

State of Hawai'i  
**IMT**

# 21<sup>st</sup> Century Government: e-Government in Practice

## A Strategist's Perspective

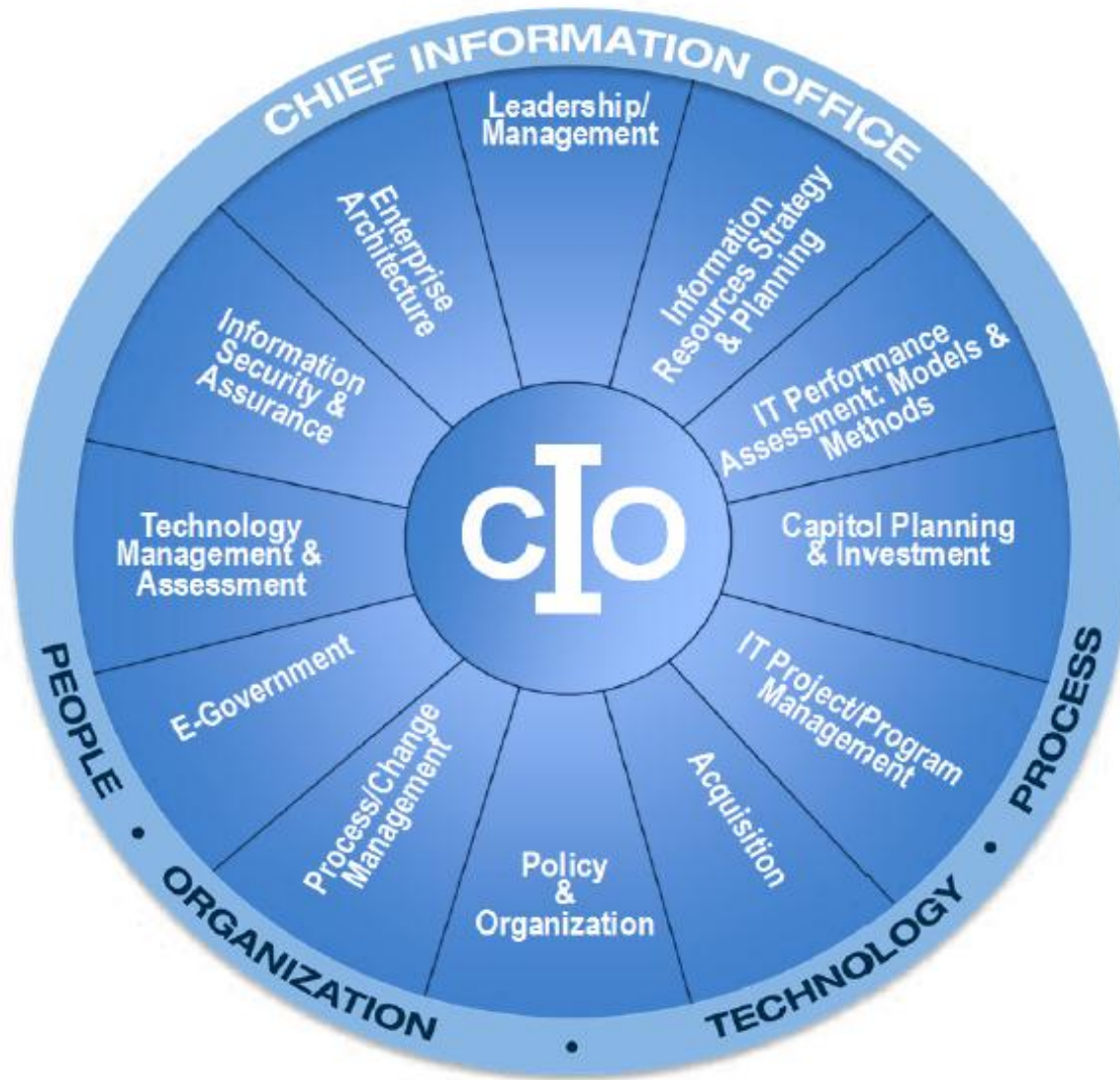
Sanjeev "Sonny" Bhagowalia  
Chief Information Officer (CIO)  
State of Hawai'i

