

Ready for prime time

Open Source

Anthony Gold
Vice President & General Manager
Open Source Business – Unisys Corporation

<http://anthonygold.blogspot.com>

anthony.gold@unisys.com

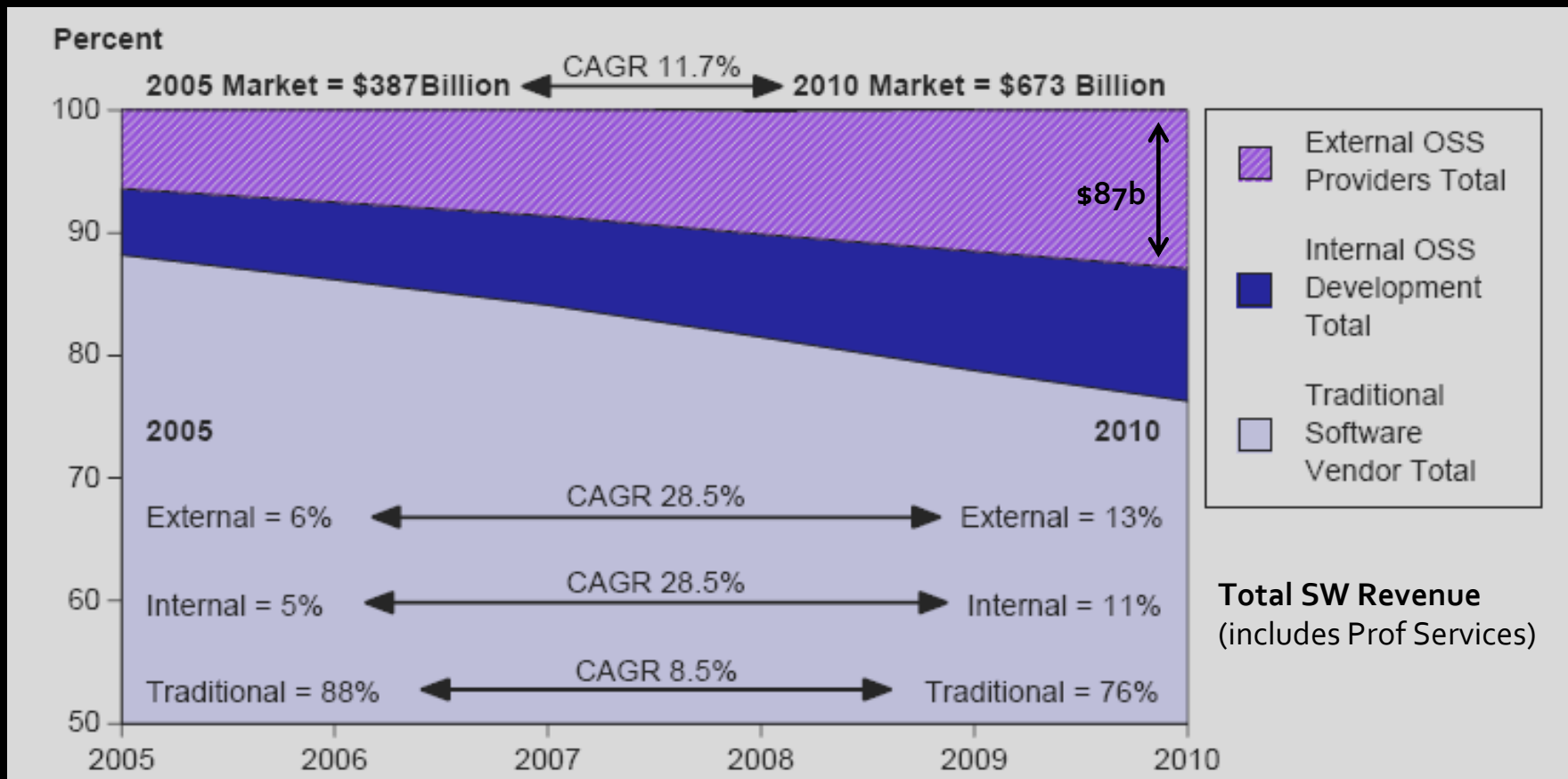
Agenda

- How big is it (open source market)?
- How did we get here?
- What keeps CIOs awake at night?
- How to get more restful sleep?
- What hurdles remain?
- What are folks doing to help?
- Case studies
- Wrap-up

How big is this “trend”?

