Initial Experience in Moving Key Academic Department Functions to Social Networking Sites

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Outline

- Institutional context
- Social/cultural context of technology choices
- Evolution of the technology choices
- Targeted department functions and actors
- Evolution of technical architectures used to support these functions
- Discussion and possible generalization

Objectives

- Share preliminary experience
- Start a dialog with other interested researchers
- Receive feedback
- Repeat

Institutional Context

- mid-size urban private university (15,000 students)
- two academic departments: computer science and history
- three core functions
 - o course management
 - research and administrative collaboration
 - o community engagement

Social Context

- Baby Boomers (born 1946-1964)
 - various types of print and broadcast media, mail, telephone
 - encountered the internet as adults
- Generation X (born 1965-1981)
 - widespread access to television during its formative
 - encountered mobile phones and the internet as young adults
- Generation Y (born 1982-1995)
 - o born into the later stages of the PC era and the

Social Context

Successive generations are increasingly willing to

- adopt new technologies
- live more ``public" private lives, much more
- share their personal data with others

Demographic considerations

- Generation Y: all current college students
- Generation Z: now entering college and will constitute the vast majority of users over the next ten years

Evolving Interaction

- Distant past: limited internet access
 - mostly read-only content: FTP, Gopher, WAIS
 - email and USENET
- Recent past: widespread internet access
 - o rapid growth of web, some interactive sites
 - o rapid growth of email for nonpublic interaction
- Present: widespread broadband access
 - o web 2.0: user engagement, public APIs
 - social networking and cloud computing

Present Interaction Landscape

- general social networking: Facebook, Orkut
- specialized professional networking: LinkedIn, XING
- hosted conventional and lightweight blogs: Blogger, Tumblr
- microblogging sites: Twitter
- social bookmarking: Delicious, StumbleUpon
- web content management: Google Sites
- online document management and groupware:
 Google Docs, Zoho

Target Functions

- course management: see paper
- research (and administrative) collaboration
 - 1. knowledge gathering
 - 2. project planning/management
 - 3. collaborative writing and software development
 - 4. bibliography management
 - 5. formal publication
 - 6. other types of dissemination
- community engagement: see paper

Target Actors

- Faculty
- Staff
- Current students
- Prospective students
- Alumni
- External users: employers, faculty candidates, parents, etc.

Evolving Architecture Example: Research Collaboration

- Distant past: email, removable media, early VCS, phone, Unix talk
- Recent past: more modern VCS over SSH, IM
- Present:
 - 1. knowledge gathering: Google Sites wiki
 - 2. project planning/management: Basecamp
 - 3. collaborative writing and software development: hosted DVCS (BitBucket, GitHub), Google Docs
 - 4. bibliography management: CiteULike
 - 5. formal publication: WikiCFP, Twitter, LaTeX/LyX
 - 6 other types of discomination (integrated). Tumble

Conclusion

- Cloud-backed, integration-based approaches off to a good start, effective, continue to evolve
- Related work descriptive, focused on one technology, or non-integration-based (build from scratch)
- To understand how best to broaden participation in computing (e.g. NSF BPC program), further data is needed on social networking participation across other demographic aspects besides age:
 - gender

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Questions?