HICSS-45 E-Government Symposium  
January 4, 2012

# Dilbert



Source: Scott Adams



Source: <http://www.ndu.edu>

Source: <http://www.cio.gov>



# 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



# An Innovation Agenda\* defines the building blocks of innovation



- Open Government

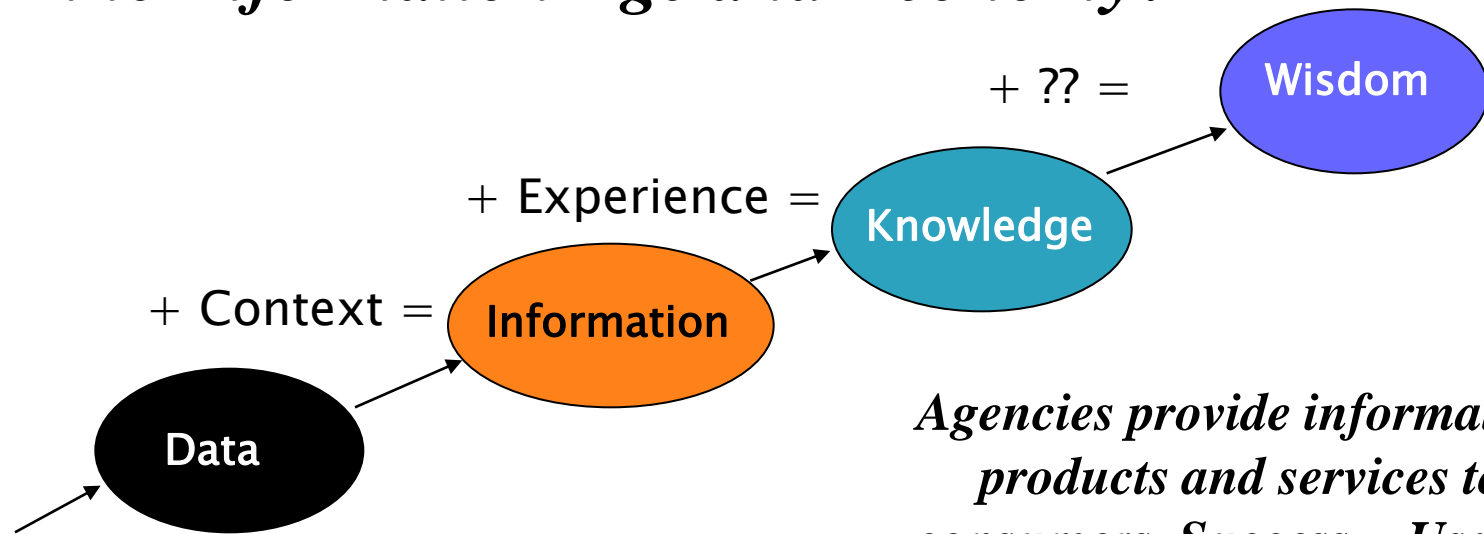
+

- Partnerships
- Entrepreneurship
- Prizes, Challenges, and Grants
- Idea Generation
- Innovative Science & Technology
- Creative Funding Strategies
- Promoting Competitive Markets

