A





Thank you for your time