



Group Information Repositories as Social Systems

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Group information management behaviors and systems are typically studied in terms of **individual** efforts toward organizing and using information, rather than focusing on social effects at the aggregate or **group** level.

the problem

Project Focus

Information organization, reuse by workgroups who share files using an online storage space

Motivation

Systems at this scale (small groups) not often studied; different from Internet, institutional repositories, PIM

Approach

Exploratory case study of groups using CTools system at UM [<http://ctools.umich.edu>]

background

ctools.umich.edu

course/project sites

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Instructors: Textbook Ordering Now Available in Wolverine Access

Now available, class instructors can order textbooks via the Wolverine Access Faculty Center. Please enter by October 29 early order deadline. [Instructors read more...](#)

Teaching Questionnaires Move Online -- Message from Provost Sullivan

I am writing to tell you about an important development in the teaching evaluation system used in most of the University's schools and colleges, the Teaching Questionnaire (or TQ) system. Beginning this semester, Fall 2008, TQ evaluations will be collected online, and paper evaluation forms will no longer be printed. [Instructors read more...](#)

Move, Hide, and Rearrange Your Tabs for Old Courses & Projects

You can customize your tabs using the Preferences tool in your My Workspace. Click the 'Customize Tabs' item in the Preferences toolbar. **New This Fall:** You can now specify the number of tabs you would like displayed along the top of the CTools window in the Customize Tabs screen.

Keep Your CTools Data Secure

An active weblogin session left on a shared computer may leave your CTools account exposed. To ensure that your CTools account and data remain secure, please be sure to complete the following three steps every time you sign off:

- Click the CTools Logout button
- Click the Cosign Logout button
- Quit your browser (else your CTools session may not be completely closed)

CTools & Other Technologies @ Michigan

Photo Credit: Laurie Lai

Want to see your photo on the CTools Gateway?
[Click here to submit your photo.](#)

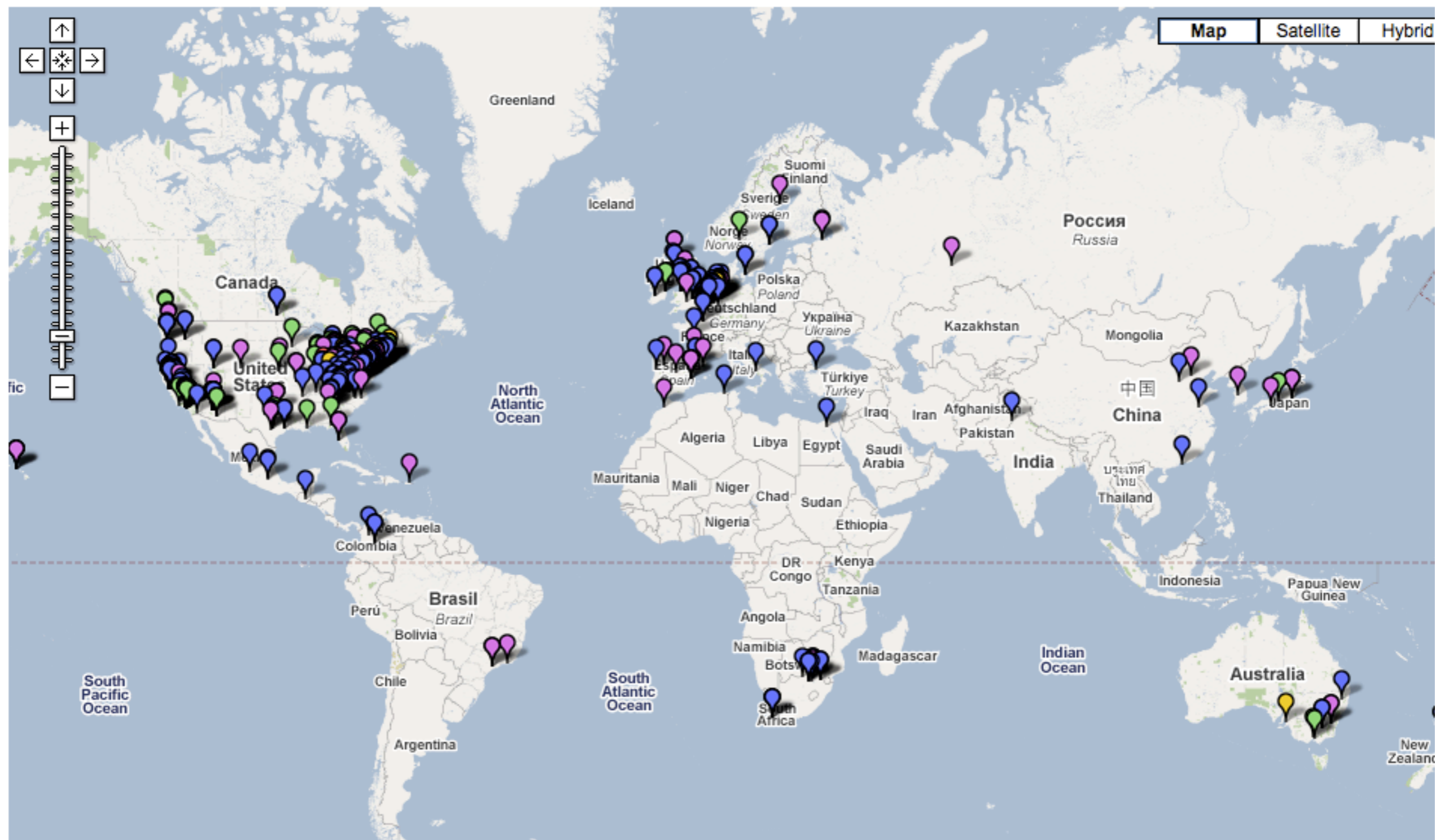
Want to add random photos to your CTools Home page?
[Click here to find out how.](#)