Much bigger than a breadbox ...

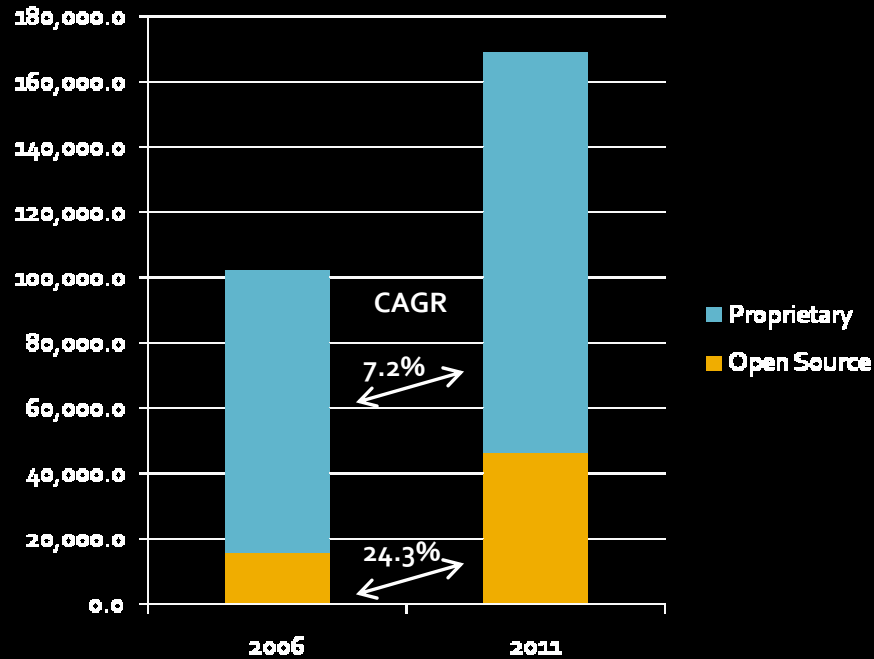
Open Source Impact



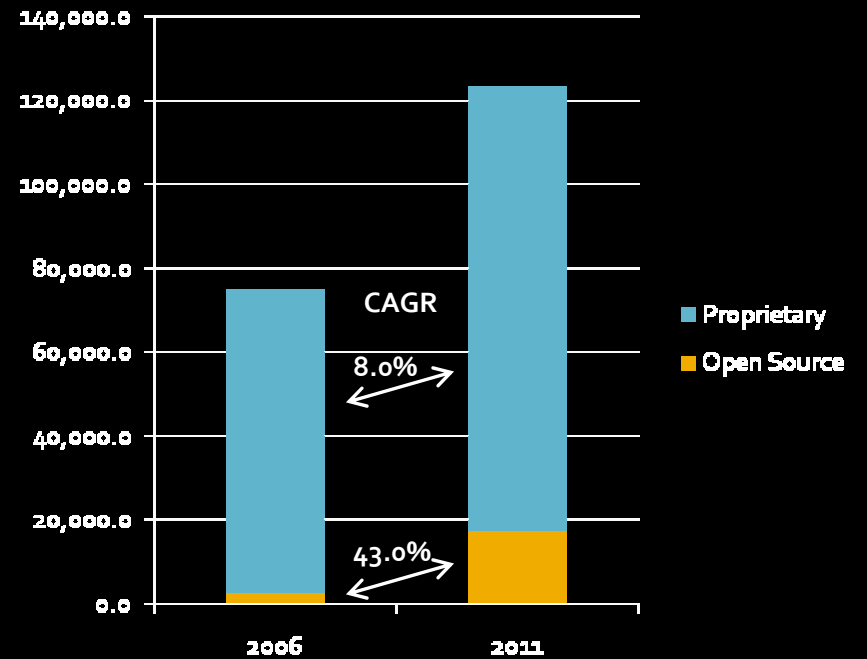
Gartner Dataquest (May 2006)

Stack Traction

Infrastructure SW Revenue (\$M)



Application SW Revenue (\$M)



Source: Gartner Dataquest (February 2007)

How did we get here?

Mass Collaboration ... it's changing the world!

