

State of Hawai'i  
**IMT**

# Transforming Government...

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

Asia-Pacific Information Management Conference

Sanjeev "Sonny" Bhagowalia  
State of Hawaii  
Chief Information Officer  
July 11, 2012

# Future World...In the Clouds?



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

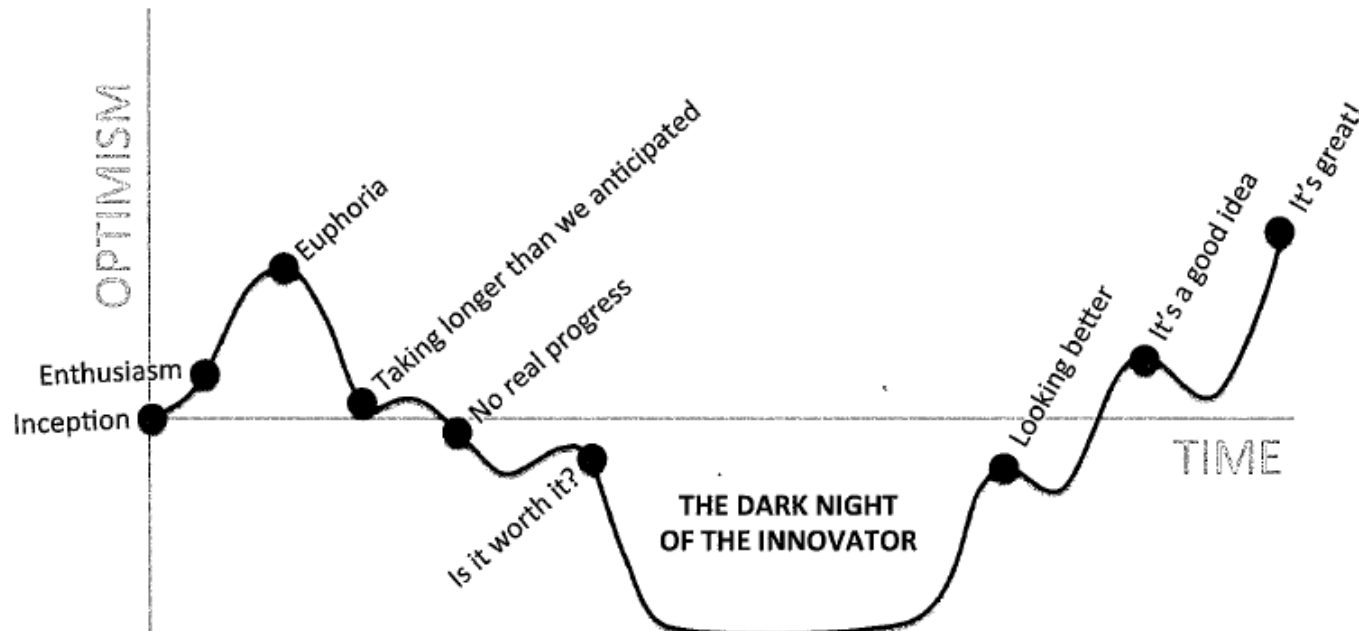
Source: New Yorker Magazine

# Transformation and Change isn't Easy

*The Path of Innovation*

*Between the idea and the reality falls the shadow*

- T.S. Eliot

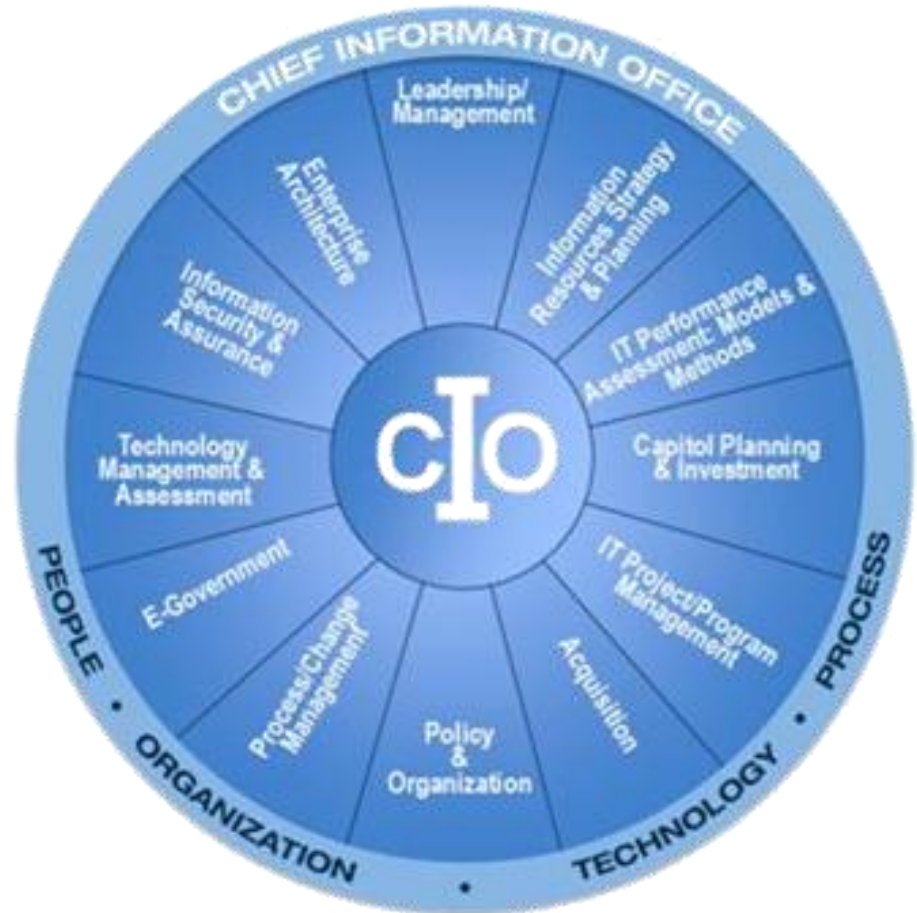


Source: Jeff Mohr, HCF



# 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>

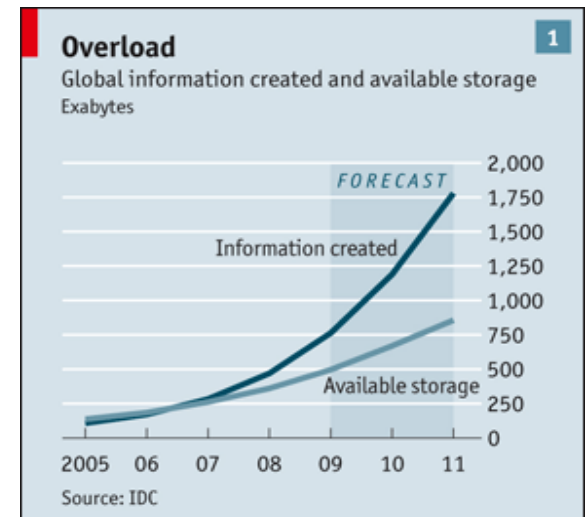
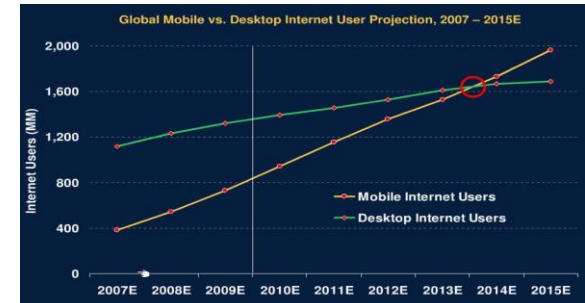
# Change is Coming (Like it or Not...)



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

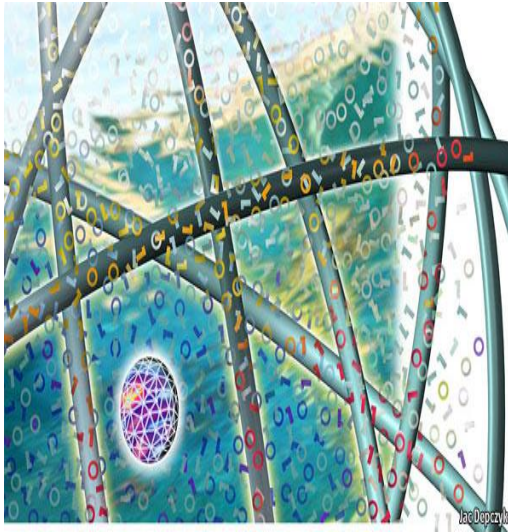
1. 20% of businesses will own no IT assets by 2012 (Gartner)
2. 75% of Stand-Alone IT Departments will disappear by 2015 (Corporate Executive Board)
3. One trillion devices will be connected to the Internet by 2013 (Cisco) – Current = 35B
4. The government can save \$1 trillion in 10 years by harnessing 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!