\* *“A Strategy for American Innovation”, published Sept 2009*

# Context: The Pursuit of Knowledge and Wisdom...is a Continuum

*How are government agencies impacted by the Information Age and Economy?*



*From Stan Davis, MIT  
Patricia Seybold, Architect*

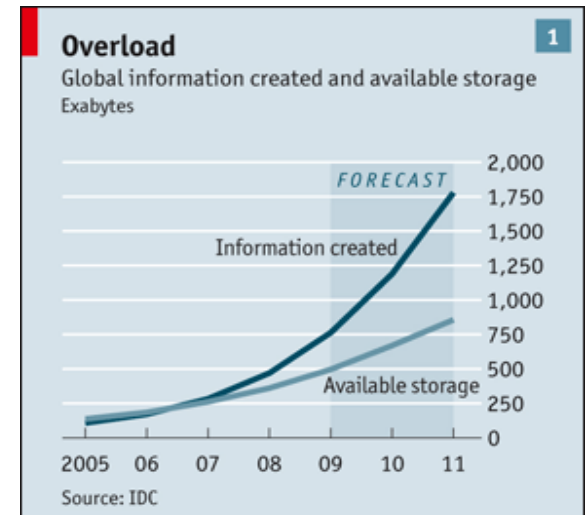
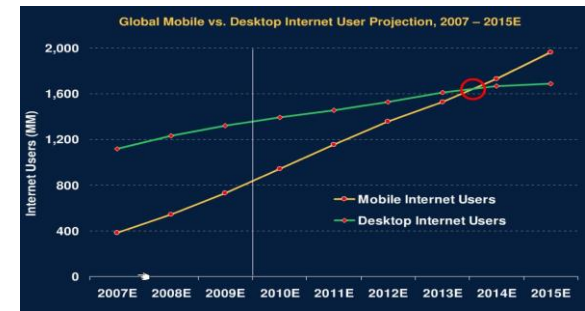
*Agencies provide information products and services to consumers. Success = Usage?*

**Challenge: How do we institutionalize best practices where information and knowledge is integrated into Systems/Apps, widely shared and is available in a Timely, Secure and Reliable Manner?  
Reward Structure?**

## 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)

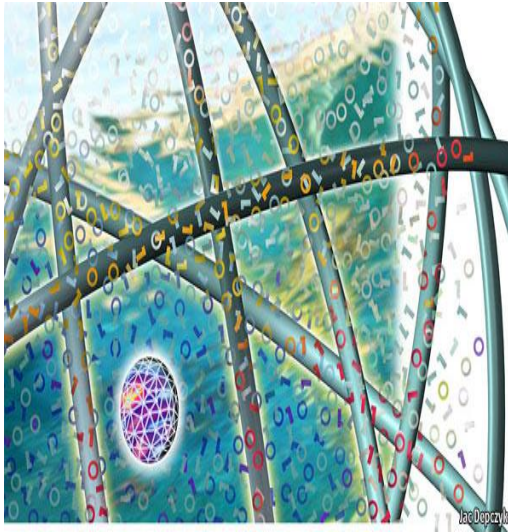
**Mobile will be bigger than desktop internet in 5 years**  
-- Mary Meeker, Morgan Stanley, April 2010



