

Transforming Government..

Through Business and Information Technology (IT)/Information Resource Management (IRM)

US Department of Transportation Executive CIO Council May 14, 2012

Sanjeev "Sonny" Bhagowalia Chief Information Officer, State of Hawaii

CIO Provides IT/IRM Leadership

- Develop, implement, and manage IT/IRM governance
- Establish and enforce policies and standards
- Create architectural requirements
- Provide statewide IT/IRM investment oversight



Source: http://www.ndu.edu

Source: http://www.cio.gov

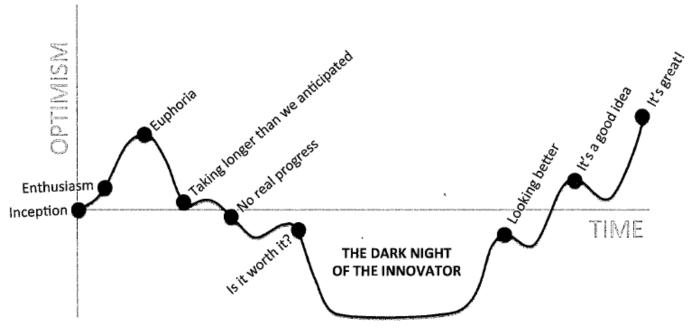


Transformation and Change isn't Easy

The Path of Innovation

Between the idea and the reality falls the shadow

- T.S. Eliot





Source: Jeff Mohr, HCF

Future World...In the Clouds?



"It was much nicer before people started storing all their personal information in the cloud."

Source: New Yorker Magazine



Change is Coming (Like it or Not...)

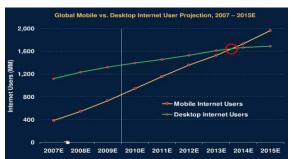


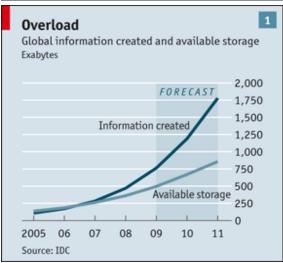
6 bold tech predictions: Fact or fantasy? FCW (December 8, 2010)

- 1. 20% of businesses will own no IT assets by 2012 (Gartner)
- 2. 75% of Stand-Alone IT Departments will disappear by 2015 (Corporate Executive Board)
- 3. One trillion devices will be connected to the Internet by 2013 (Cisco) Current = 35B
- 4. The government can save \$1 trillion in 10 years by harnessing certain proven technologies (Technology CEO Council)
- 5. 25% of personal computing devices sold will be tablets by 2015 (Forrester Research)
- 6. Data will grow by 800% in the next five years with 80% Unstructured Text/Media (Gartner)

Mobile will be bigger than desktop internet in 5 years -- Mary Meeker, Morgan Stanley, April

2010





Volume of digital information increases tenfold every five years & the data is replicated many times over!



<u>Context: Maximum sharing and flow</u> <u>of information and knowledge</u>



- YouTube is now second largest search engine in the world
- 1.5 million pieces of content shared daily on Facebook
- On-line newspaper readers are up 30%
- 250 million visitors each month to Myspace, YouTube, and Facebook (none were around 6 years ago)
- Mobile devices will be world's primary connection tool to the Internet in 2020

As big an issue outside your organization as within it



New Updates from Gartner - Access to Anything, Anywhere, Any Time

- 1) 30 billion pieces of content were added to Facebook this past month.
- 2) Worldwide IP Traffic will quadruple by 2015.
- 3) Over 107 trillion emails were sent this year (89% of which were spam).
- 4) Today's employees can access

