# Web 2.0 in the Enterprise

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Independence. Integrity. Insight.

## Agenda

- **+** Introductions
- Virtual Workplace trends
- **♦ What is Web 2.0?**
- **+** Views and Trends
- **+** Organizational Considerations
- **+** Conclusions and Recommendations



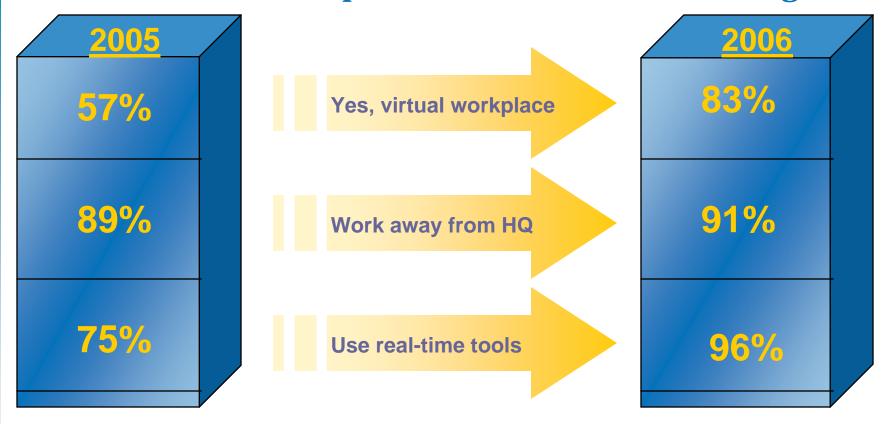
#### Introductions

- About Nemertes
  - Founded October 2002
  - Research data comes from network of 2,500 IT executives willing to discuss their issues and concerns at length
  - Principals all have 16-21 years industry experience, including operational
  - Focused on analyzing the business value of emerging technologies
  - Advise leading global enterprises, carriers, vendors, investment firms on emerging technologies





## The Virtual Workplace is Here—and Growing!



**\$40% - 70% of employees work away from their supervisors.** 



## **Agility Drives Web 2.0**

Agility = the ability to quickly react to change.

### What agility is:

"What's driving folks to be agile is the ability to capture a marketplace where we see one, to create a first-mover advantage. To be able to shift out of a marketplace that's not competitive."—Nemertes Research IT Advisory Board Member

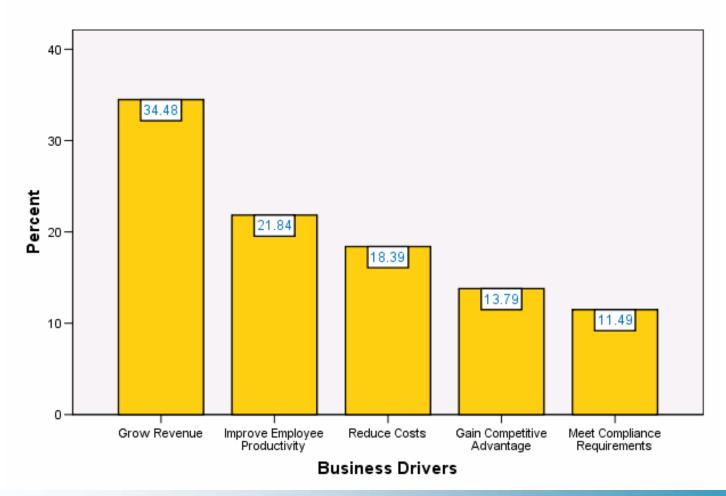
### What agility is not:

"We've had to delay opening stores by weeks to months because the infrastructure wasn't ready. That's not good." -Nemertes client





### **Collaboration Drivers**





#### What Is Web 2.0?

#### Origins

- **†** Tim O'Reilly, Dale Dougherty
- http://www.oreilly.com/pub/a/ oreilly/tim/news/2005/09/30/ what-is-web-20.html