**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



# So, What Problem Are We Trying to Solve with e-Gov?

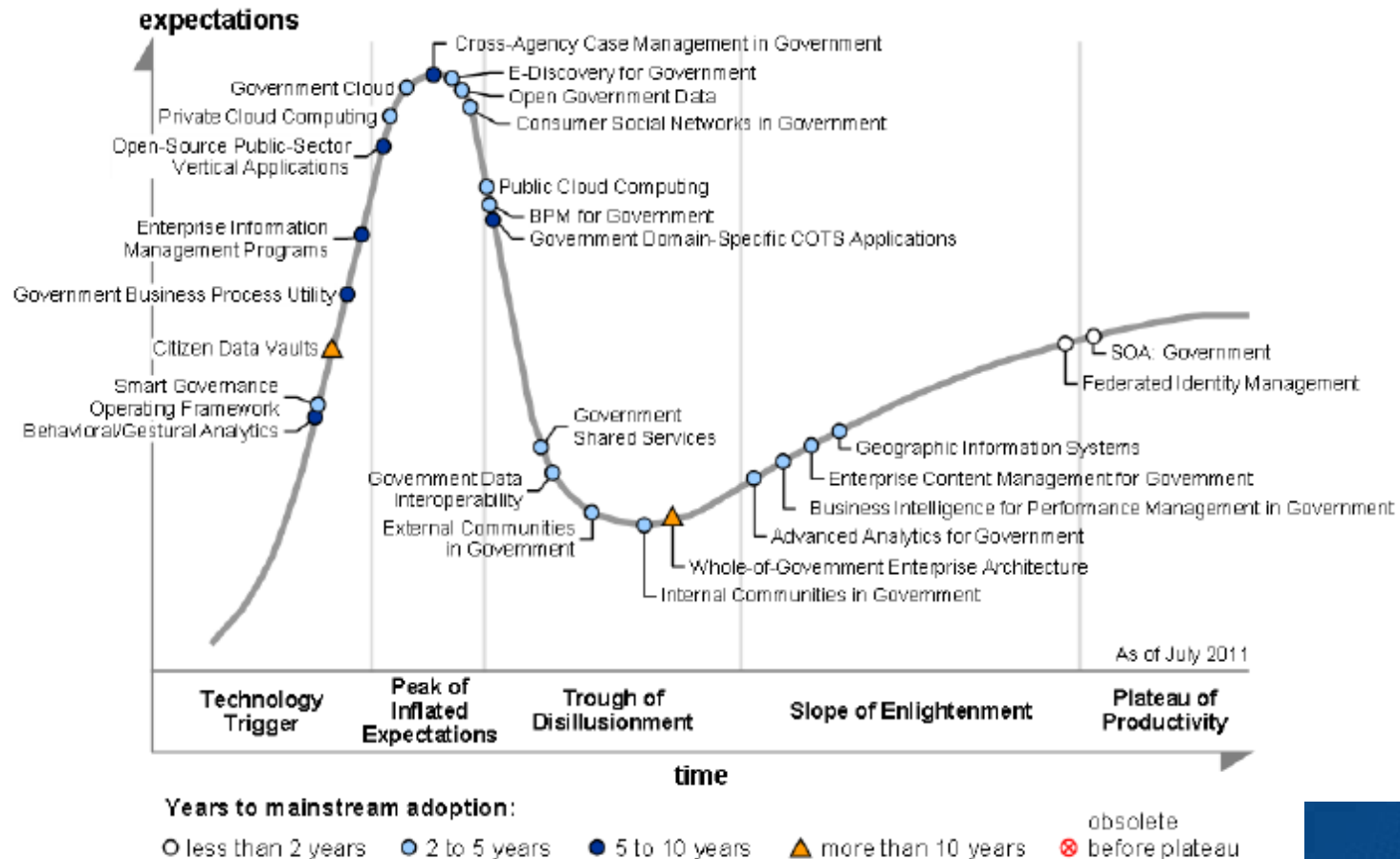
- ▶ The Government does not have the monopoly on the best ideas – engage citizens to participate, collaborate and solve problems in their daily lives (on-line versus in-line)
- ▶ “Share everything – protect what you must “ versus “protect everything – share what you must” – Attorney Generals, US Department of Justice
- ▶ “Sunlight is the best disinfectant” – Justice Brandeis
- ▶ Almost 75% of Citizens prefer to deal with the Government on-line (versus in-line) and 75% are happy with e-Gov services provided by Federal Government (Source: TBD)
- ▶ New Gov 2.0 and Web 3.0 technology is here for Citizen Services
- ▶ A Vast, Growing Ocean of Government Data, Information, & Knowledge Assets Exists – but what is Useful, Reliable and Authoritative?
- ▶ Easy-to-Use and Powerful Business Intelligence and Applied Analytics – Information Accessible Anywhere, Anytime, Any Device. Ensure Quality, Privacy, Security, e-Records, Organization, and Managed Growth for Reliable Enterprise Decision-Making
- ▶ What is/are the Measure(s) of Success? “Culture Eats Strategy for Lunch” – Martha Johnson, GSA Administrator

**Organizational Mission Effectiveness and Efficiency**



# Gartner Conference Highlights (2011)

Figure 1. Hype Cycle for Government Transformation, 2011



Source: Gartner (July 2011)

Source: "Hype Cycle for Government Transformation (July 2011)"