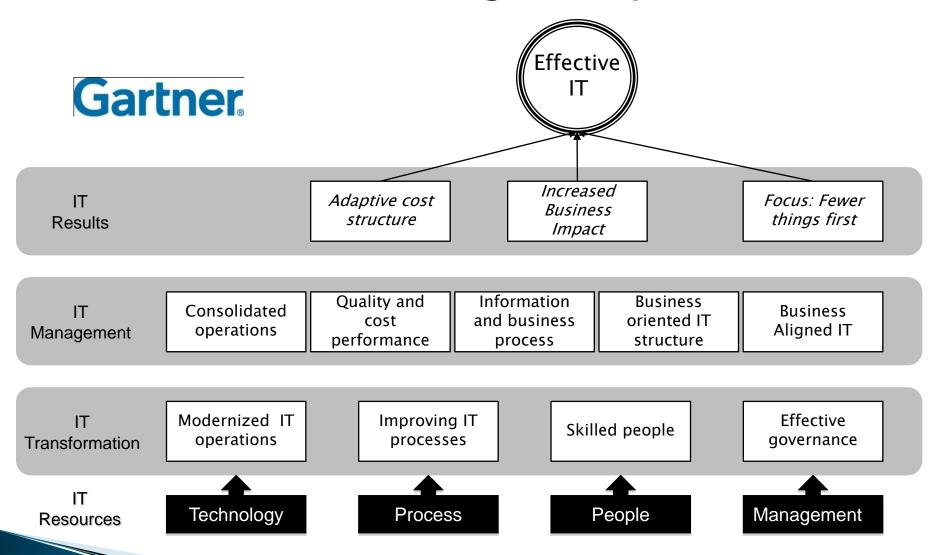


- Over 1 Billion Web pages (and growing)
- ▶ 350,000 iPhone and Over 100,000 Android Apps
- ▶ 10,500 Radio Stations, 5,500 magazines, 300+ TV Networks

Source: Top 10 Trends and How They Will Impact Data Centers and IT, David Cappuccio, Vice President, Chief of Research



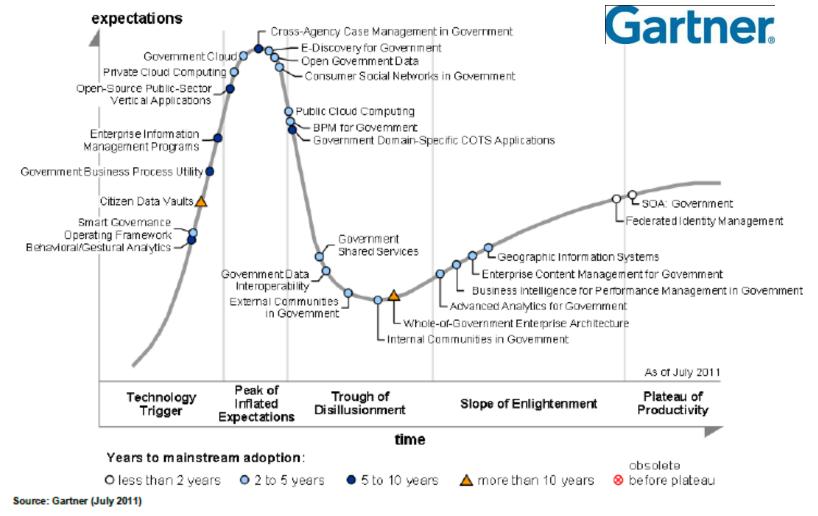
CIOs build effective IT/IRM through transforming resources and management practices





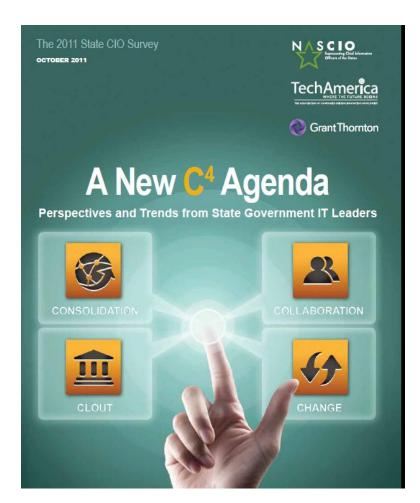
Hype Cycle for Government Transformation

