

Wikis and Information Sharing

Al Williams - alw@psu.edu

Session 5331, SHARE in San Jose

August 15, 2008

<http://www.personal.psu.edu/alw/s5331aw.pdf>

General Info

- Some links won't work for you because they need authentication
- I like questions and participation
- These are my opinions (but my peers agree with me)
- Answers to questions during the presentation are posted at the end

Agenda

- Introduction - Who Am I?
- What is a Wiki?
- Why Would I Use a Wiki?
- How is Wiki Different From:
- Wiki Products
- Wiki Experiences at Penn State
- SHARE Wiki?
- JotSpot and Google Sites
- Conclusions
- Q & A

Who Am I?

- Al Williams www.personal.psu.edu/alw
 - Computer Scientist - Penn State 1968
- Work Experience
 - Sikorsky Aircraft, 10 years
 - Scientific Computing - 5 years
 - Systems Programming - 5 years
 - Penn State, 29 years
 - Manager of Mainframe Systems (academic) - 8 years
 - Director of Classroom and Lab Computing - 14 years
 - Team Leader in Emerging Technologies - 7 years
 - SHARE
 - Attendee since 1971
 - Volunteer since 1979

Emerging Technologies?

- Things we work on
 - Identity and Access Management
 - Federation - Shibboleth
 - Networking
 - Security at Line Speed (SALSA)
 - Pervasive Wireless
 - Internet2, National Lambda Rail (NLR)
 - Computing in the Digital Arts
 - IT Architects in Academia (ITANA)
 - Social Networking, Social Software
 - Integrated Communications
 - Security Best Practices

Social Software

- From Wikipedia
 - Social software (including Web 2.0 and Enterprise 2.0) is normally defined as a range of web-based software programs. The software allows users to interact and share data with other users.
- Examples:
 - Instant Messaging
 - Discussion Forms
 - Blogs
 - Wikis
 - Social Bookmarking
 - Virtual Worlds

Social Networking Examples

- Social Networking Video
 - http://www.youtube.com/watch?v=6a_KF7TYKVc
- Social Bookmarking Video
 - <http://www.youtube.com/watch?v=x66lV7GOcNU>
 - <http://delicious.com>

What is Wiki?



- Ward Cunningham 1995
- Influenced by airport bus in Honolulu
- Wiki means quick and Wiki-Wiki means very quick
- Created quick way to collaborate called WikiWikiWeb
- Shortened to Wiki
- The smallest online database that could possibly work

What is Wiki?

- Server software that allows users to freely create and edit Web page content
- Uses any Web browser
- Supports hyperlinks
- Simple text syntax for creating new pages and cross links
- Allows the organization of contributions to be edited
- Wiki Video
 - <http://www.youtube.com/watch?v=-dnL00TdmLY>

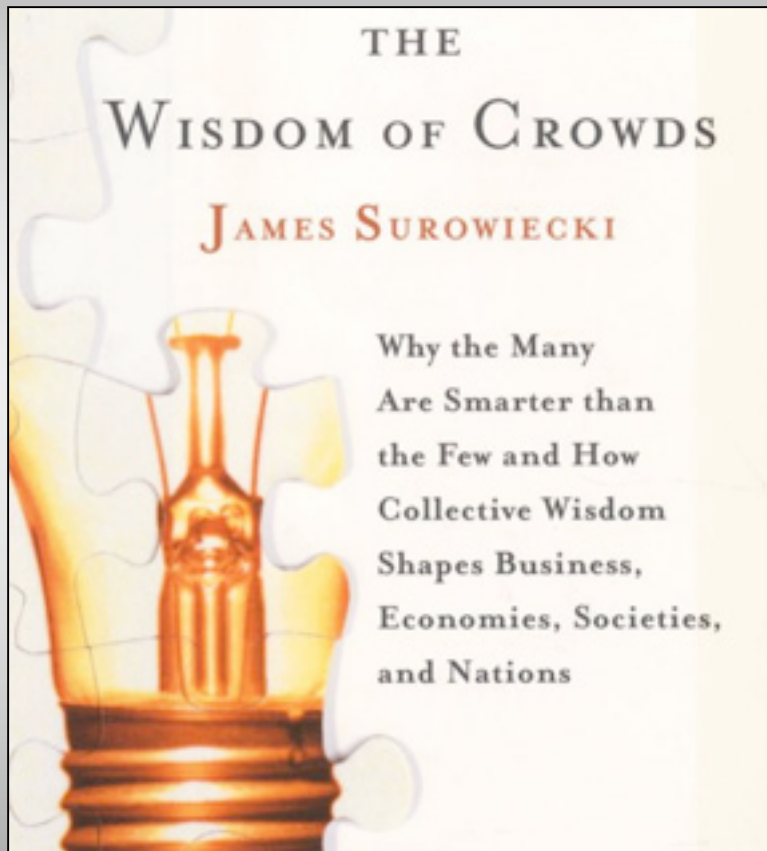
What is Wiki?

