Social Networking Within The Boeing Company

Position Statement for W3C and OpenSocial Workshop:
"Social Standards: The Future of Business"

Adam Boyet, Mark Bryant, Ann Bassetti,
Global Collaboration Technologies
August 2013

Boeing is huge

- 175,000 employees
- 5 continents; 71 countries; 50 U.S. states
- Customers in 145 countries
- 189 international sites supported by Boeing IT infrastructure
- 24,000 suppliers in 71 countries
- Research, design and technology development centers, and programs in multiple countries
- Manufacturing, services and technology partnerships with companies around the world

Hence, needs all modes of collaboration & communication

2

Major commitment to social business

- One of the largest intranets in the world

- Major commitment to social networking for business purposes, both inside and outside the enterprise

- Primary current 'social media' focus is on deployment of, and engagement with, an internally-built social networking tool, "inSite" (http://www.w3.org/2009/Talks/Boeing-tpac09.pdf).

- Within ~4 years:
  - 83K employees have customized their user profile
  - extensively used for discussions, sharing, connecting, identifying expertise
  - is the corporate people directory
  - is the tool for enterprise mentoring system

Primary goals

Help users:

- Find out about each other personally or professionally

- Mine their own networks of contacts & acquaintances for advice, references, referrals

- Form teams, both formal & informal communities/groups

- Collaborate on the same or similar work objects

- Discuss & comment on their work

- Organize work from their perspective

- Identify relevant work

- Discover other people with common interests

- Alert users to information or events that may be relevant to them

- Learn from others' expertise

- Capture knowledge with transparent collaboration instead of via private email threads (where most knowledge is lost to others)

4

inSite

- Internally-built, from "scratch"

- Leverages:
  - Java and open frameworks (e.g., Spring, Hibernate, Solr, Lucene)
  - With W3C and other open standards in mind (e.g. SIOC, FOAF, RDF, ATOM)

- Integrated with the enterprise-wide Web single sign-on tool (a commercial product) for authentication & identity management

- When inSite was developed there was no wholly-integrated social networking platform available

- Allows us to very quickly integrate the user feedback that matches Boeing needs.

- Thus far, 109 inSite releases.

Other Boeing collaboration tools

- Most are COTS (commercial off-the-shelf)

- Massive deployments of:

  - Microsoft technologies (SharePoint, Exchange, Office, Lync, Search)

  - Atlassian Confluence (wiki)

  - Wide assortment of other collaboration & communication tools:

    - telephony

    - video conferencing

    - data conferencing

    - streaming media

    - group chat

    - ...

New opportunities: factory

- Actively exploring how social tools might be used in our factory manufacturing environments. Differences between factory & offices:

  - Factory workers have shared workstations

  - Much less time to explore on the computer

  - Factory culture is more hierarchical, 'command-and-control',

    – Workers are wary about whether or not they are 'allowed' to use a social networking tool

    – Or if they'll get in trouble for voicing a controversial opinion.

  - In both factory and offices:

    – Many managers worried about people wasting time, or behaving inappropriately

    – Tend to be differences in generational perceptions about value of new social tools.

New opportunities: external

- Externally, Boeing Corporate Communications uses Twitter and a few blogs for marketing purposes.

- Boeing Facebook account is primarily a recruiting tool.

- 10s of 1000s of external customers, suppliers and partners:

    - currently log on at the Boeing firewall daily

    - allowed tightly-controlled access to specific resources – but not to our social environments.

- Envision using social tools for greater collaboration with our suppliers and partners, but haven't gone down that path yet.

- Wide variety of security and identity concerns.

Questions and issues

1. As we deploy other tools with profile capabilities, how can we seamlessly integrate profile information, consolidated within inSite? (We do not want our users to have to recreate their information in multiple locations.)

2. In addition, we want our employees to be able to update profile information from anywhere.

3. What are best ways to consolidate & view one's activity stream, pulling activities from multiple sources?

4. How to share one's activities between systems?

5. A primary goal for our social networking effort is to better identify expertise. What standards are needed for analyzing the social / professional networks in the company?