# Context: Maximum sharing and flow of information and knowledge



- 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**

# Trends We Need to Watch...

1. Consumerization & The Tablet
2. The Infinite Data Center
3. IT Consumption
4. Context Awareness
5. Hybrid Clouds
6. Fabric Data Centers
7. IT Complexity
8. Patterns and Analytics
9. The Virtual Enterprise
10. Social Networking

**Gartner**<sup>®</sup>

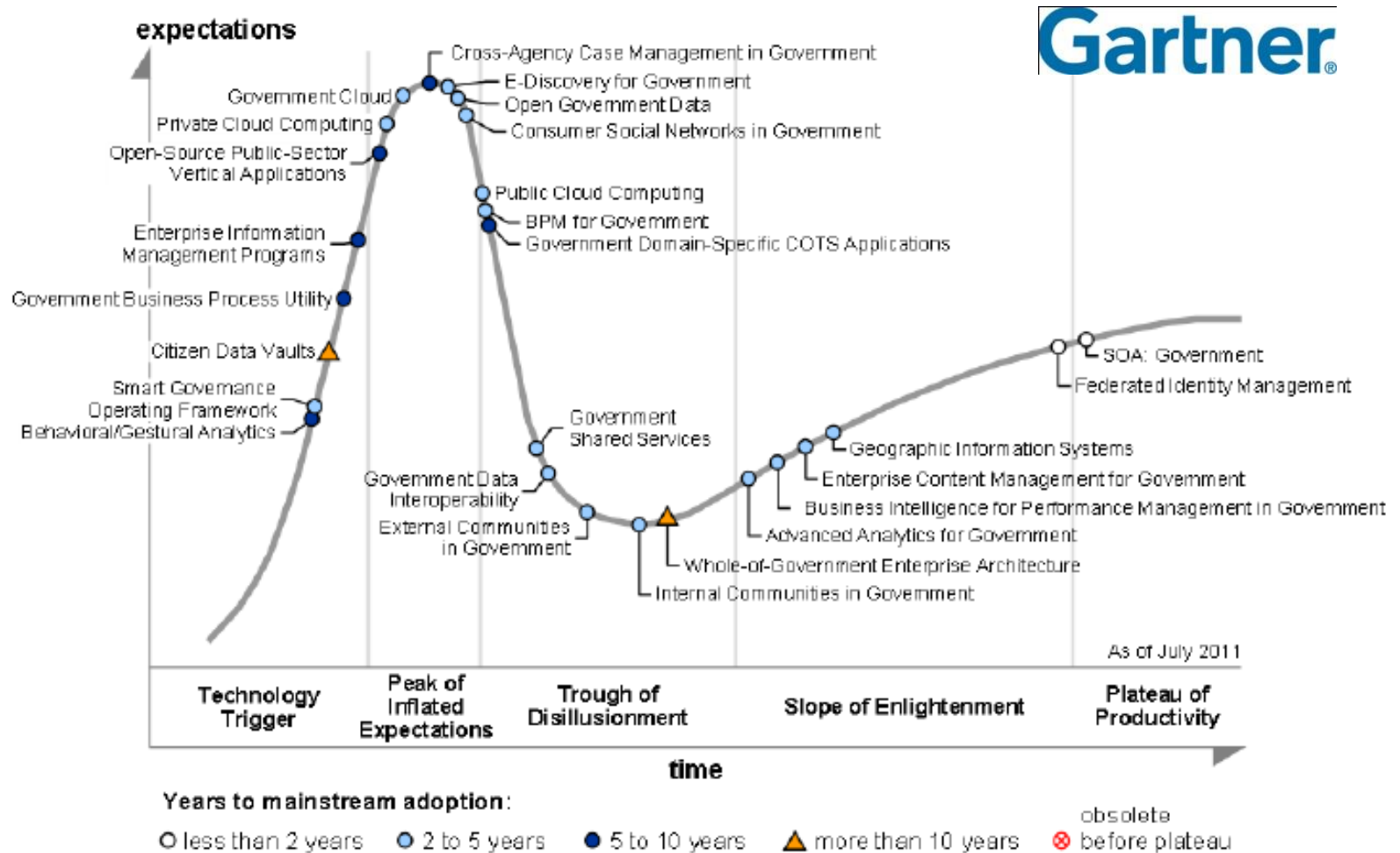


Source: Top 10 Trends and How They Will Impact Data Centers and IT, David Cappuccio, Vice President, Chief of Research, Gartner



# Hype Cycle for Government Transformation, 2011

Figure 1. Hype Cycle for Government Transformation, 2011



Source: Gartner (July 2011)

# 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)

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



Source: <http://www.nascio.org>



## Services to Citizens

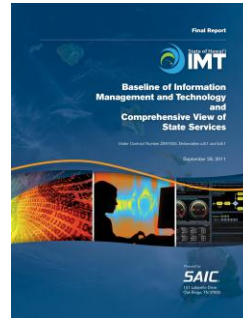


## Enabling Services



# Phase A – Major Deliverables

## 1) Baseline Report

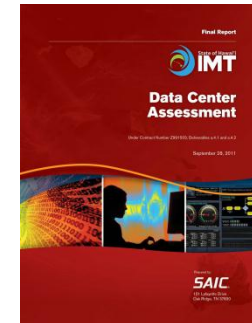


Items 1–3 released in an open, transparent manner to the public

## 2) Benchmarking Report



## 3) Data Center Assessment



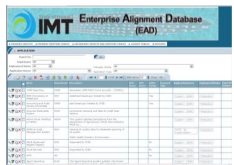
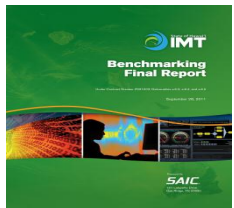
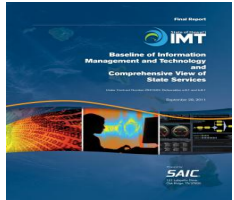
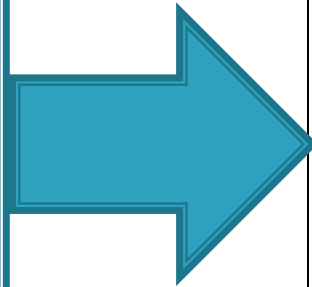
## 4) Enterprise Alignment Database (EAD) Tool

The screenshot shows a web-based interface for the Enterprise Alignment Database (EAD). It features a search bar, a table with multiple columns and rows of data, and a sidebar with navigation options. The interface is titled 'IMT Enterprise Alignment Database (EAD)'.

*High quality work products delivered on time and within budget – Phase A complete!*

# The Study Found: Top 10 Areas of Opportunity

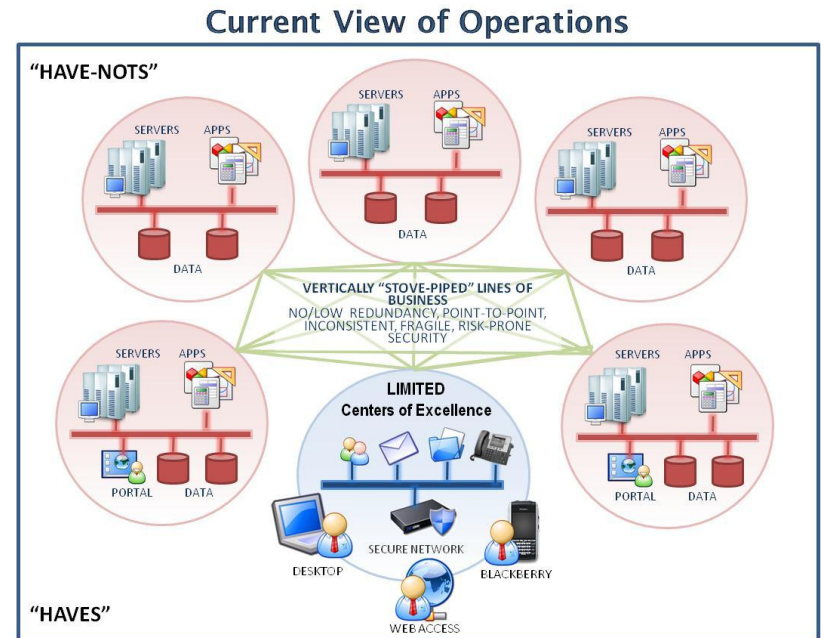
1. Governance
2. Disaster Recovery (DR) and Continuity of Operations (COOP)
3. IT Procurement
4. Security and Privacy
5. Open Government and Social Media
6. Collaboration and Work Flow
7. Enterprise Applications
8. Enterprise Infrastructure
9. Wireless / Mobile / Radio
10. Business Process Re-Engineering



*We need to focus on these  
Top 10 opportunities...*

# Phase A – Findings

- ▶ 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

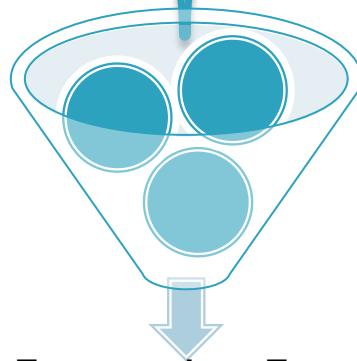


*Many disconnected silos of effort*

# 20 Key Recommendations

Business Reference Model	Data Sharing and Collaboration	Organizational Change
Manual Interfaces	Bargaining Unit Leadership	ICSD
Risk Assessments	Service Management Model	Applications Portfolio
Performance Measures	Application Integration	Data Architecture
Funding for IT	Platforms and Technologies	IT Costs
Agency Model		IT Skills

20



All recommendations are important but must be sequenced according to resources and readiness

4

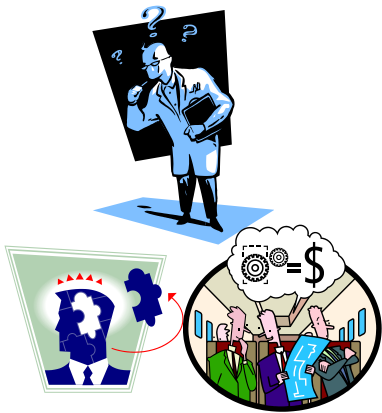
Enterprise Focus  
Governance Strategies  
Business Process Re-Engineering  
Technical Foundation

*We are starting to implement the 4 basic foundational recommendations now!*



# Four Key Recommendations to Start

1



*Enterprise  
Focus for  
Projects*

2



*Establish  
Enterprise  
Governance*

3



*Re-engineer  
Business  
Processes*

4



*Strengthen  
Technical  
Infrastructure*

# The Way Forward



# A Vision for a Better Future

## Mission

To assist agencies in the effective, efficient and convenient delivery of programs and services to the public through business transformation and information technology modernization.