Mass Collaboration

- Wikipedia
- Goldcorp
- Linux



The Architecture of Participation

2000 - Web 1.0

DoubleClick

Ofoto

Akamai

MP3.com

Britannica Online

Personal Websites

Evite

Net2Phone

Page Views

Screen Scraping

Publishing

Content Mgmt Systems

Directories (taxonomy)

Stickiness



2007- Web 2.0

Google AdSense

Flickr

BitTorrent, Limewire

iTunes (audio & video)

Wikipedia

Blogging, LinkedIn

Upcoming.org and EVDB

Skype

Cost per Click

Web Services

Participation (MySpace, YouTube)

Wikis

Tagging ("folksonomy")

Personalized Syndication (RSS)



Harnessing Mass Collaboration



The Peer Produced Airplane

- In the past, Boeing wrote detailed specifications for each part and asked suppliers to build to plan
- Today, suppliers co-design airplanes from scratch and deliver complete sub-assemblies to Boeing's factory, where a single plane can be snapped together like Lego blocks, in as little as 3 days

Mass Collaboration in Science



- Match top scientists to relevant R&D challenges
- Seekers – “I have a problem ...”
- Solvers – “I have a solution ...”



ALS Biomarker
Deadline: Nov 06, 2008
\$1,000,000 USD

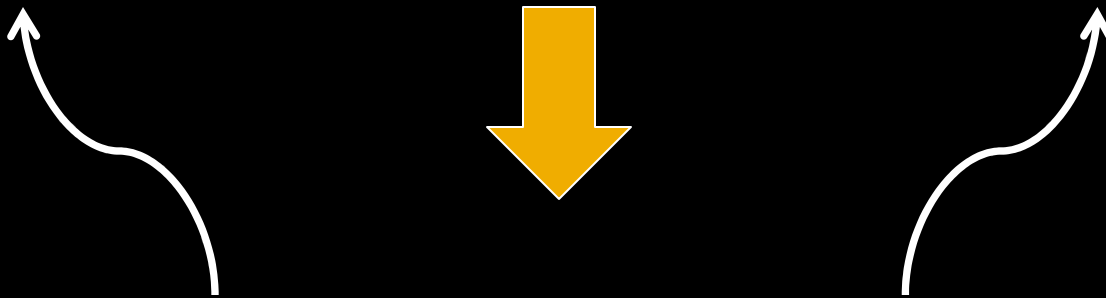
Web 2.0 in Intelligence

United States: 16 spy agencies – 100,000 employees

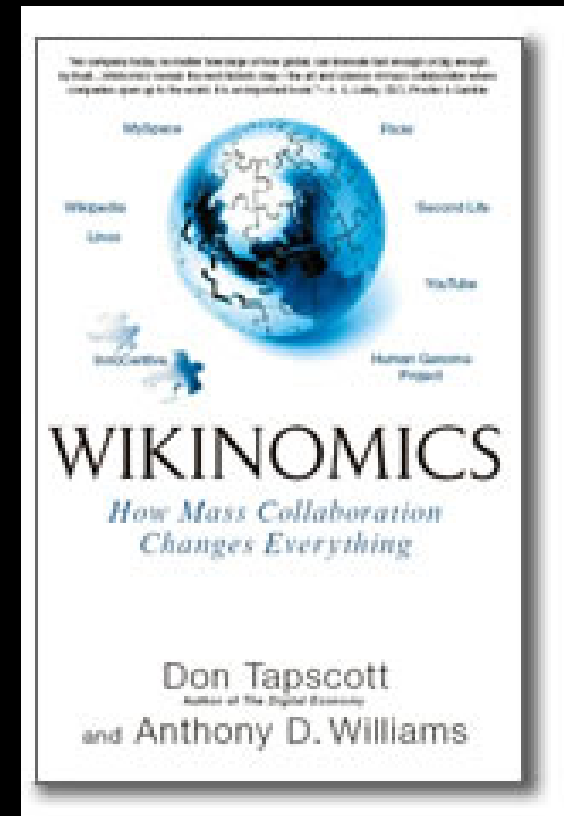
- A-Space
 - Top secret intelligence analysts
- Intellipedia
 - 30k articles
 - 114 new articles and 4,800 edits each workday
- Library of National Intelligence
 - *Amazon-like* article suggestions

"Wikinomics"

PRODUCERS → CONSUMERS



PROSUMERS



What's the pain in industry?