6. Should there be a standard way to explain / describe expertise to make it easier to exchange this data between systems?

Questions and issues, continued

7. Another big goal is to capture and manage our 'knowledge'. We widely enable tagging and category management – but humans are unreliable. Do we need any additional technical foundations to enable better information management, especially to achieve some sort of commonality between products?

8. Boeing will always have widely diverse systems and sources. How are others leveraging or augmenting COTS applications to exploit interoperability goals?

9. How to "bridge" authentication schemes between COTS, internal applications and SSO (Single Sign-On) implementations?

10. Can there be a standard that security providers and commercial product vendors all implement to make this easier for businesses? Is there an existing one that could be adopted?

Back up examples

Example: Question answered quickly!
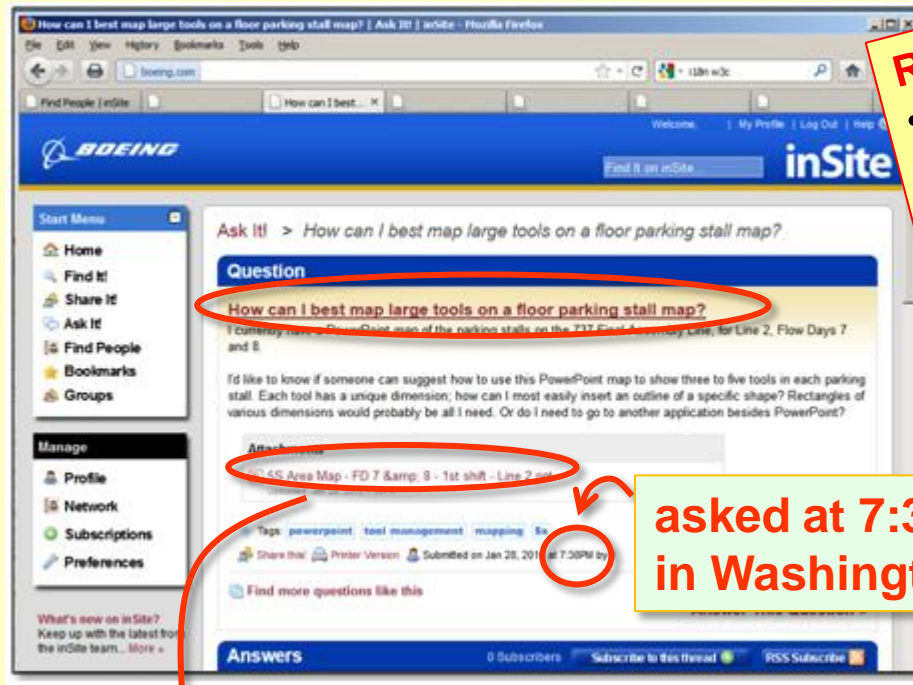
RESULTS:
- answered in less than 24 hours, by employees across the company
- knowledge captured & documented for all

answered 3:00am -- S. Calif.

add'l discussion 7:25am -- Washington

asked at 7:38pm in Washington
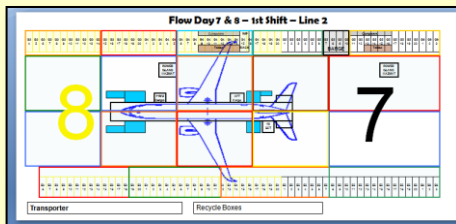
attachments / illustrations

confirmation, 9:28am -- Virginia

January 2010 = knowledge captured!

12

inSite: Advanced People Search Results

search:
- **skill = "environment"**
- **skill = "safety"**
- **skill = "radiation"**
- **language = "Japanese"**

3 people (who have put skills in their User Profile)

can export results to Excel file, or send email to the list

13

inSite: Skills of all who report to a manager

You can also see the skills for all the people who report to a particular manager

If Brad needed technical help in middle of night and didn't know who to call .. . he could click the skill & see who in in his organization has that skill, with their phone number, email , etc.