#### Key characteristics

- The web as a platform
- Social networking "The Wisdom of Crowds"
- Data is king
- Applications via the web
- Rich web-based user interfaces





#### The Pillars of Web 2.0

- Web browser as the user interface
  - No regard for "which" browser, all should be supported
- Users are in control applications provide a framework, users provide the content
- Users should be able to self-organize
- Users should be able to easily share information
- Applications should be extensible users build upon base-level functionality



### Web 2.0 Architecture

Blogs
Wikis
Social Networking
Shared-workspaces, community building

RSS/ATOM Syndication

AIR/AJAX/Ruby/Gears



### Web 2.0 Products and Services

del.icio.us

Services

myspace.com
a place for friends

facebook

WIKIPEDIA

Wikipedia

Services

Myspace.com
a place for friends

Facebook

Facebook

Broadcast Yourself

**Products** 







social software for business



### **Breaking Down Web 2.0**

- **†** The Web As A Platform
  - Applications and users interact across the web
    - **The web browser as the application interface rather than a thick application on each person's computer**
    - Services reside "in the cloud", limited presence on desktops
      - **†** Though some vendors support off-line data modes
    - **Services** improve with scale
      - **†** The more users, the better the experience
  - **Examples:** 
    - Microsoft Office versus Google Apps
    - BitTorrent vs. Napster



## **Social Networking**

- Users control their experience, create content, form communities, and interact
  - Public examples include Flickr, MySpace/Facebook/LinkedIn, YouTube, blogs
- Leverage the power of the community (The Wisdom of Crowds)
  - Tagging and sharing of documents /sites /information
  - Wikis such as wikipedia or smaller variants
  - Using the public as "the expert"
    - **+** E.g. Tripadvisor.com





#### Wisdom Of Crowds

#### Digg

- Users submit stories
- More submissions = higher rankings
- Users can also push stories down
- What's the value?
  - You as the reader can leverage the opinions of others
- Other examples?
  - Amazon or IMDB.com rankings
  - Del.ico.us tagging of web sites
- Business implications
  - Easier access to information, need to monitor external exposure





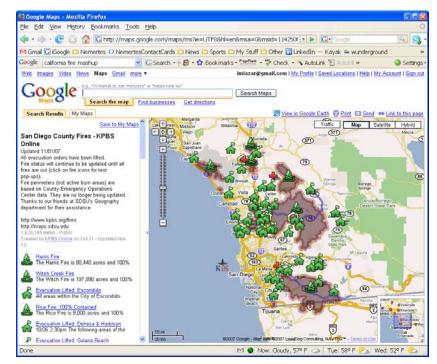
#### Web 2.0 Data Models

#### Data is King

- Web services interfaces enable applications to interact or integrate via common defined software interfaces (e.g. SOAP, SAML, XML)
- Service Oriented Architecture (SOA) to define standards
- Mash-ups enable combining data from different applications to deliver new applications

#### **+** Example:

 Google map data integrated with location tracking applications to enable managers to track fleets or field service in real time



Google Maps mashup to track California wildfires



## Web 2.0 Application Delivery

- Applications via the Web
  - Web-browsers replace thick clients as the user's application interface
  - \* "Software as a service" (SaaS), either provided by the enterprise, or obtained via public offerings
    - **Examples: Salesforce.com, Siebel OnDemand, Google Apps, ThinkFree, Microsoft Office Live Workspace**
  - **A change in pricing models (the end of software upgrades?)**
  - Numerous products aimed at small business market
    - Microsoft Office Live
    - **Google Apps**



### Web 2.0 User Experience

- Rich web-based user interfaces
  - New programming and development environments eliminate the limitations of the traditional web browser
  - **Examples: AJAX, Ruby for development of rich light-weight applications**
  - Approaches from eTelos and Google for off-line access
  - Data syndication from multiple applications via common standards such as RSS (Really Simple Syndication) or ATOM
  - Pervasive video
- Applications designed for any platform
  - Forget limitations: Mac, Windows, Linux, or Mobile platform options