## Vision

A State where:

- ▶ the public engages with an open and transparent government;
- ▶ State employees, citizens and businesses have convenient and secure access to reliable information;
- ▶ government processes are streamlined, integrated and implemented to meet the public's service expectations;
- ▶ information technology and information capabilities align and support business needs, strategies, and outcomes;
- ▶ innovation and continuous improvement are fostered.

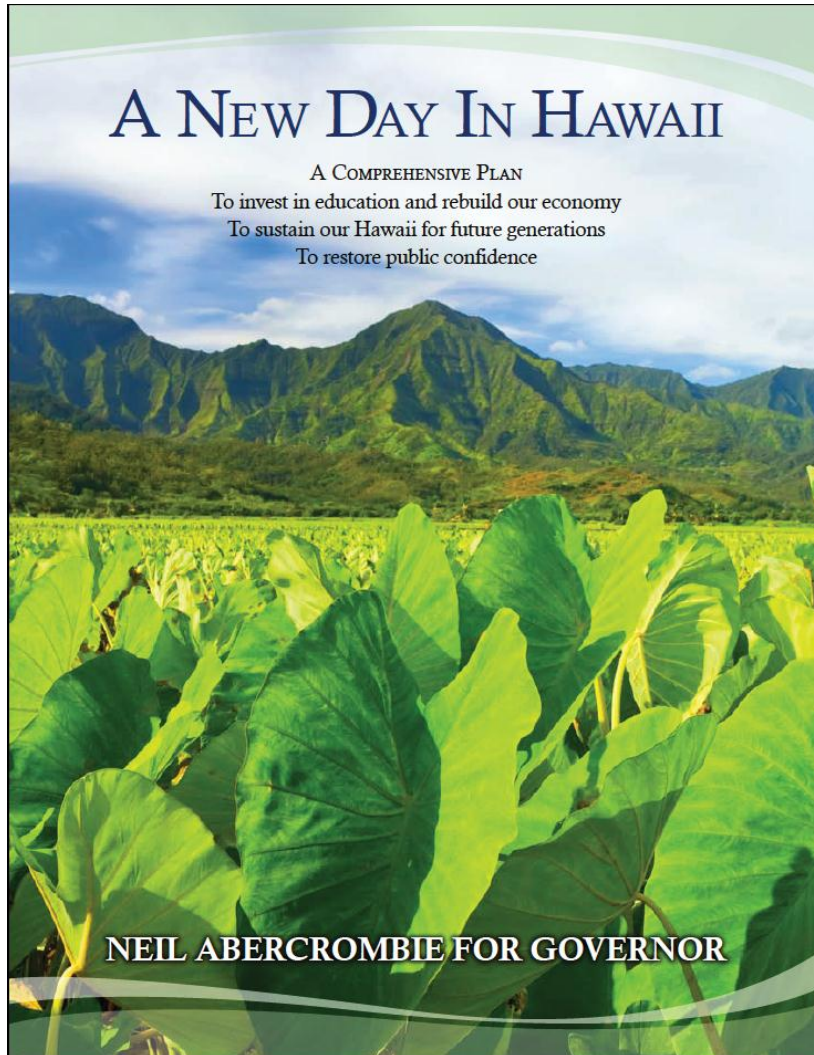


# Benefits of the Transformation

The transformation will benefit:

- ▶ **State citizens** through improved delivery of services and programs (e.g. going “online” instead of “waiting in line”); a more transparent and responsive government; and increased access to information and data.
- ▶ **State employees** with streamlined workflow processes allowing more focus on serving customers and access to a wider range of new technologies to support departmental mission, programs and services.
- ▶ **State government** through efficiently aligned services; reduced costs and unnecessary redundancies; increased reliability and security; and improved outcomes and accountability.

# 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**

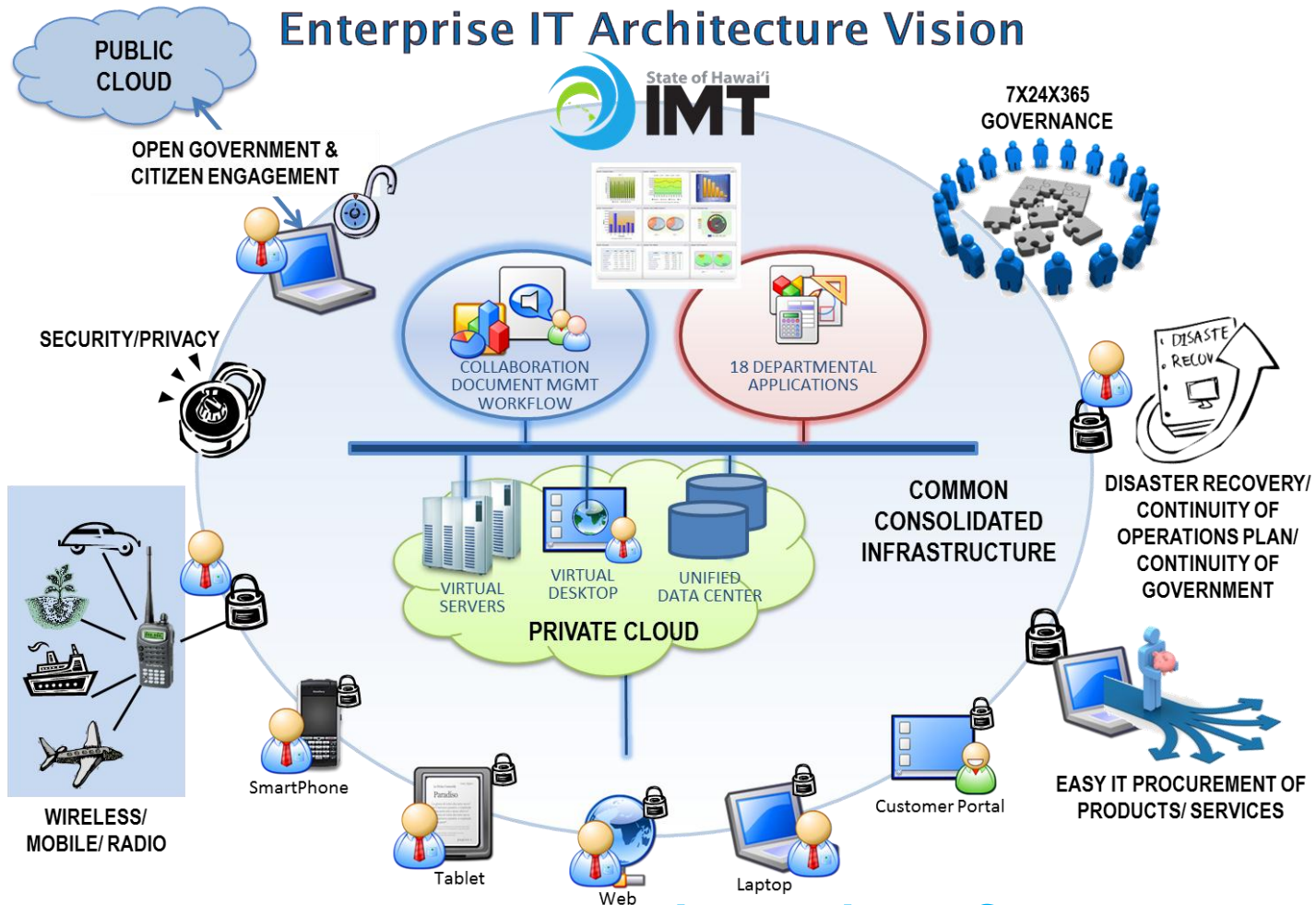
- Early Childhood
- Education and Workforce Development
- Healthcare Transformation
- Safety Net, Homelessness, Public Safety
- Housing