Figure 1. Hype Cycle for Government Transformation, 2011





NASCIO 2011 Survey*



*http://www.nascio.org/publications/

39 Questions

- Roles & Governance
- Legislative Affairs & Advocacy
- Financial Management, Funding and Budget
- Collaboration
- Consolidation and Shared Services
- Cloud Computing
- Sourcing Strategies and IT Workforce
- Health Care
- Business Intelligence and Business Analysis
- Mobility

Conclusions

State CIOs are changing

- How they provide services
- The Source and diversity of their revenue streams
- Their relationship with the legislature
- How mobile devices and apps connect citizens to their government



NASCIO Conference (2011)

NASCIO Top Ten Strategy Priorities (2012)

- 1. Consolidation / Optimization
- 2. Budget and Cost Control
- 3. Governance
- 4. Health Care
- 5. Cloud Computing
- 6. Security
- 7. Broadband and Connectivity
- 8. Shared Services
- 9. Portal
- 10. Mobile Service/Mobility



NASCIO Top Ten Technology Priorities (2012)

- Virtualization
- Legacy application modernization/ renovation
- Cloud computing
- 4. Mobile workforce technologies
- 5. Networking
- 6. Enterprise Resource Management (ERP)
- 7. Identity and access management
- Business Intelligence (BI) and Business
 Analytics (BA) applications
- Document/Content/Records/E-mail management
- 10. Public Safety Radio Network

Source: http://www.nascio.org



It's not just about Technology....

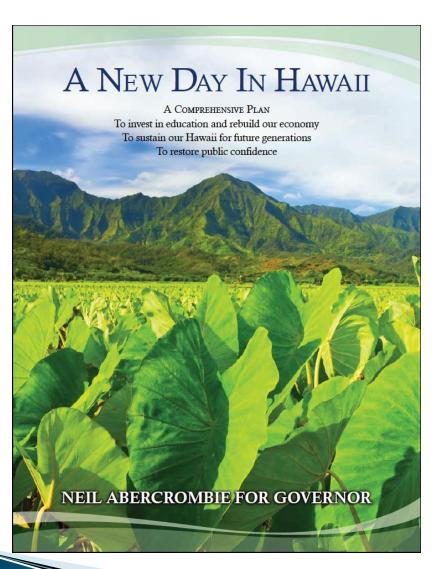




Source: "Real Value from the Cloud: Moving beyond personal productivity", Center for Digital Government, 2012



The New Day Vision



GROWING A SUSTAINABLE ECONOMY

- New Day Work Projects
- Renewable Energy
- Food Security
- Innovation Economy
- Improvements on Public Lands
- Environmental Stewardship
- Culture, Arts, Creative Industries

INVESTING IN PEOPLE

- Early Childhood
- Education and Workforce Development
- Healthcare Transformation
- Safety Net, Homelessness, Public Safety
- Housing

TRANSFORMING GOVERNMENT

- Information Technology
- Fiscal Management
- Operations Management
- Customer Service
- Civil Defense and Security



A Strategic Plan for the State of Hawai`i

A comprehensive Statewide Strategic Plan will...