- Not a standard
- Wiki products differ
 - Mark up language
 - WYSIWYG editor
 - Access Controls
 - Common Gateway Interface (CGI)
 - Hosted service
 - Build your own
 - Free or for purchase
 - Often open source

Why Use Wiki?

- Facilitate teams working together
- Allow anyone or selected group to
 - Read
 - Update
 - Comment
- Examples
 - Annual Report
 - Project Management
 - Documentation
 - Strategic Plan
 - Encyclopedia <http://www.wikipedia.org>

Why Use Wiki?



- It works
- Who Want's to be a Millionaire
 - Experts right 65%
 - Audience right 91%
- Google ranks pages by popularity

How is Wiki Different From

- Blog
 - Like a newspaper article
 - People can comment, but not modify
- Discussion Forum
 - Pick a topic
 - See what others say about it (thread)
 - But no final document
- Listserv
 - Email comments on a topic
 - Sort of a Discussion Forum by email

Hosted Wiki Service

- Vendor runs wiki for you
- You pay
 - By size
 - By number of users
 - By amount of space
 - By features
- You configure and manage content
- Sometimes offer free personal wiki

Hosted Wiki Products

- Wikispaces - offers free personal
 - <http://www.wikispaces.com/>
- Wet Paint - offers free personal
 - <http://www.wetpaint.com/>
- Peanut Butter Wiki - offers free personal
 - <http://pbwiki.com/>
- Confluence
 - <http://www.atlassian.com/hosted/confluence/>
- JotSpot (recently purchased by Google)
- Google Sites - free, can purchase enterprise services
 - <http://sites.google.com/>

Wiki Software

- Usually downloadable product
- Usually open source
- Often free
- You install and run on your server
- You manage your database on your server

Wiki Software

- MoinMoin
 - <http://moinmo.in/>
- Twiki
 - <http://twiki.org/>
- Media Wiki
 - <http://www.mediawiki.org/>
- Confluence
 - <http://www.atlassian.com/software/confluence/>

MoinMoin

- Written in Python
- Scaleable - good performance
- Some interesting features
- Free
- GNU Public License

Twiki

- Written in Perl
- Open Source, GNU Public License

Media Wiki

- Free
- Open Source GNU Public License
- PHP script
- Wikipedia uses this

Confluence

- Open Source
- For fee product from www.atlassian.com
- Written in Java and C
- Lots of extensions
- Wiki of wikis

PSU Wiki Experiences

- We want a wiki that is
 - Extensible
 - Feature Rich
 - Scaleable
 - Has Access Control
 - Usable
- Will run our own servers
 - Privacy concerns
 - Already have people and server resources
- ET providing prototype

PSU Experience - MoinMoin

- Scalability looks good
 - Python compiled code
- Access Control
 - Use WebAccess Front End (authentication)
 - Can (with some work) manage authorization
- Some nice features
- Usability not so good
 - Seems to need too much admin help
 - Users not happy with it
- Free, but...

PSU Experience - MoinMoin

- Database back end
 - MySQL
- Prototype by another group
- Never opened up for general use

PSU Experience - MediaWiki

- Scalability looks OK with PHP
 - If Wikipedia can do it ...
- Access Control
 - WebAccess Front end
 - Separate wiki instances for groups
- Nice Features
 - MediaWiki Extensions
 - http://www.mediawiki.org/wiki/Extension_Matrix
- Usability is Good
 - People are familiar with this one
 - Would have liked bread crumbs
- MySQL back end database
- Free

PSU Experience - MediaWiki

- ET set up prototype for internal use
 - <https://et-test.psu.edu/wiki/>
- ET set up prototype for all faculty and staff
 - <https://wiki.et-test.psu.edu/>
- Would have done for students, but ...
- Worked pretty well
- Designed to be completely open (like Wikipedia)
- Not so happy with separate instances for access control