- **TRANSFORMING GOVERNMENT**

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

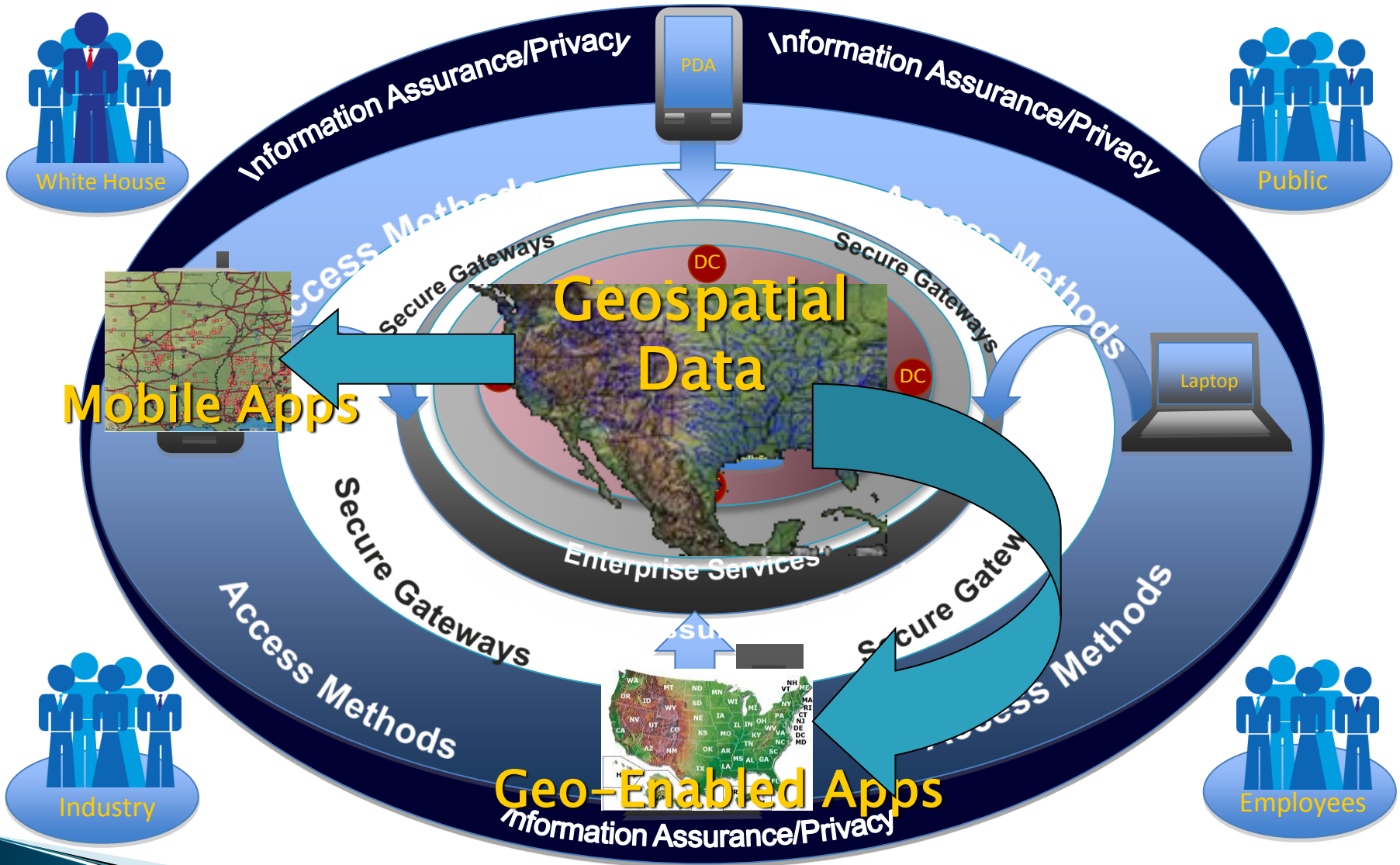
# Vision

## Preliminary Future Enterprise IT Architecture Vision



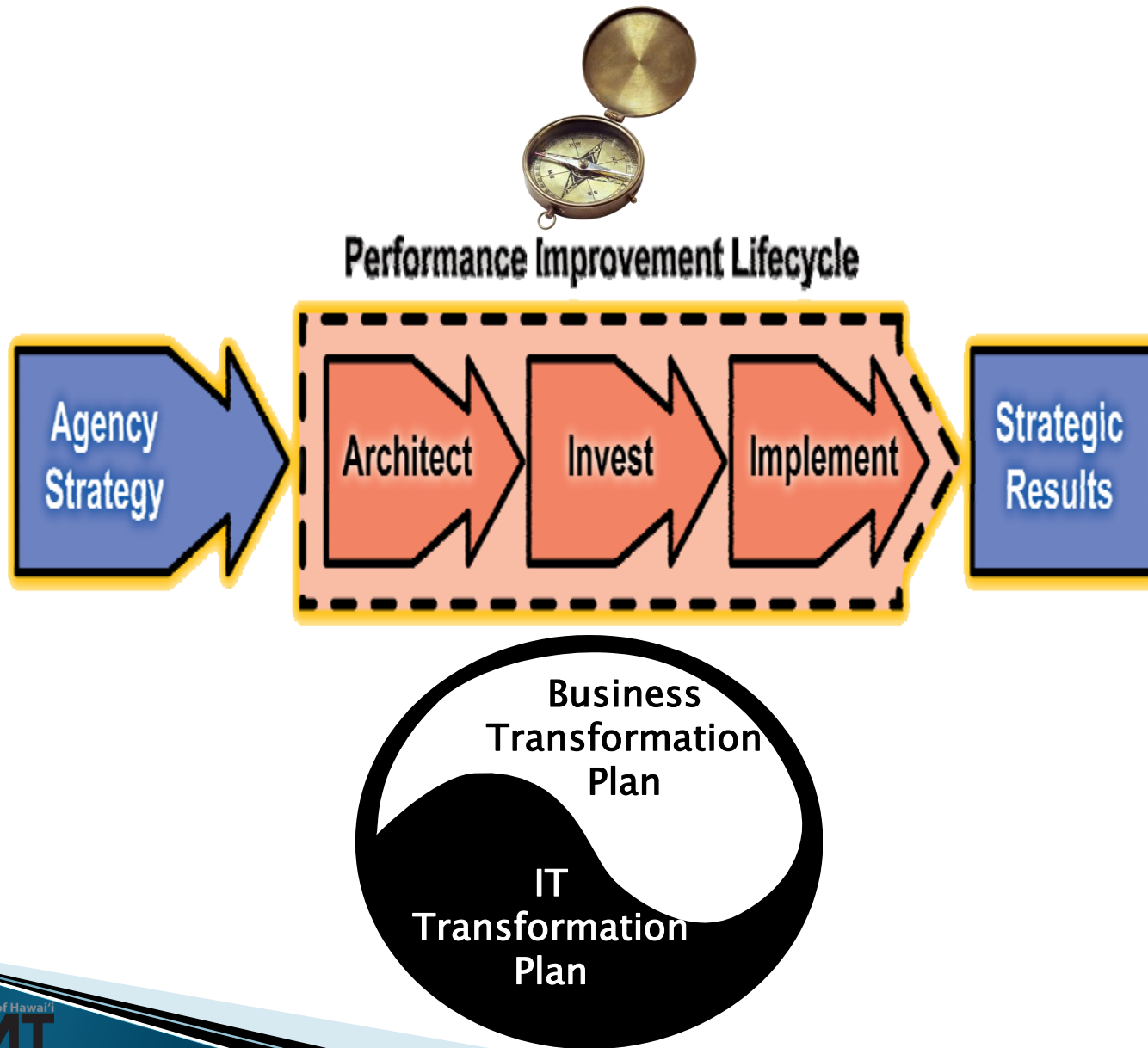
*Access to the right information –  
anywhere, any time, any mission,  
securely and reliably*

# Notional Vision



Access to the right information for authorized users any time, anywhere, any mission, securely and reliably

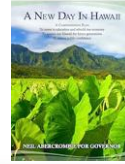
# The Transformation Plan





Strategic Plan Framework

Strategic Plan



New Day Vision

Drives

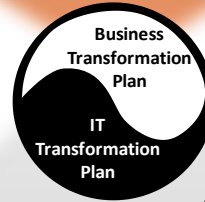


Management and Oversight (Governance)