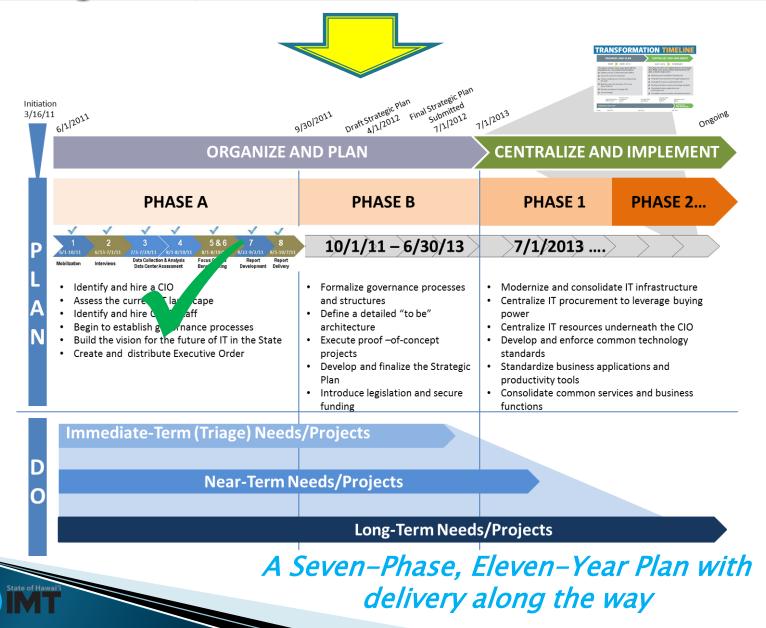
- Provide a unified view for all Departments and provide State employees at all levels with a clear line-of-sight from their daily activities to the Administration's strategic goals
- Provide the Legislature with the objective, quantitative information they need to appropriately fund needed investments
- Provide the citizens of Hawai`i with a vision for the future and an unobstructed view of the success of our programs
- Make resource prioritization decisions more fact-based and defensible
- Serve as a framework for the transformation of the State's business and IT/IRM enterprise
- Make Hawai'i a leader in aligning resources to outcomes, achieving better results with lower investment in the long term

With a Plan in place we will be in a better position to:

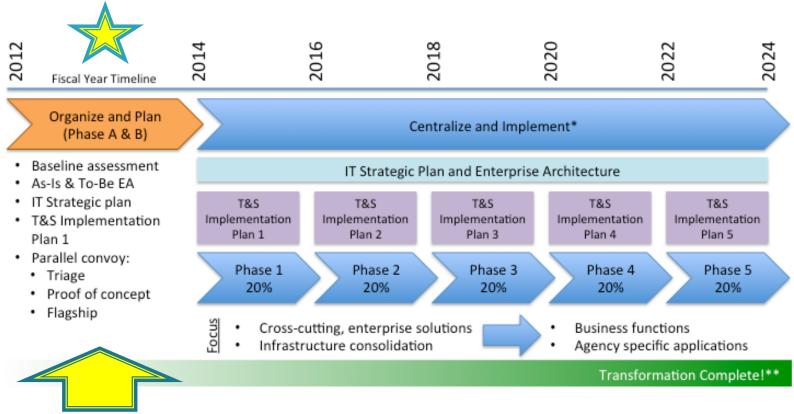
- o invest in education and rebuild our economy
- o sustain our Hawaii for future generations
- restore public confidence



An Integrated, Multi-Year Transformation Plan...



The Transformation Plan



*Successful implementation of Centralize and Implement Phases dependent on funding

**State will pursue continuous improvement and innovation during and after the transformation

A Seven-Phase, Eleven-Year Plan with delivery along the way



State of Hawaii Business Model

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~150 Services

20 Core LOBs

14 Support LOBS ~50 Services

Core State Services (Services for Citizens) Falles, Cardinals and Consolid. Extent and Research Falley Credition and Falls Development Budget Planning Fragram Manifering Balcation, Reportal Empring Completes and Separting Planeter and Engages Altradius Extende describe being Capital Flanning Microsto/Assessed Paralle Budget Permutation American Control States Fragram/Frajed Flanning Markings Floring Zraligis Flanning Reserve Collection Control Management User For Collection Section Collector Zufe fred bie Debt Calledian Admid Grant's Farrant and Consists Zale Breit Transfers and Consight Francisco I Socialism

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VEID 12/18/2011

34 Total I OBS ~200 Services

<u> Phase A – Major Deliverables</u>

Baseline Report



Items 1-3 released in an open, transparent manner to the public

Benchmarking Report



Data Center Assessment

Low Land Control Contr

3) Data Center Assessment







The Study Found: Top 10 Areas of Opportunity









- Governance
- Disaster Recovery (DR) and Continuity of Operations (COOP)
- 3. IT Procurement
- 4. Security and Privacy
- 5. Open Government and Social Media
- 6. Collaboration and Work Flow
- 7. Enterprise Applications
- 8. Enterprise Infrastructure
- 9. Wireless/Mobile/Radio
- 10. Business Process Re-Engineering

We are focusing on these Top 10 opportunities...