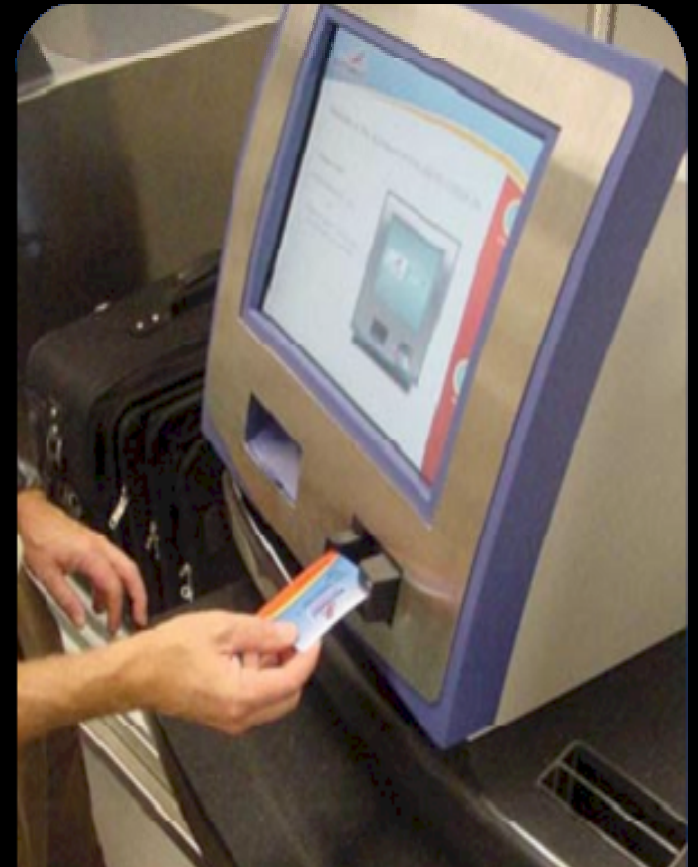
With special emphasis on government ...

The CIO Conundrum™

- IT Budgets declining
- ~70% of IT budget spent on Maintenance
- More accountable for business results
- Users demanding new features/functions
- Customers demanding seamless access to information
- Functions duplicated all over
- Lots of legacy

Customer Experience

- Multi-channel portals
- Critical interaction point for the enterprise
- User interaction model for SOA
- Windows into all services