PSU Experience - Confluence

- For fee product
 - One time purchase
 - Annual maintenance
- Free Personal Wiki
 - <http://lily.garden.et-test.psu.edu:8080/>
- Very rich feature set
 - Many Confluence Plugins
 - <http://confluence.atlassian.com/display/CONFEXT/Home>
 - Chart Example
 - <http://lily.garden.et-test.psu.edu:8080/display/alwiki/Make+a+Chart>
 - LateX Example
 - <http://lily.garden.et-test.psu.edu:8080/pages/viewpage.action?pagelId=622595>
- Very good user interface
 - <https://wikispaces.psu.edu/display/~alw/Home>

PSU Experience - Confluence

- ET decided to replace MediaWiki with Confluence
 - <https://wikispaces.psu.edu/>
- Worked with Atlassian to add LDAP support
 - Enables use of groups
 - PSU ITS supports user managed groups
- Working with CIC to document needs
 - <http://www.cic.uiuc.edu>
- Being used by Internet2
 - <https://spaces.internet2.edu/>

PSU Experience - Confluence

- This really took off
- Users like the ability to make own spaces
- Users like the ability to manage own ACLs
- The LDAP groups part is working well
- Purchasing add-on features
 - Gliffy - create flow charts and diagrams
 - <http://www.gliffy.com/>
 - Theme Builder - skin wiki to look like any web site
 - <http://www.adaptavist.com/display/Builder/About/>
- ET looking for group to move this into “Production”

SHARE Wiki?

- Purchased hosted service from JotSpot
- Initially for board and program managers
- Extending it to all volunteers
- Easy to use - No mark up language
- Time to adopt issue
 - Our SHARE team is often mainframe centric
 - Focus on manageability
 - Focus on security
 - Focus on control
 - Takes a while to get this open stuff

SHARE Wiki

- <http://sharewiki.jot.com>
- Invitation to join by email
 - Your email address is your userid
 - You set your own password
- Can build ACL groups such as Board, Program Council, Project Managers
- Most stuff open to all who logon
- Can create public content
 - Orlando SOA Grid
 - http://sharewiki.jot.com/SOA_Grid/

SHARE Wiki

- Interesting Problem - Google bought JotSpot
 - <http://www.jot.com/>
- February 2008 - Google Sites
 - Nice extended features
 - Can use Google Apps
 - <http://www.google.com/a/help/intl/en/index.html>
 - Email invitations restricted to one email domain (e.g. share.org or psu.edu)

Google Sites

- Looks interesting
- Email Domain restriction is a problem
- Probably will need to purchase “Premier Edition” service
 - Pay by number of users
 - Gain use of security features
 - Google purchased Postini
 - <http://www.postini.com/goog/google.php>
- Google has not fully integrated JotSpot customers

Google Sites

- Some examples
 - For SHARE
 - <http://sites.google.com/a/share.org/sites/>
 - For PSU
 - <http://sites.google.com/a/psu.edu/sites/>

Conclusions

- Your mileage may differ
- If you value free - MediaWiki is good
- If you really want it all - Confluence is great
 - You need to have local skillsets
 - You need local servers
 - We moved to clustered service and licenses
- MoinMoin or Twiki might be good enough
- Google Sites will get better

Resources

- Commoncraft - Explanations in plain English
 - <http://www.youtube.com/user/leelefever>
- Wiki History
 - <http://c2.com/cgi/wiki?WikiHistory>
- Ward Cunningham
 - <http://c2.com/cgi/wiki?WardCunningham>
- Wikipedia
 - <http://en.wikipedia.org/wiki/Wiki>
- Wiki Design Principles
 - <http://c2.com/cgi/wiki?WikiDesignPrinciples>
- Cunningham & Cunningham
 - <http://c2.com/>
- Google Applications
 - <http://www.google.com/a/>

Questions?

Answers to Questions

- Where can I find a comparison of different wiki features?
 - I found two good sources:
 - Wiki Matrix
 - <http://www.wikimatrix.org/>
 - Wikipedia - Comparison of Wiki Software
 - http://en.wikipedia.org/wiki/Comparison_of_wiki_software

Answers to Questions

- Can I host a wiki directly from z/OS without running a guest Linux?
 - Yes
 - We actually had a hands on lab presentation on this topic at the Baltimore conference: Session 8370 z/OS Tomcat Exploring. You can download the handout from the Baltimore proceedings.
 - The session takes you through installing JSP Wiki under Tomcat on z/OS
 - You can get JSP Wiki at
 - <http://www.jspwiki.org/wiki/JSPWikiDownload>