1

State of Hawai'i Business and IT/IRM Transformation Strategic Plan

2



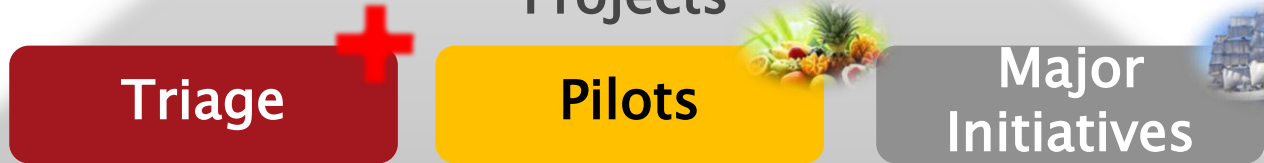
Enterprise Architecture

3



Projects

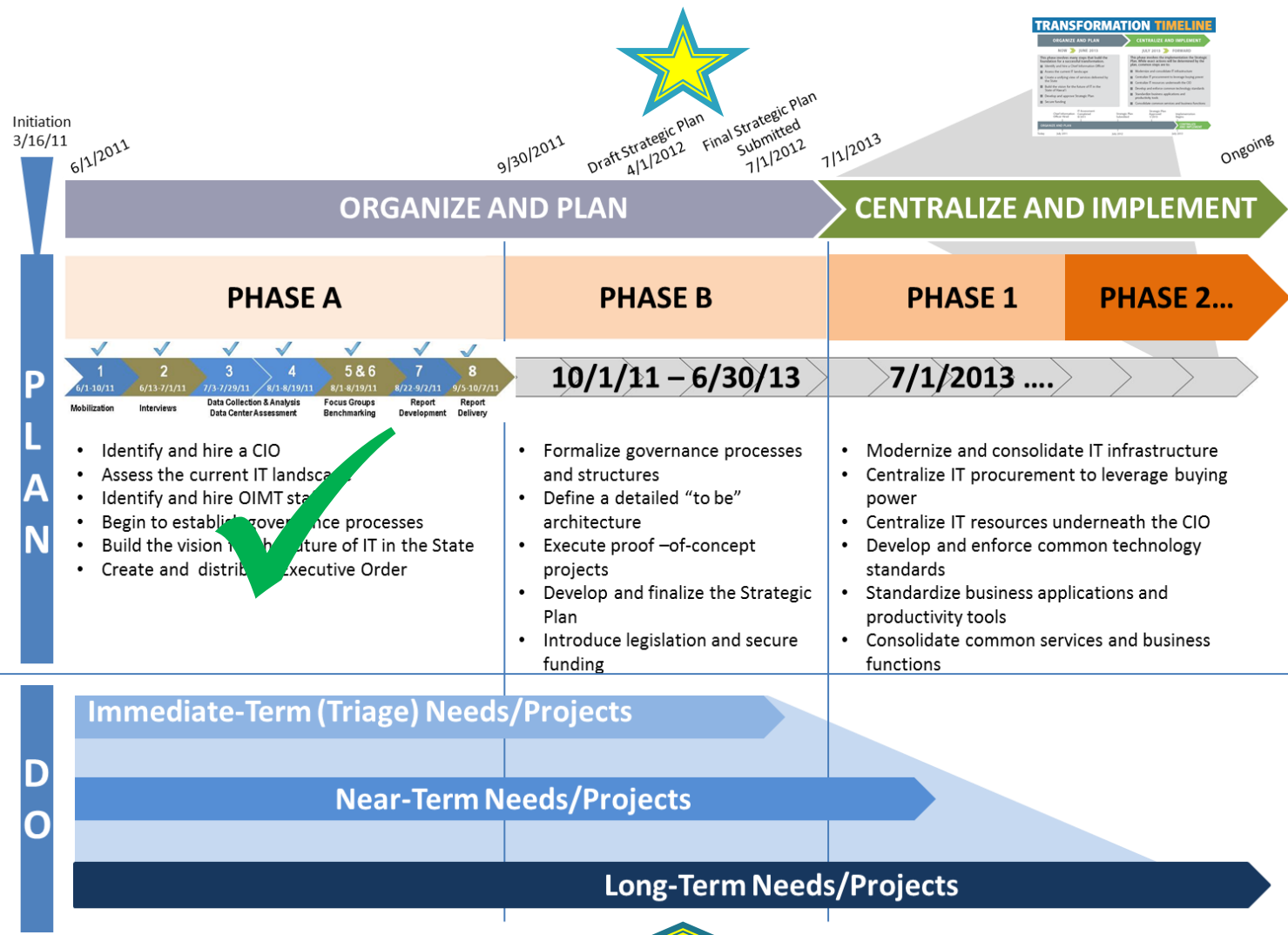
4



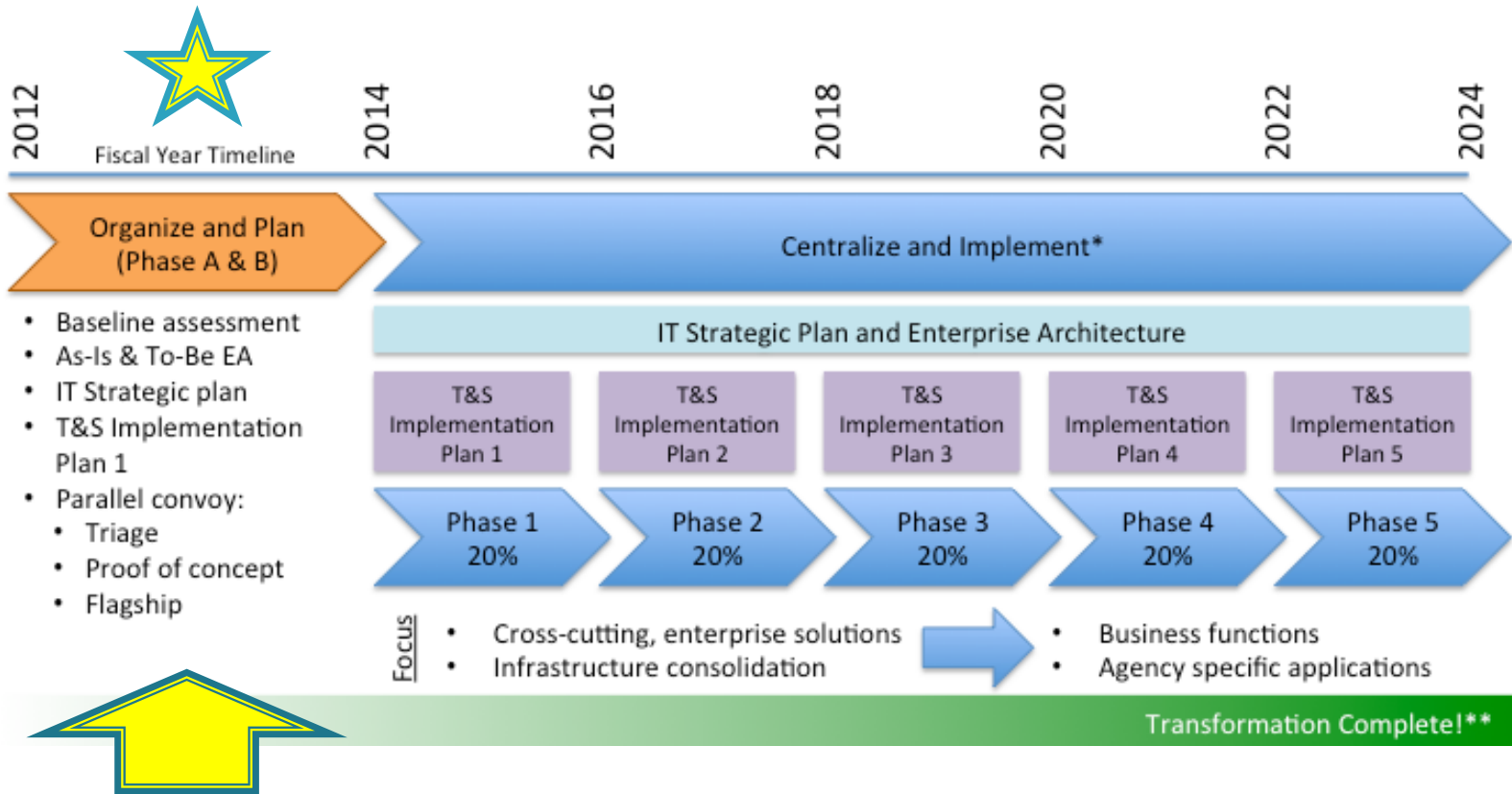
Business Process Reengineering



# 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*

# Transformation Plan

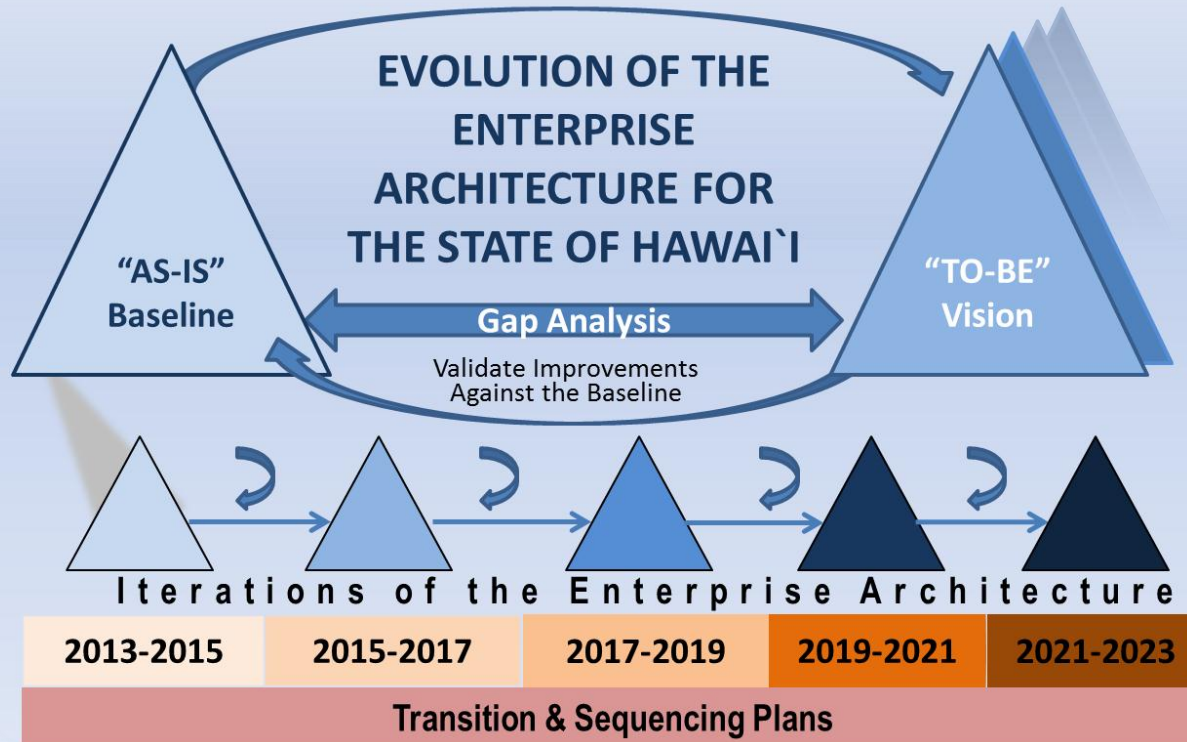
Governance View



Transformation View



Departmental View



*Deliver outstanding customer services and business value*

# The Open Government Initiative



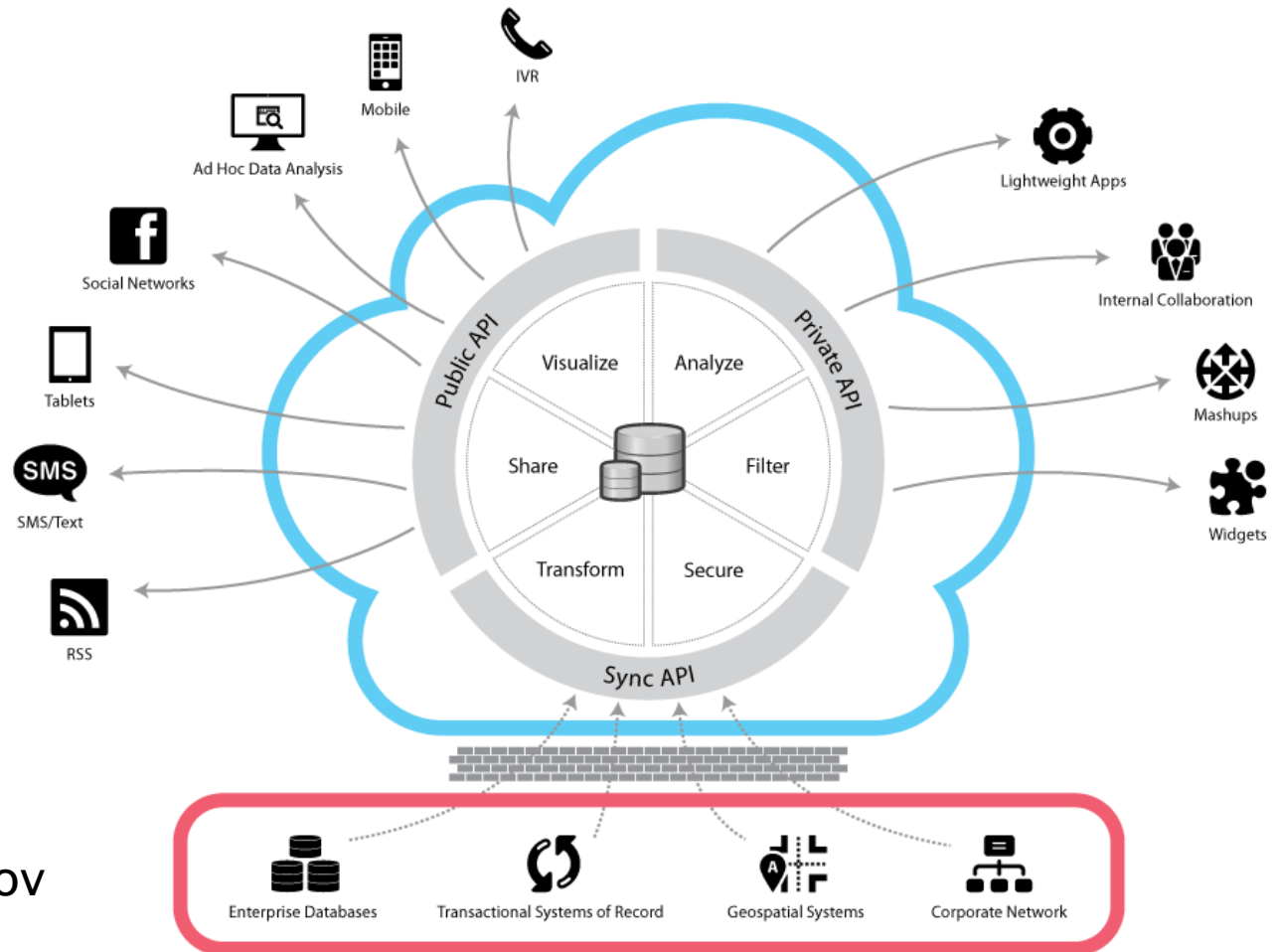
**Transparency** promotes accountability

**Participation** allows people to contribute ideas/expertise; government benefits from broad knowledge sharing

**Collaboration** encourages cooperation within government and with industry



# Next Generation Data.gov: A Platform Designed for Data Access & Consumption



<http://www.data.gov>

 Socrata | The Open Data Company™

 **DATA.GOV**  
EMPOWERING PEOPLE

# Intranet Portal - Alpha

hawaii.gov Text size: Large / Normal / Small Wednesday, March 28, 2012 Log in Register

State of Hawaii  
**IMT** Intranet Portal  
*Alpha Pilot*

Search Site  
 only in current section

Home Governance Working Groups Deliverables Reports Memos CEO Blog

### Transformation Framework

The framework of the transformation includes: Governance, the Business and IT/IRM Transformation Strategic Plan, Enterprise Architecture and Projects (Triage, Pilot, and Major Initiatives).

• • • •

## Aloha and Welcome to the Intranet Portal - ALPHA Pilot!

### Transforming Government

The Office of Information Management and Technology under the leadership of State Chief Information Officer Sanjeev "Sonny" Bhagowala is developing the Business Transformation and Information Technology Strategic Plan, which will provide the road map for the technology modernization initiative.