DISA CIO – John Garing

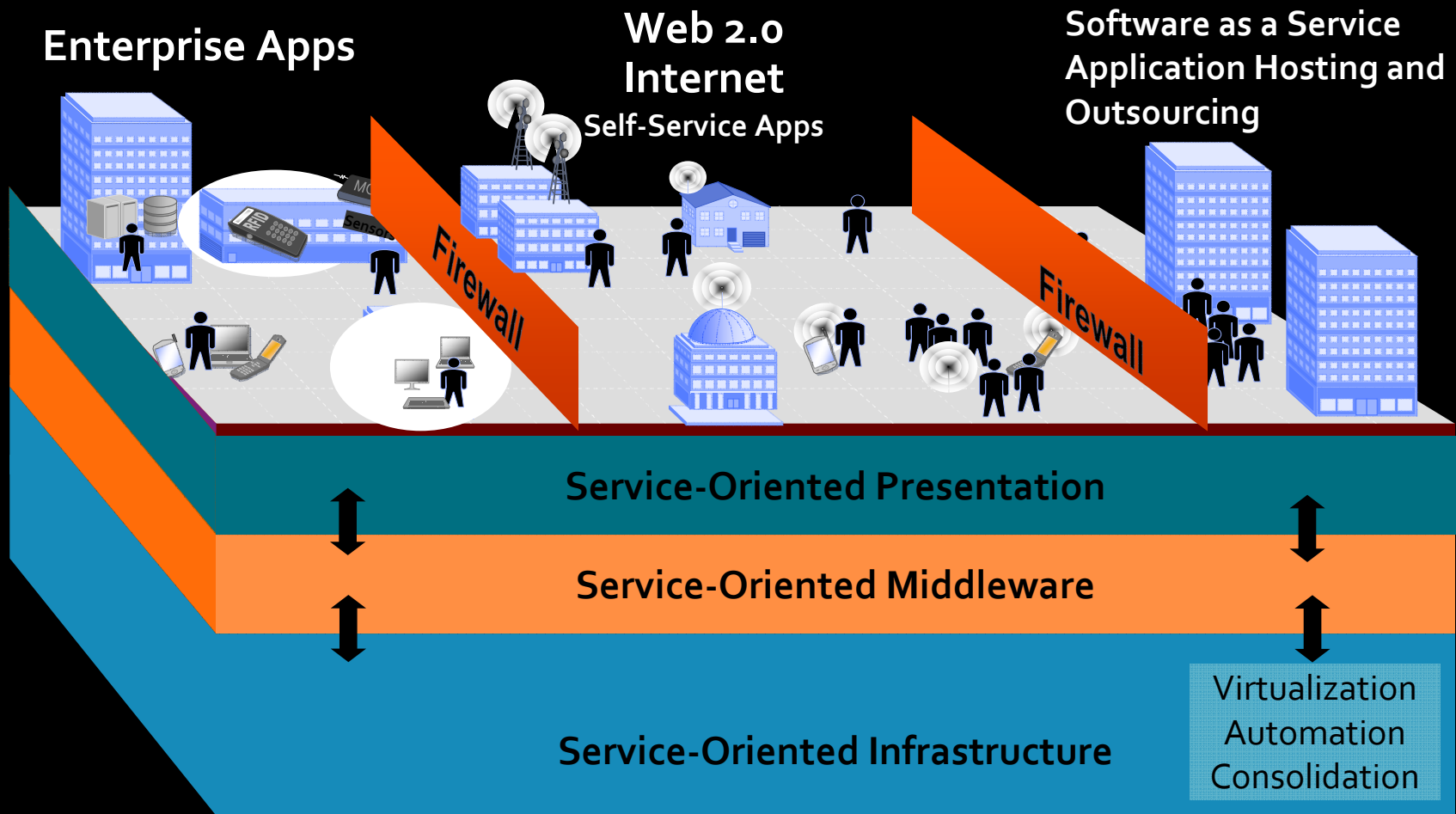
- Defense Info Systems Agency
- Protecting DOD's networks



Solving the CIO Conundrum TM

And getting a better night's rest ...

