Defining the Future of IT in California

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Background

- The history of information technology in California is one of many successes and a few failures.
- Key accomplishments between 2003 and 2007:
  - Between 2003 and 2007, the state's technology ranking improved from 42nd to 16th.
  - In 2005, the state's website was ranked 47th in the nation, by 2007, the state's ranking had improved to 12th.

Background

- Successfully completed 90 IT projects, These projects provided services and benefits including:
  - Statewide food and cash benefits to more than one million households;
  - The collection of more than $790 million in revenue by FTB; and
  - Three departments implemented projects related to federal Medicare Part D eligibility for prescriptions and cost recovery.

Background

- Despite these accomplishments, further success was limited by:
  - A skeptical legislature.
  - The lack of a single point of expertise and responsibility for statewide IT program.
- In 2007, the Legislature passed SB 90, which provided a governance framework for future improvements.

The What and the Why?

- The Governor believes that California, as the birthplace of the information technology revolution, should have a state government that is also an IT leader.
- To accomplish the Governor's goals means improving how the state manages and implements necessary IT systems, so that we can more efficiently and effectively deliver services to California residents and businesses.

What we have done

SB 90 established the OCIO and provides a framework to enhance IT governance and project oversight.

Role of the CIO

- Advise the Governor on the strategic management and direction of the state's IT resources.
- Establish and enforce state IT strategic plans, policies, standards and enterprise architecture.

Key Actions to Date

- School Finders
- Education Data Project
- Broadband and digital literacy
- GIS
- The IT Capital Planning process implemented by OCIO will align IT investments with program goals and ensure all IT investments are consistent with state priorities, IT policy, etc.

What we have done

Role of the CIO

- Minimize overlap, redundancy and cost in state operations.
- Coordinate activities of AIOs and the Director of DTS.

Key Actions to Date

- Moving forward with server consolidation plan that will significantly reduce costs when implemented.
- Leading effort to consolidate state e-mail systems to enhance security, reduce costs and improve reliability.
- With DTS Director implemented spend management program at DTS.
- Significantly enhanced the state's web presence through coordination with AIOs, recognized by Brookings and the Center for Digital Govt.

What we have done

Role of the CIO

- Improve organizational maturity and capacity in the effective management of IT.
- Establishing performance management and ensuring IT services are efficient and effective.

Key Actions to Date

- Established Project/Risk Mgmt training program as a requirement for state IT PMs.
- Developing statewide workforce development & planning strategy focused on training, recruiting and retaining IT staff (01/09).
- Identified key metrics to assess performance of IT projects, which provides transparency into projects so OCIO can intervene when necessary.

Looking Forward . . .

- Establishing the OCIO (SB 90) has addressed many internal and external issues and improved the perception of the state's IT organization . . .
  - Examples:
    - Digital States Survey = 16th to 5th
    - Best of the Web = Not ranked to 3rd
    - Brookings = 12th to 4th
- . . . but, there are several key operational issues that require attention and action.

The Challenge of IT

“Any sufficiently advanced technology is indistinguishable from magic.”

Arthur C. Clarke

The Challenge of IT

- Major Challenges:
  - IT projects cost more than budget, take more time than scheduled and deliver less functionality than promised.
  - There are multiple systems within Agencies and across state government that perform the same functions.
  - Current practices and systems limit data sharing.
  - The ability for state agencies to restore critical IT systems after a disaster is insufficient .
  - State IT systems and assets are vulnerable to security threats.

- Bottom Line – We need to continue to improve our management of IT spending and delivery.

IT Landscape

- Top line view of IT organization:
  - 130 agency/department CIOs.
  - More than 10,000 IT employees (annual payroll/overhead in excess of $1.5 billion) and thousands of contract employees.
  - Operating expenditures of more than $3 billion annually.
  - More than 120 large IT projects under development with budgets exceeding $6.8 billion over 11 years.
  - More than 500 small to medium IT projects under development.

IT Landscape

- IT Workforce Maturity
  - More than 50% of the state's IT workforce will retire within the next five years, further exacerbating the skill gap in state IT.
  - Beyond the skill gap, leadership capacity is in short supply.
  - Need to make up for "deferred" spending on human capital by:
    - Investing in leadership training and skills development.
    - Conducting succession and workforce planning.
    - Modernizing the classification and testing process.
    - Recruiting and retaining skilled staff.

IT Landscape

- Data Centers and Servers
  - The state has approximately 409,000 sq. ft of floor space in 405 locations dedicated to data centers and server rooms.
  - Approximately 33% of data center floor space lacks sufficient disaster recovery and backup capability.
  - The state owns and operates more than 9,494 servers. More than a third of these servers are at, or near, end of life (3+ years old).
  - Data centers are a clear target for energy efficiency efforts.

IT Landscape

- IT at the Desktop
  - More than 200,000 desktops/laptops in use by Executive Branch agencies.
    - Refresh cycle – 3 to 5 years.
  - Current PCs in use require between 4 and 16 times as much electricity as laptops using advanced power management.
  - Six platforms and >100 different email systems.
    - **150,000 active email boxes.**
    - **15 million emails/day.**

California IT Landscape

- Key Security Issues
  - Web and e-mail security threats are increasingly sophisticated.
    - Explosion in e-mail spam – ~95% of the e-mail the state receives each day is spam.
    - Inter-departmental e-mails are sent through the public Internet exposing them and increasing risk.
  - According to Gartner, the state's network vulnerability is projected to increase by more than 800 percent by 2018 if we maintain the current operating model.

Next Steps

Accomplishing the Governor's IT Agenda

- Establish a cooperative partnership with Business and IT leaders.
- Develop the ability to provide statewide services in key areas, including:
  - Security and Disaster Recovery
  - GIS
  - E-mail
  - Enterprise Resource Planning Systems
  - Document Management

Benefits

- By adopting a shared services model for IT, the state can significantly *reduce* operating *costs* and *energy usage* while enhancing *security*, improving Continuity of Government, and *promoting* government *transparency*.

- Modernizing the existing IT infrastructure will ensure that the state is able to support the new applications and technologies necessary deliver robust online services to residents and businesses.