### Draft 1.0 of Business Transformation and Information Technology Strategic Plan Review

The staff of OIMT have been working diligently over the last few months to develop the Plan. We are pleased to inform you that Draft 1.0 of the Plan is ready for your review and feedback.

You'll find the following documents on this site available for viewing and/or download:

- [Governance](#)
- [Strategic Plan](#)
- [Enterprise Architecture](#)
- [Projects \(Coming Soon\)](#)

### A Call to Action

Your suggestions, insight, and ideas will contribute to developing the Plan further in the coming months, as we will release a second draft in April and a third in June, with the final plan presented at the end of July. Follow these steps to comment on the plan:

1. **Register to log in and comments**
2. **Review the document(s)**
3. **Provide your feedback by Thursday, March 1, 2012**

Mahalo for your support and we look forward to your participation in transforming the State of Hawaii!

#### Governance

The governance plan provides the framework for the management and oversight of business processes and Information Technology (IT).

[Read more](#)

#### Strategic Transformation Plan

The Business Transformation and IT Strategic Plan provides the road map for the State's ten-year modernization initiative.

[Read more](#)

#### Enterprise Architecture

- Business Architecture (Business Processes, Organization, People)
- Application Architecture (Systems) | Data Architecture (Data, Information)
- Technology Architecture (Hardware, Software, Network)

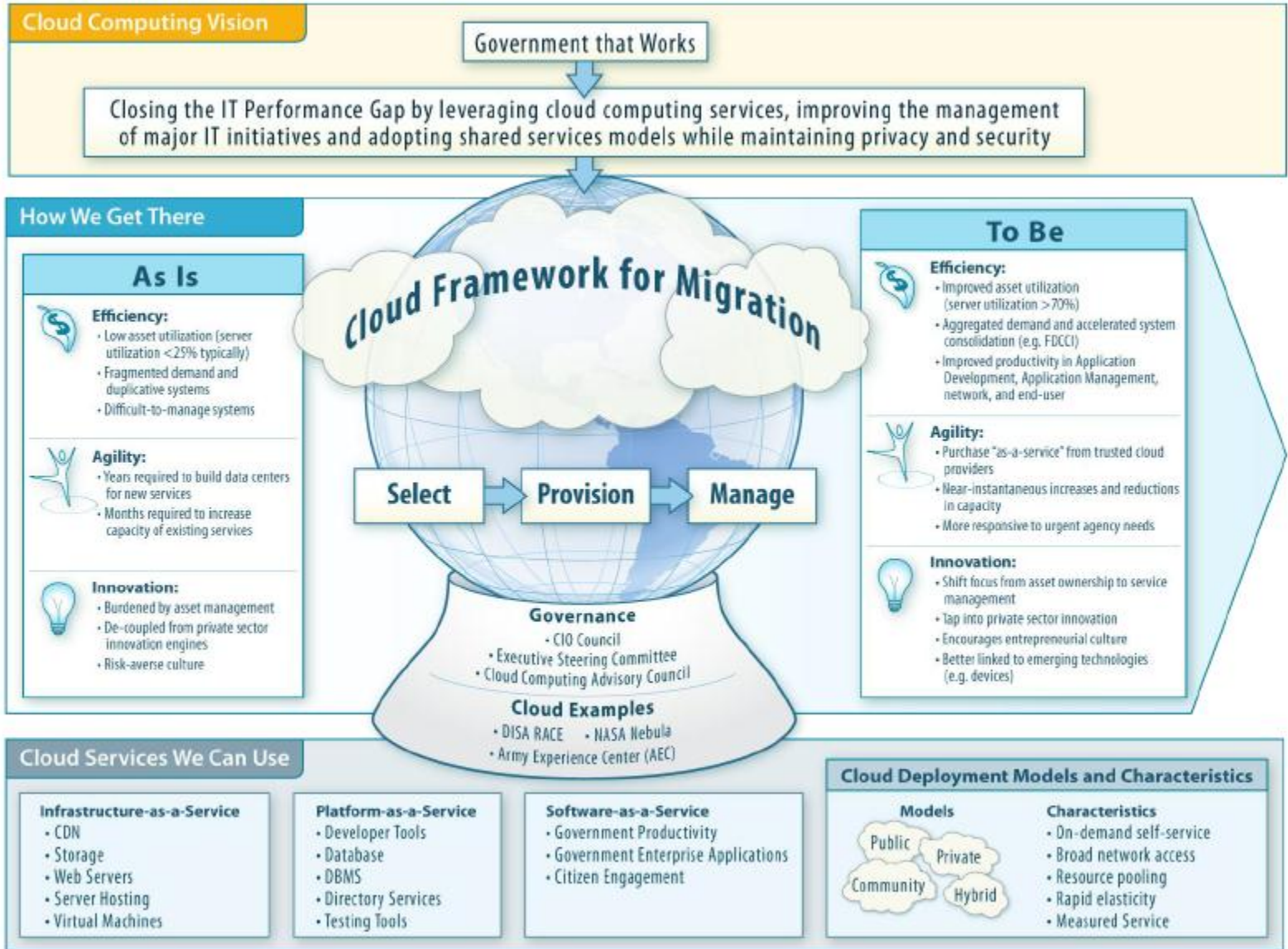
The EA plan describes the current state, the future vision, and transition and sequence plan that bridges the gap over ten years.