Top 10 Strategic Areas of Opportunity

Governance

- Creating and Reenergizing Advisory Committees; Policies and Procedures; Investment Planning and Oversight
- IT Transformation Roadmap; Strategic Plan

2. Disaster Recovery and Continuity of Operations

Where, What, When, and How

3. IT Procurement

- Leverage Federal schedules
- State-wide licensing and "buys" for hardware, software, and services

4. Security and Privacy

5. Open Government and Social Media

Facilitate, integrate, and ensure

6. Collaboration and Work Flow

Document management (inter and intra-departmental) and work flow; Web content management;
 eSignature

7. Enterprise Applications

- GIS; Cloud Computing; Consolidated eMail in the Cloud;
- Legacy System Modernization

8. Enterprise Infrastructure

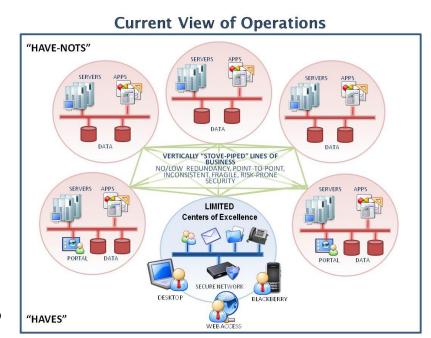
- Network extension and improvement
- Data Center enhancement and consolidation
- Virtualization server and desktop
- Wireless/Mobile/Land Mobile Radio/Broadband
- 10. Cross-Cutting Business Process Reengineering



Federal Systems and Interfaces are about a 1/3rd of the Portfolio and represent challenges in Duplication

<u>Phase A – Findings</u>

- 18 Departments & University of Hawaii
- \$157.5 million IT/IRM budget
- 746 IT/IRM staff
- Over 500 applications
- 200 lines of business
- High duplication of effort
- Wide funding disparities
- Some focused areas of excellence