Enterprise Modernization

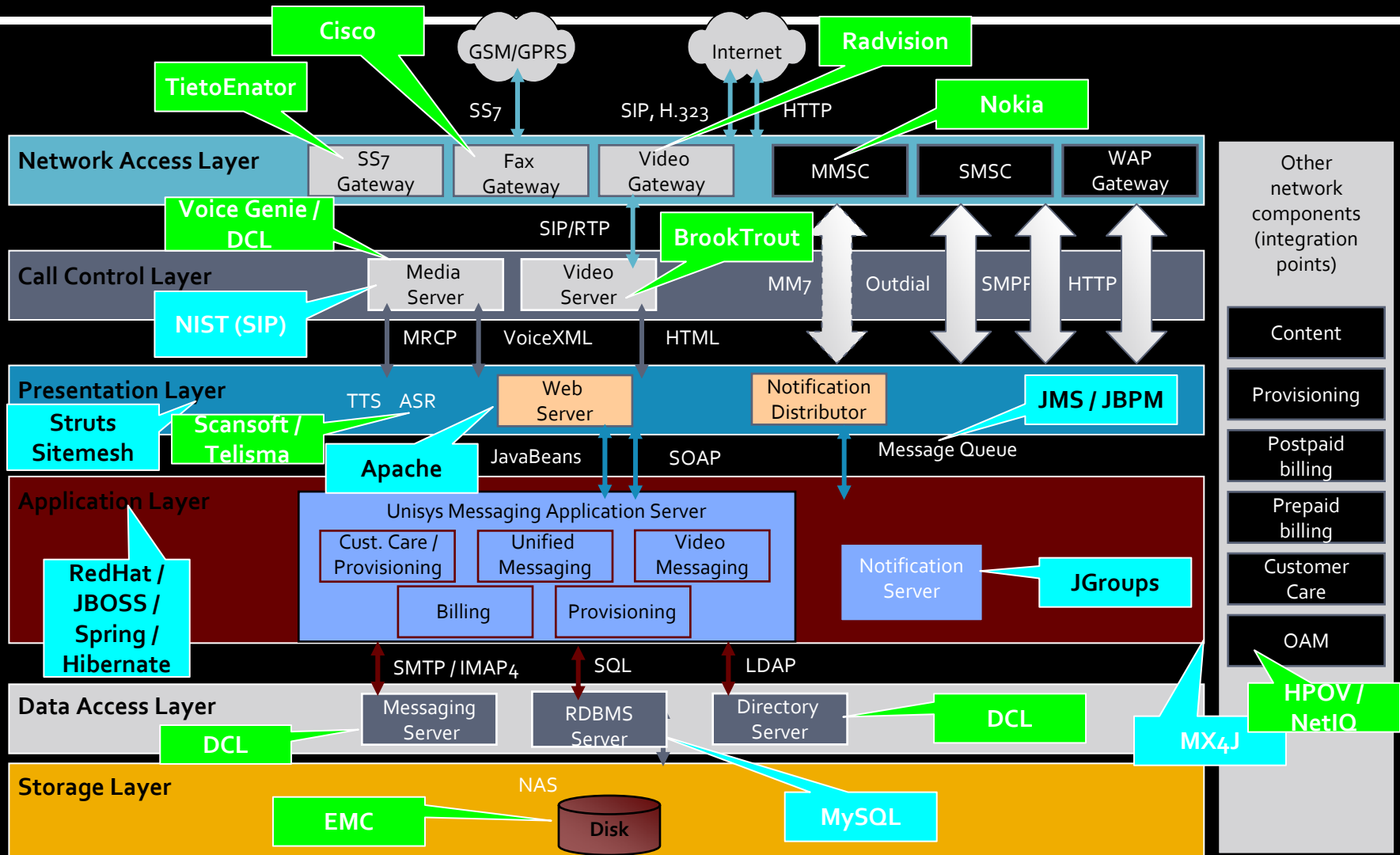


Forrester Research

Forrester Consulting 2007 study on Open Source in Large Enterprises

- Enterprise-class maturity
- Mainstream (not just edge)
- Evaluation leads to adoption
- Doing more with less
 - Code reuse
 - Virtual instantaneous peer feedback
 - Greater innovation
- Reducing IT complexity
 - SOA enabler
 - Integration with legacy

Case Study – Next Gen Messaging



OTD Roadmap – July 2006

Department of Defense

“This report recommends **shifts** in the process of technology acquisition **from closed**, locked-in black box systems **to open** and modular approaches.

These open approaches are **based on open standards**, services based architecture, open source collaboration, and reference open source implementations.

These shifts, in turn, **enable a business process migration** from proprietary products that can only be changed by one vendor, towards a marketplace for professional services to extend and adapt **capabilities on demand.**”

Official Navy memo – July 2007

“This memorandum provides guidance for all Navy and Marine Corps commands regarding the use of **Open Source Software (OSS)**.

The objective of the Department of Defense (DoD) goal of achieving an interoperable net-centric environment is **to improve the war fighter's effectiveness** through seamless access to critical information.

A key piece in **supporting the DoD goal is the ability to utilize OSS** as part of the Department of the Navy's (DON) Information Technology (IT) portfolio.”

Hill Air Force Base – July 2007

18,000 users. Maintenance, engineering, and logistics for some high-power aircraft including the F-16 Falcon and C-130 Hercules.

OpenVMS, Solaris, and other variants of Unix.

Plagued by frequent downtime. Each hour of which cost them about \$1 million.

Standardized on Linux. → Great success! Downtime minimized, turnaround times shortened.

To sustain the existing environment: \$5 million per year. The new environment: \$100k per year.

What challenges remain?

And how do we surmount them ...

Lots of Innovation ...

But difficult to navigate



Inhibitors to more rapid adoption

- Strategic Fit
 - Which projects are right for my environment?
 - How do they all fit together for me?
- Enterprise Support
 - Can I bet my business on this stuff?
 - Who can I turn to for guarantees (indemnification)?

What are folks doing to help?