[Read more](#)

Home | Terms of Use | Privacy Policy  
Copyright © 2012 State of Hawaii - All rights reserved.

Site Map | Accessibility | Contact

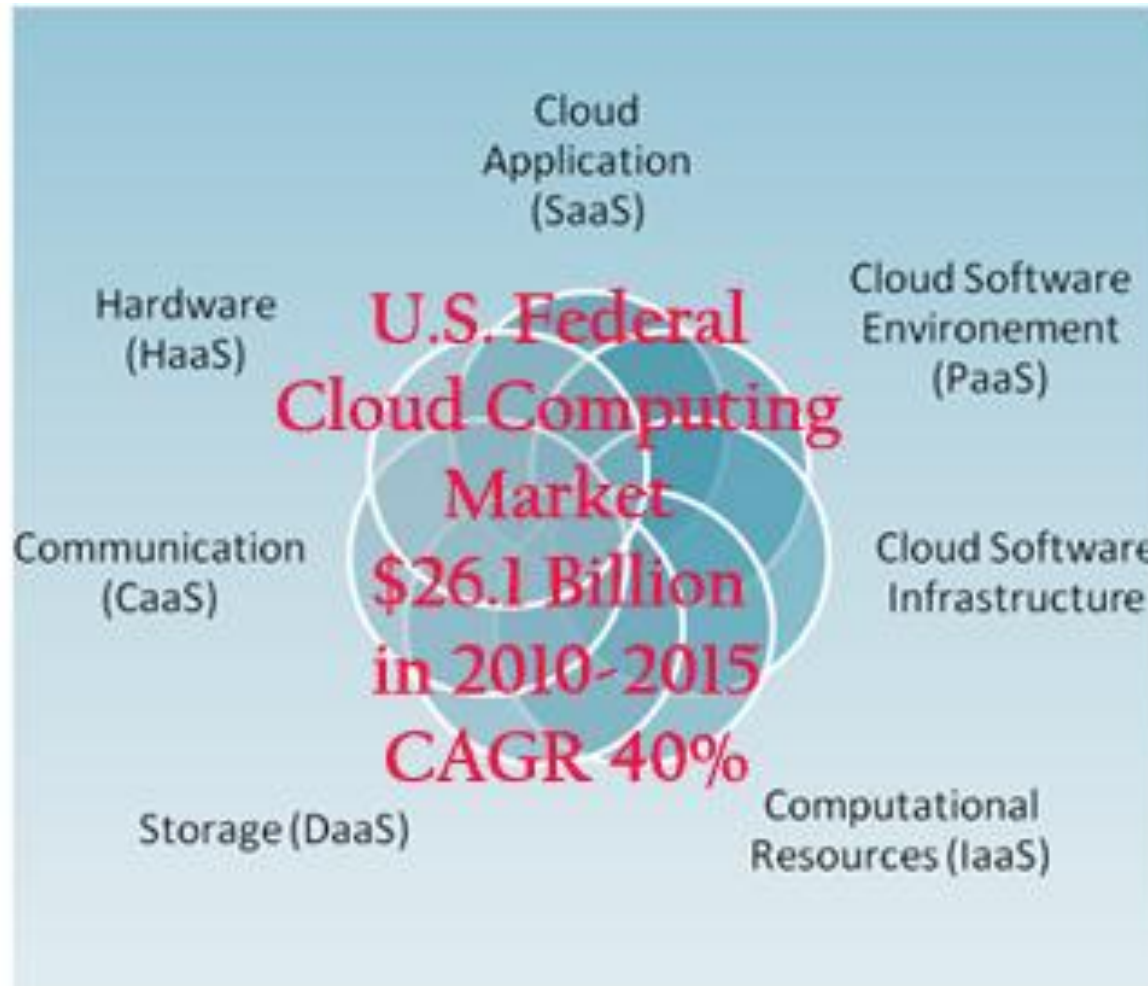
# Notional Cloud Computing View



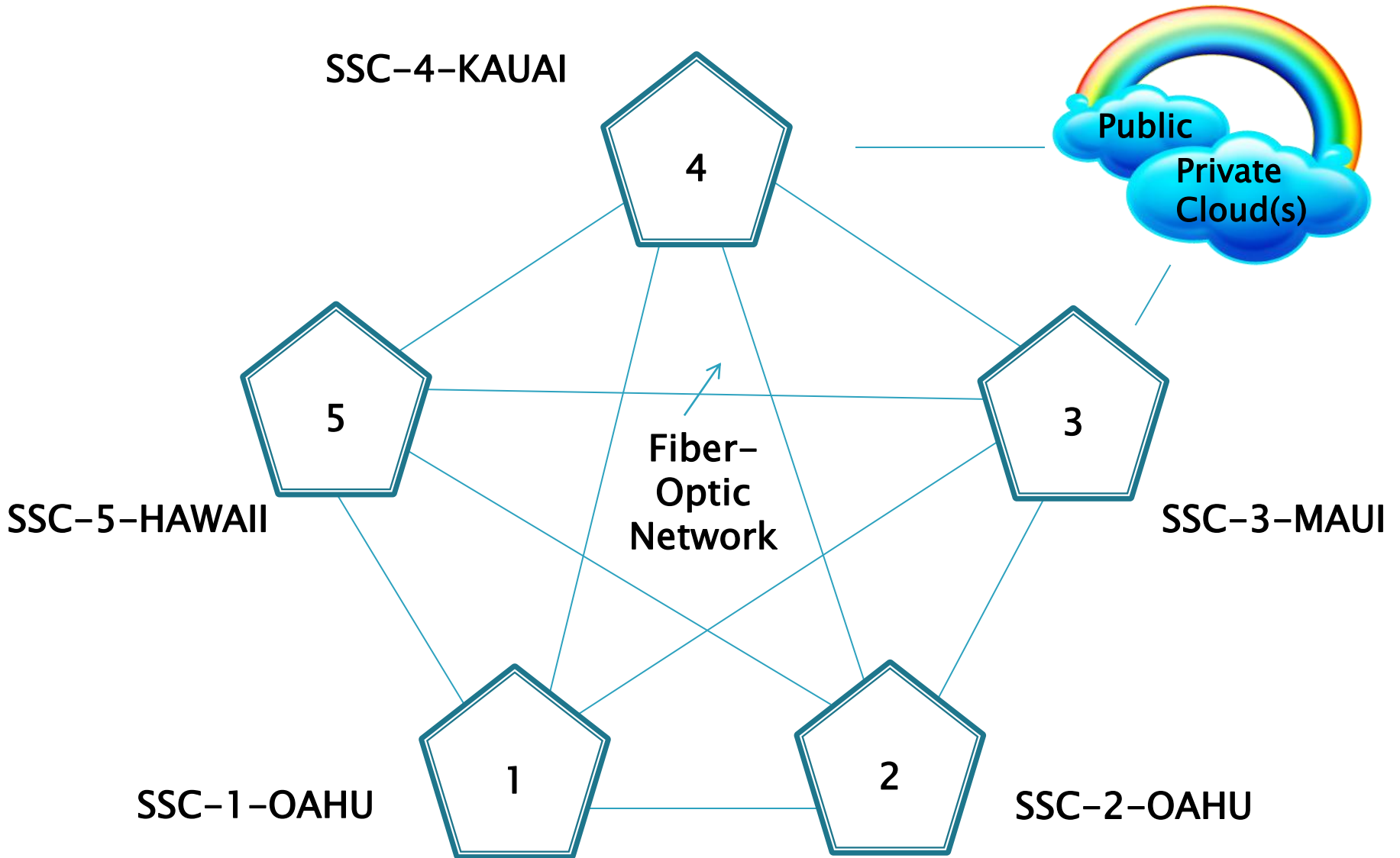
Source: Federal Cloud Computing Initiative Update, Sonny Bhagowalia, Deputy Associate Administrator, GSA, June 22, 2011