Many disconnected silos of effort



Started on Four Key Recommendations

1 2 3 4



Enterprise Focus for Projects



Establish Enterprise Governance



Re-engineer Business Processes



Strengthen Technical Infrastructure



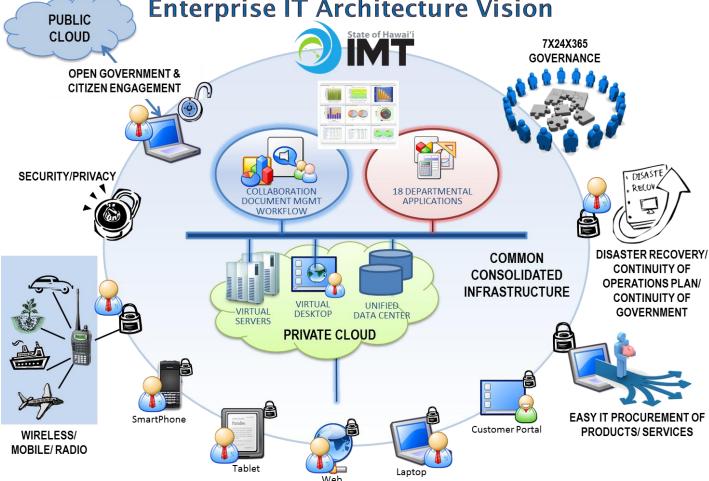
The Way Forward





Vision

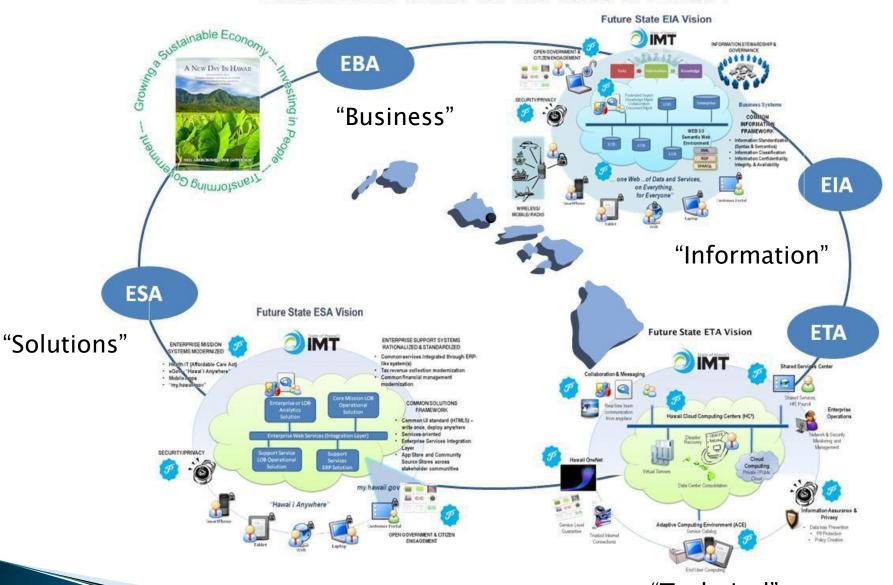
Preliminary Future Enterprise IT Architecture Vision



Access to the right information – anywhere, any time, any mission, securely and reliably



Enterprise Architecture Future State Vision for the State of Hawai`i





State Strategic Plan



I Nanagement and Oversight (Governance)
State of Hawai i Business and IT/IRM
Transformation Strategic Plan

2



Enterprise Architecture

3 As Is

T & S Plan

To Be

Projects

4 Triage

Pilots

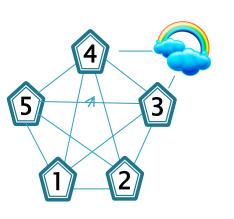
Major Initiatives

Business Process Reengineering



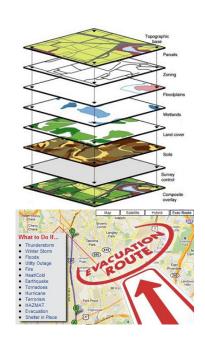


What's Next?









Shared Service/ Data Centers

Mobile

Cloud and Web 3.0

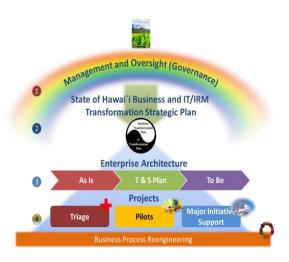
Next-Generation GIS

...and Much More...

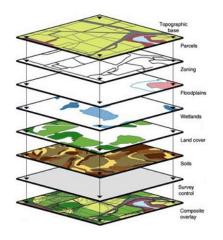


What We Need From You

We are collectively developing the State of Hawai`i Business and IT/IRM Transformation Strategic Plan



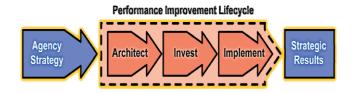
In May, and June, 2012, we need your input in our future vision for the State, interfaces to federal Government systems and what does the ideal Business and IT/IRM environment look like?



Please see http://www.hawaii.gov/oimt for details and announcements! We intend to Publish our Plan by July 31, 2012.



The Crossroads...



Stove-Piped,
Sub-optimized,
IRM and IT
Environment
(Today)



Geo-enabled, Integrated, Mobile, **Transparent, Web-**Accessible, Open, Standards-based, Agile, Reliable, Available, Secure **Enterprise** Information and IT **Environment** (Goal)

We are at a Crossroad in History – Let's Choose the Pathway to Success!









Mahalo!

http://www.hawaii.gov/oimt