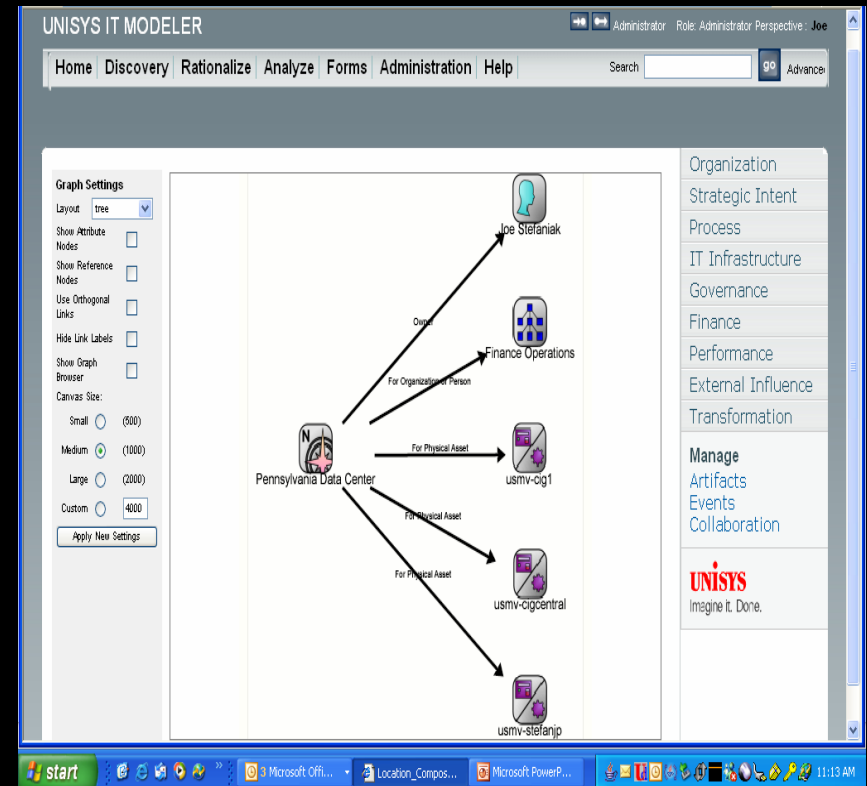
With special emphasis on SI's like Unisys

Systems Integrators (SI's)

- Providing Strategic & Enterprise support
 - Unisys, IBM, HP, Cap Gemini, EDS, Accenture, etc.
- What has Unisys been doing?
 - LZW ☹️
 - Dynamic Partitioning, MPIO, Five 9's, 4x-32x
 - ES7000 – Guinness Book of World Records
 - Modernization – SOA
 - Virtualization, Migration, Consolidation

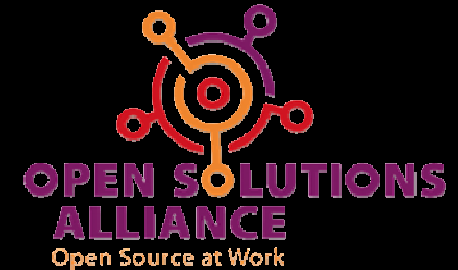
First Step: Discovery

- Identify assets
- Map to business processes
- Build models
- Determine SOA opportunities



<http://www.esj.com/news/print.aspx?editorialId=2515>

Open Solutions Alliance



- Non-Profit (501c6 – same as Eclipse)
- Interoperability Standards
- Reference Architectures and Case Studies
- Community Awareness
- Complete Transparency
 - <http://www.opensolutionsalliance.org>

Case Studies

More than just theory

European Union



- Open Source Observatory and Repository (OSOR)
- European Member States of the European Union (EU)
- Centrally store, share, and collaborate around software development and consumption
- Examples: public e-procurement, application interoperability, e-ID card processing
- Goals: replace proprietary, sharing software, speed up development and deployment

US Navy

- Aviation Data Management and Control System (ADMACS)
- Supports real-time operations of an aircraft carrier
- Built on Linux, MySQL (cluster), JBoss AS, and JBoss Enterprise Middleware suite



Federal Reserve



- One of the US's largest processors of payments
- Modernization of check processing systems
- Open Payments platform
 - Meet current and emerging customer demands (12 Federal Reserve banks)
 - Extremely high-volume performance requirements
 - SOA methodology

Wrap-up

A dramatic shift is upon us

Sustained Inattentional Blindness for Dynamic Events

- “Gorilla Experiment”
- Conscious Unconsciousness
- Pay attention to “gorilla” markets



<http://viscog.beckman.uiuc.edu/grafs/demos/15.html>

Thank You!

Blog: <http://anthonygold.blogspot.com>

Email (w): Anthony.Gold@unisys.com

Email (p): apgold@yahoo.com

Linked In: <http://www.linkedin.com/in/anthonygold>