# Cloud Computing Market (Federal)



# Notional Shared Services Center Vision For Hawaii

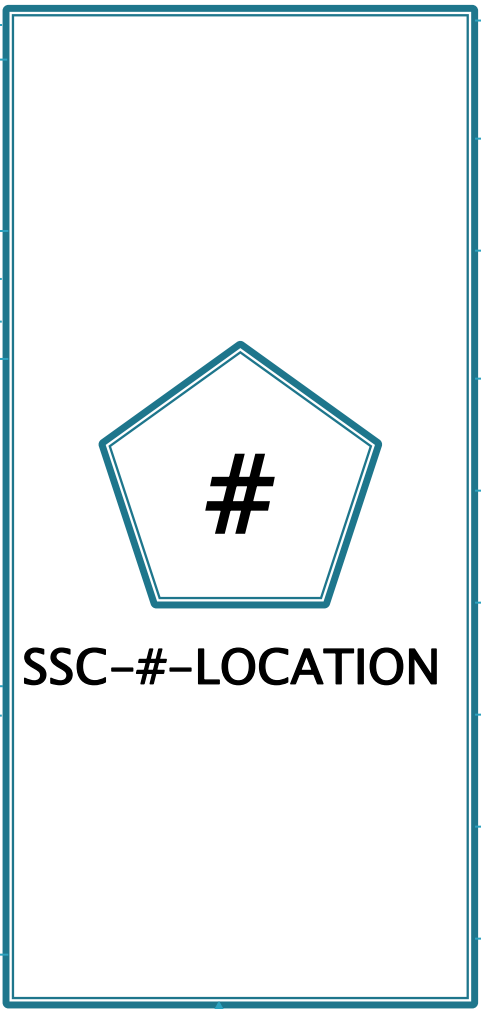
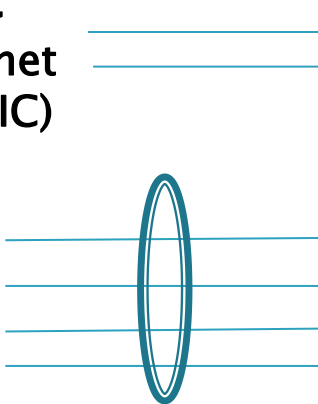
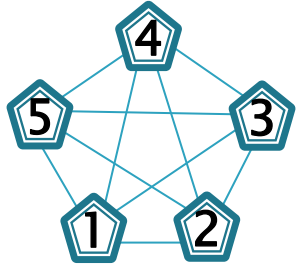


Shared Service Center (SSC) =  
Data Center (DC) + Cyber Security Operations Center (CSOC) + Network  
Operations Center (NOC) + Services Center (SC)

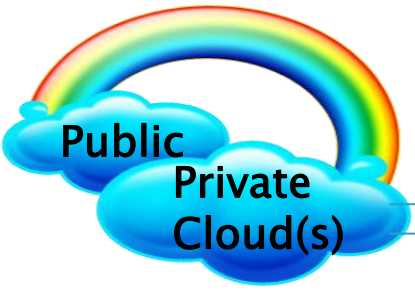
# Notional Typical Shared Services Center

## Internet

(Trusted Internet Connection/TIC)

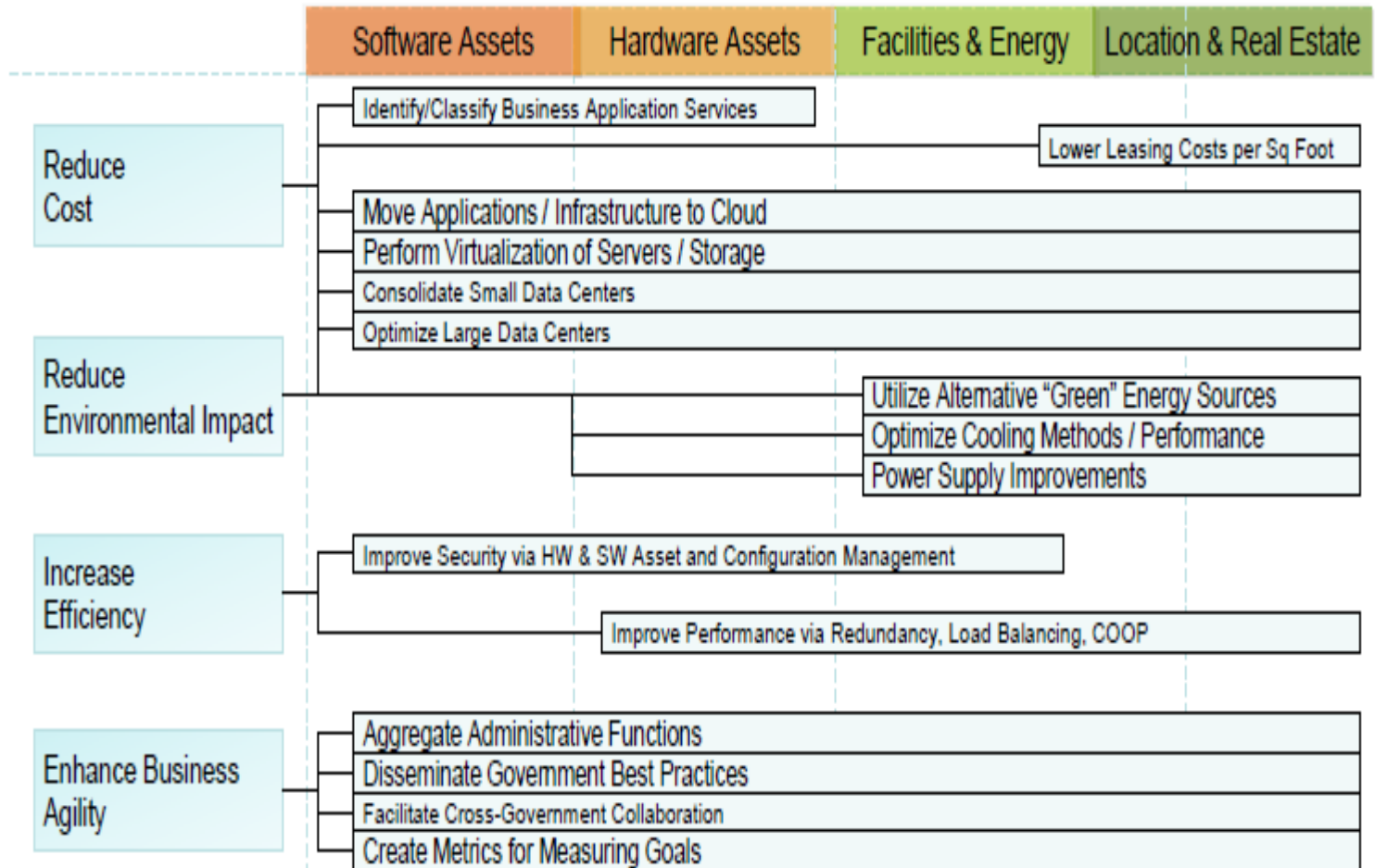


- Voice Services
- Video Services
- Data Services
- Web Services
- Radio Services
- Mobile Services
- LAN Services
- Applications Services
- Business Services



Systems Management Services  
Cyber-Security Services

# Data Center Consolidation



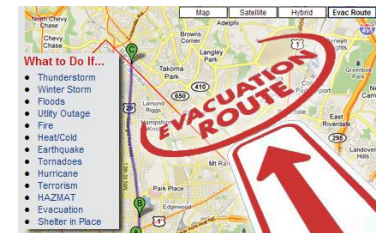
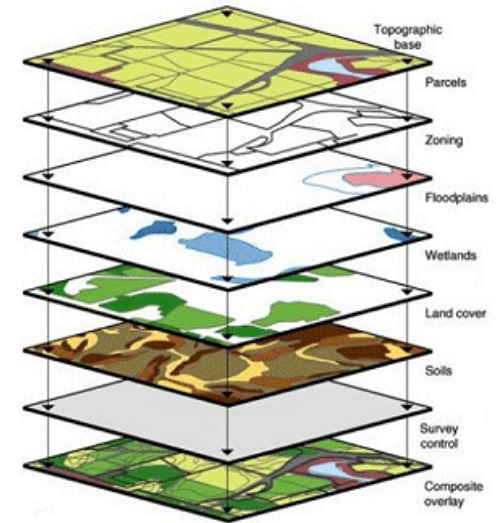
# What's Next?



**Mobile**



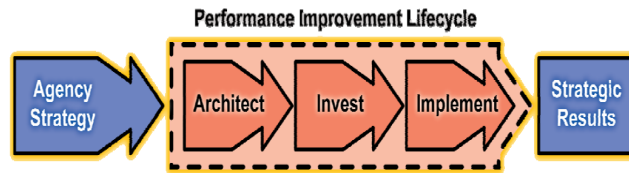
**Cloud and Web  
2.0/3.0**



**Next-Generation  
GIS**

**...and Much More...**

# The Crossroads...



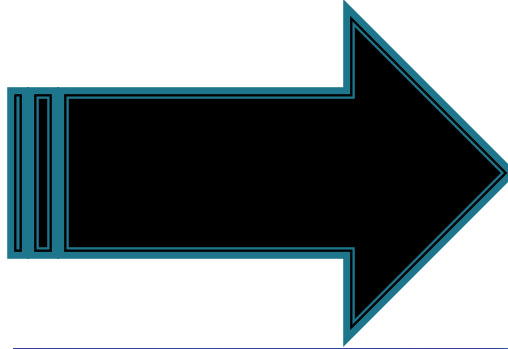
**Stove-Piped,  
Sub-optimized,  
IRM and IT  
Environment  
(Today)**



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

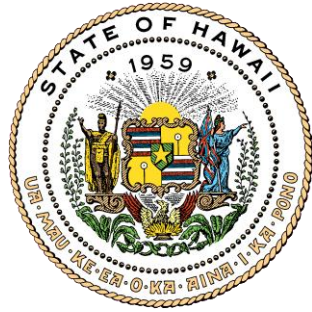
**We are at a Crossroad in History –  
Let's Choose the Pathway to Success!**

# “The Best Way to Predict the Future is to Invent it”\* ...Let’s Go!



**\*Source:**  
Alan Kay, Stanford  
Peter F. Drucker





State of Hawai'i  
**IMT**



INNOVATION  
SUCCESS  
EVALUATION  
DEVELOPMENT  
GROWTH  
SOLUTION  
PROGRESS  
MARKETING



# Mahalo!

<http://www.hawaii.gov/oimt>