# Gartner Conference Highlights (2011)

Figure 2. Priority Matrix for Government Transformation, 2011

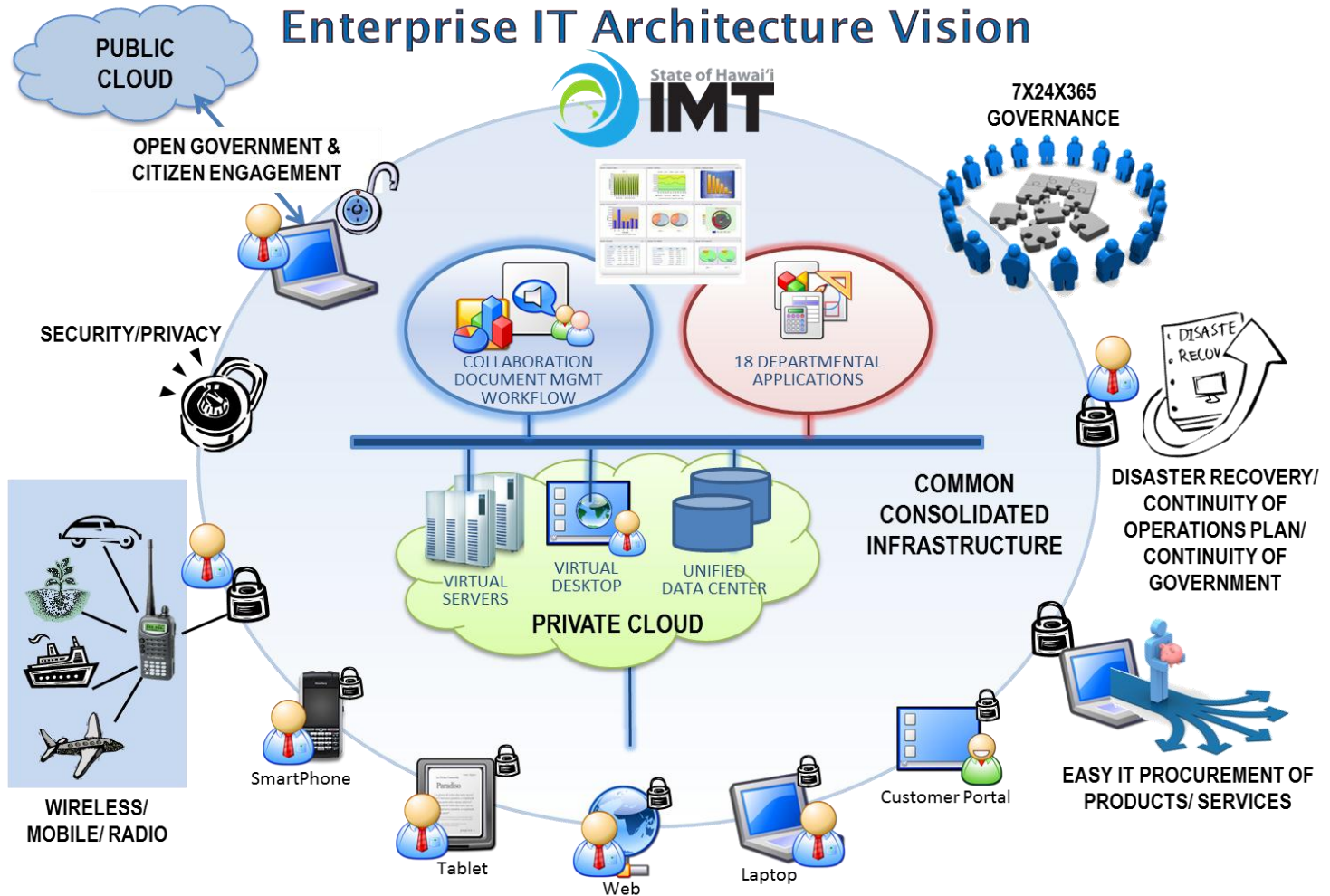
| benefit          | years to mainstream adoption  |  |   |   |
|------------------|-------------------------------|--|---|---|
|                  | less than 2 years             | 2 to 5 years   | 5 to 10 years   | more than 10 years                          |
| transformational | SOA: Government               | Consumer Social Networks in Government<br>Public Cloud Computing<br>Smart Governance Operating Framework   | Enterprise Information Management Programs  | Citizen Data Vaults                         |
| high             |                               | Advanced Analytics for Government<br>BPM for Government<br>Business Intelligence for Performance Management in Government<br>E-Discovery for Government<br>Geographic Information Systems<br>Government Cloud<br>Government Data Interoperability<br>Government Shared Services<br>Internal Communities in Government<br>Open Government Data<br>Private Cloud Computing | Cross-Agency Case Management in Government<br>Government Domain-Specific COTS Applications                              | Whole-of-Government Enterprise Architecture |
| moderate         | Federated Identity Management | Enterprise Content Management for Government<br>External Communities in Government   | Behavioral/Gestural Analytics<br>Government Business Process Utility<br>Open-Source Public-Sector Vertical Applications |   |
| low              |                               |  |   |   |

