Consumers Embrace Emerging Technologies
Public Sector Operations a Reminder of 20th Century Performance

“There’s an app for that”

“There’s a form for that”
“Game-Changing” Innovation in Private Sector
GE’s “Reverse Innovation” Model Ushers in New Growth Opportunity

1. GE software-enabled portable ultrasound developed for price-sensitive rural Chinese market

2. 85% price performance improvement expands American market size, “democratizes” access to quality healthcare

President’s Strategy for American Innovation

Innovation for Sustainable Growth and Quality Jobs

Catalyze Breakthroughs for National Priorities

• Unleash a clean energy revolution
• Support advanced vehicle technology
• Drive breakthroughs in health IT
• Address the “grand challenges” of the 21st century

Spur Productive Entrepreneurship and Promote Efficiency

• Promote American exports
• Support open capital markets that allocate resources to the most promising ideas
• Encourage high-growth and innovation-based entrepreneurship
• Improve public sector innovation and support community innovation

Invest in the Building Blocks of American Innovation

• Restore American leadership in fundamental research
• Educate the next generation with 21st century knowledge and skills while creating a world-class workforce
• Build a leading physical infrastructure
• Develop an advanced information technology ecosystem

Source: www.whitehouse.gov
From R&D to Deployment
Cloud Computing an Opportunity for Economic Growth, Efficiency

$15+M in NSF research awards supporting cloud partnerships with Google, Microsoft, Yahoo, IBM, HP, Intel
“Beta Block” R&D Initiative to Connect Homes

Internally Funded Programs Spur Innovation in National Priorities

Case in Brief

• Launched in November 2009
• Case Western Reserve University collaborative includes 40+ partners, 100+ household gigabit network
• R&D effort, with private sector stakeholder support, to spur innovation in poor communities “next door”

• Program metrics and goals set to measure changes related to:
  • Neighborhood Safety
  • Health and Wellness
  • STEM Education
  • Energy Sustainability

Source: http://blog.case.edu/lev.gonick/2009/11/17/new_gold_standard_for_smart_connected_communities_case_western_reserve_university_announces_1000_mbsec_fiber_to_the_home_research_project
Toward a New Performance Compact
A Government that Works

Core Principles
- Prioritization
- Transparency
- Engagement
- Rapid Results
Agencies Publish Open Government Plans
Unprecedented Initiatives Reflect President’s Values

Health and Human Services launches Community Health Data Initiative – public-private effort aimed to help communities use health data.
“Government as a Platform”
Federal, State and Local Approach to Unlock the Value of Data
Engaging Front-Line Workers in Reform
VA Seeks Frontline Input to Reduce Claims Turnaround Times

7,000+ workers (out of 19,000) submit, comment on 3,000+ ideas over one month –ten are approved for implementation

Idea: Lessen the need for VA medical examinations by providing Veterans with standardized medical questionnaires to be completed by their treating physicians

Source: Department of Veterans Affairs
Prize Competition Delivers Results in 9 Hours
MIT Embraces “Spirit of Commonwealth” to Answer DARPA’s Call

DARPA Network Challenge

MIT Balloon Team Design

ALICE WINS $750
BOB WINS $500
CAROL WINS $1,000
DAVE WINS $2,000

Source: balloon.mit.edu; networkchallenge.darpa.mil
NHIN Direct an Open Collaboration for HIE

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<th>NHIN in Brief</th>
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<td>Services</td>
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<td>Standards</td>
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<td>Policies</td>
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<td>Trust Fabric</td>
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“A set of **policies**, **standards** and **services** that enable the Internet to be used for secure and meaningful exchange of health information to improve health and health care”

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<th>NHIN Direct in Brief</th>
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<tr>
<td>Open, transparent collaborative process</td>
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<td>Include use of wikis, blogs, open source and open content</td>
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<td>First phase grounded in real-world implementation in 2010</td>
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<td>Follow key rules of HIT Standards Committee Implementation Workgroup</td>
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<td>“Keep it Simple”</td>
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<td>“Design for the Little Guy”</td>
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<tr>
<td>etc.</td>
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Source: [www.nhindirect.org](http://www.nhindirect.org) & [healthit.hhs.gov/faca](http://healthit.hhs.gov/faca)
Catalyzing Breakthroughs for National Priorities

Public Input on “Grand Challenges” for the 21st Century

Use of Social Networking helps grand challenges message reach an additional 1.5M people

White House Request for “Grand Challenge” ideas receives over 700 responses

Source: www.engineeringchallenges.org
*http://www.whitehouse.gov/administration/eop/ostp/grand-challenges-request-information
Catalyzing Breakthroughs for National Priorities

Seeking Public Input on Student-Led Innovation in “Killer Apps”

The Role of Student-Led Innovation in “Killer Apps” for Broadband Networks

Posted by Tom Kail and Aneesha Chopra on March 25, 2010 at 10:37 AM EDT

Students have contributed (pdf) some of the most important advances in information and communications technologies—including data compression, interactive computer graphics, Ethernet, Berkeley Unix, the World Wide Web, speech recognition, Mosaic, and Google.

Students can play the role of innovators again—by leading the way in the next generation of applications. In the same way that Mosaic and Google drove demand for today’s broadband, we need a gigabit second Internet and 4G wireless. Indeed, a key initiative that would cultivate, with student involvement, such a wave of innovation, is what the next generation of applications will be, universities, companies, and even global collaboration, build on investments already made in high-speed research networks such as Internet2 and National LambdaRail, and take advantage of a growing number of grants from the Department of Commerce’s Broadband Technology Opportunities Program (BTOP).

The initiative could have a number of elements, including:

- Campus-based incubators for the development of broadband applications, with access to high-speed networks, cutting-edge peripherals, software development kits, and cloud computing services.
- Relevant courses that encourage interdisciplinary teams of students to design and develop broadband applications.

Send us your ideas and feedback - the Internet2 network plays a key role in this effort

University of Maryland Human-Computer Interaction Lab – partnerships with govt, non profit, and for profit companies – children join researchers to test and design new technologies

Source: http://www.whitehouse.gov/administration/eop/ostp/blog?page=2
"I just am glad someone is listening and to know I'm not alone."

"Where can I find food & water?"

"I see people trapped under a building and they are alive at this location! Send Help!"