## Web 2.0 Challenges

- So what's the downside?
  - **The Web 2.0 hype meets the business reality**
  - **+** Concerns about individuals using public services
    - Where's my data?
    - Who tracks how my data is used?
    - **+** How do I meet compliance requirements?
  - **Unproven business models** 
    - Anyone remember how hosted applications were supposed to replace desktop apps a few years ago? What happens if my SaaS provider goes out of business?
  - What are the network requirements?
    - Web services/SOA requires guaranteed network performance
    - Need to bridge public/private networks



#### Views on Web 2.0

#### **+** Fear

- "Out of control" users
- Sensitive information on public sites
- → Privacy can I have any anymore?
- **†** This is just for kids
- + How do I ensure compliance/governance?

### **Opportunity**

- Giving users the power to generate their own content, form their own communities, and freely share information creates opportunity
- But, in the confines of governance/compliance/security policies

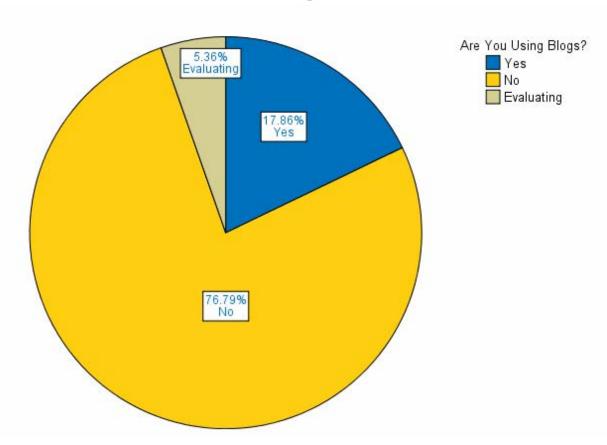


### **Adoption Trends**

- But....Businesses of all sizes are increasingly adopting the components of Web 2.0
  - Generational gap exists, younger workers are much more comfortable living in social networks
  - You may not use Facebook, but the odds are pretty good your kids use it
    - Those that try to limit access to social networking sites are facing a backlash
  - Professional networks exist on sites such as LinkedIn
- Growing interest in the *opportunities* of Web 2.0 to improve collaboration, increase agility, and save money

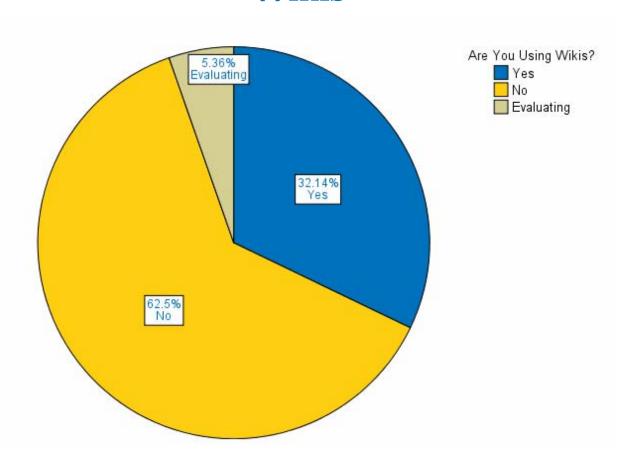


# Blogs





### Wikis





## **Organizational Stumbling Blocks**

- Lack of awareness
  - Both opportunities and threats
- **+** End-user deployed apps
- Key areas slipping through the cracks
  - Security
  - → QOS
  - + High reliability
  - Identity management
  - **+ Compliance & Control**
  - End-user training
- Silos of decision making
  - Example: Separate wikis without regard for compliance/retention requirements





## Web 2.0 Strategy Road-Map

- What applications are covered
  - + Hosted or owned?
- Rules of the road
  - **+** Compliance/security/governance
- Define partner strategy
  - How to leverage hosted services to save time/money
- External as well as internal opportunities
  - + Customer / partner communities?
  - **+ Vertical specific communities?**
- **Define training plans**





### Thank You!

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