As of July 2011

Source: Gartner (July 2011)

Source: "Hype Cycle for Government Transformation" (July 2011)

# Preliminary Future Enterprise IT Architecture Vision

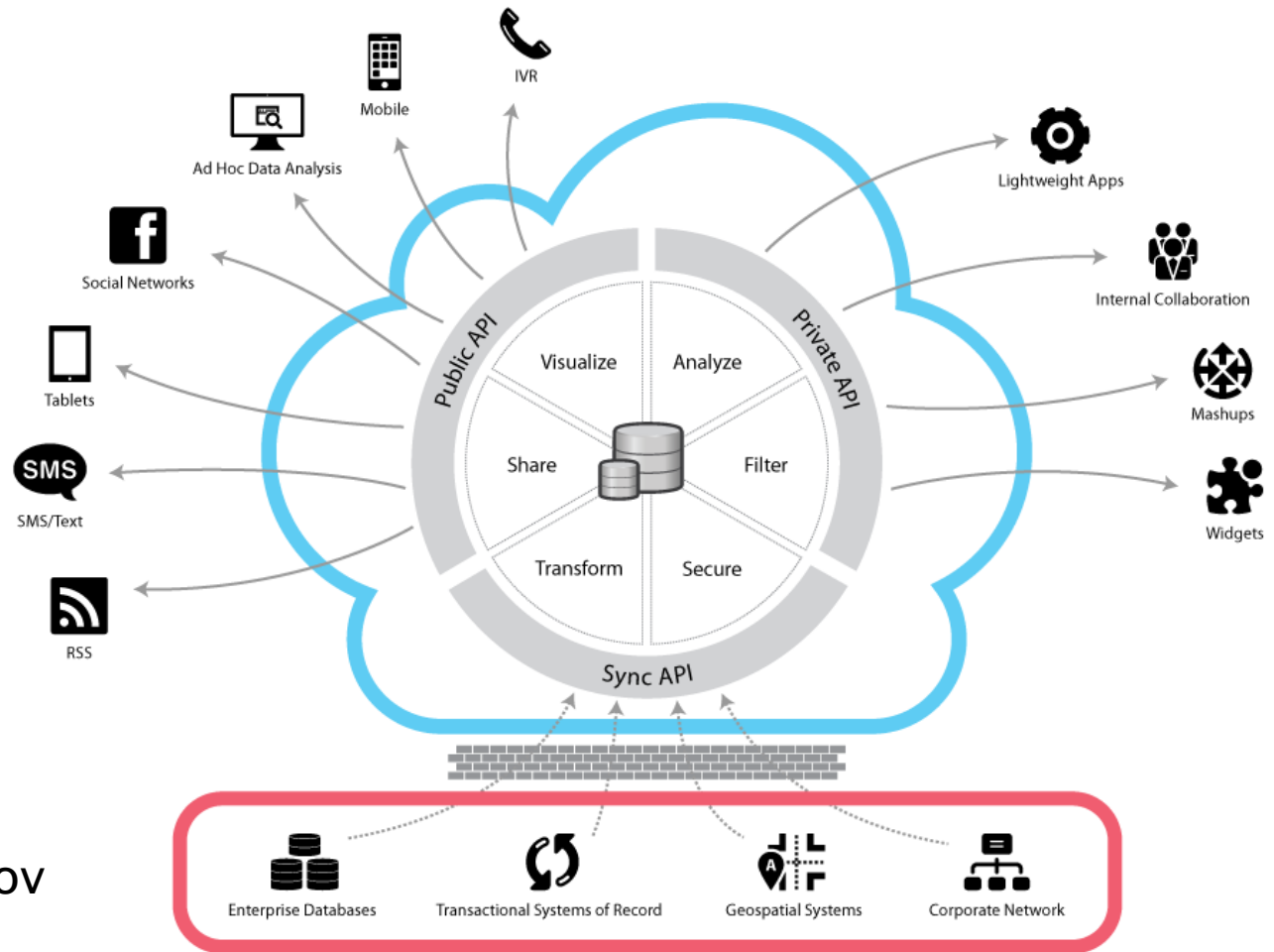


*Access to the right information – anywhere, any time, any mission, securely and reliably*

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



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



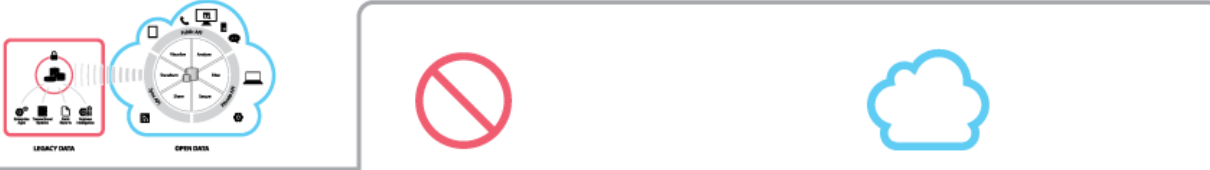
<http://www.data.gov>

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 **DATA.GOV**  
EMPOWERING PEOPLE



# Next Generation Data.gov: Contrasting Legacy Data vs. Open Data

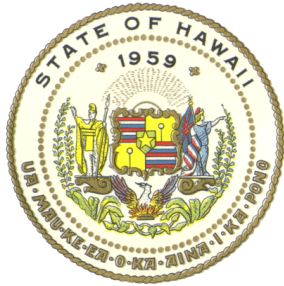


| Attribute/Characteristic             | Legacy Data  | Open Data   |
|--------------------------------------|--|---|
| <b>Core Use Cases</b>                | Data Collection, Process Automation, Enterprise Apps | Data Use and Reuse, Data Sharing and Collaboration, Ad Hoc Apps |
| <b>Key Influences</b>                | Corporate Network Computing                          | Internet, Web 2.0 and the Social Web                            |
| <b>Who Benefits?</b>                 | Data Practitioners                                   | The Rest of Us  |
| <b>Where's the Data?</b>             | On Premise   | In the Cloud  |
| <b>Organizational Model</b>          | Business Process Optimized                           | Consumption Optimized   |
| <b>Designed for</b>                  | The PC   | The Web   |
| <b>Security and Permissions</b>      | Secure   | Secure  |
| <b>Accessibility</b>                 | Very Restricted                                      | Very Accessible   |
| <b>Scalability</b>                   | Employee Use   | Widespread Use  |
| <b>Finding the Data</b>              | By Table Name  | Searchable Catalog  |
| <b>Data Exploration and Analysis</b> | Add-on PC/Desktop Tools                              | Native in Platform; In Web Browser                              |
| <b>Charts and Maps</b>               | Add-on PC/Desktop Tools                              | Native in Platform; In Web Browser                              |
| <b>Ad Hoc Access</b>                 | None to Limited, guarded by a gatekeeper             | Open and unfettered but authenticated                           |
| <b>Developer Access</b>              | None to limited, rigid access via closed protocols   | Open, standards-based, modern (RESTful) APIs                    |
| <b>Reporting</b>                     | Static   | Dynamic   |
| <b>Data Usage Metrics</b>            | Ask the Gatekeeper                                   | Open  |



<http://www.data.gov>





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INNOVATION  
SUCCESS  
EVALUATION  
DEVELOPMENT  
GROWTH  
SOLUTION  
PROGRESS  
MARKETING



# Mahalo!

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