For Your Information...






















Create a Database-Enabled Website Using UM.SiteMaker

UM.SiteMaker is a web-based program, originated at the University of Michigan, that lets non-technical people make highly customized websites and web-databases. This system enables end users to create searchable databases in their websites without the need for assistance from database administrators or programmers. [Click here to request a new UM.SiteMaker site.](#)

[Show All](#) |
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 [Pilots](#) |
 [Partners: Academic](#) |
 [Partners: Commercial Affiliates](#) |
 [Community Servers](#)



<http://sakaiproject.org/portal/site/sakai-community/page/d89dabbf-a033-412f-80c4-a38931056b26>

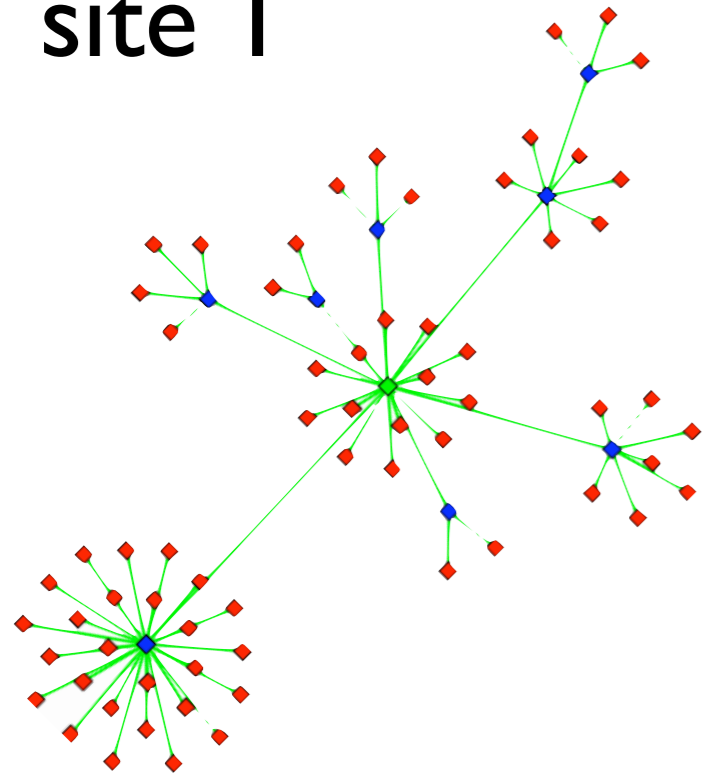
Title		Access	Created By	Modified	Size
	SI DSO Resources	Add ▾	Actions ▾		
	2008 PhD visting days	Add ▾	Actions ▾	Entire site Jude Yew	Mar 11, 2008 1:53 pm 2 items
	Archived	Add ▾	Actions ▾	Entire site Emilee Rader	Feb 18, 2007 10:05 pm 4 items
	Bios for Incoming Students	Add ▾	Actions ▾	Entire site Beth St Jean	Aug 8, 2008 4:29 pm 1 item
	Committee Assignments	Add ▾	Actions ▾	Entire site Beth St Jean	Aug 30, 2008 10:49 am 1 item
	Consent Form Examples	Add ▾	Actions ▾	Entire site Emilee Rader	Jun 2, 2008 5:08 pm 9 items
	collaborative sensemaking consent form.pdf		Actions ▾	Entire site Emilee Rader	Jun 2, 2008 5:21 pm 34.5 KB
	developingl-interview consent_airongLUO.pdf		Actions ▾	Entire site Emilee Rader	Jun 2, 2008 5:21 pm 64.1 KB
	Folk Models of Security Consent Form - approved.pdf		Actions ▾	Entire site Emilee Rader	Jun 2, 2008 5:21 pm 28.1 KB
	GroupBloggingConsent.pdf		Actions ▾	Entire site Emilee Rader	Jun 2, 2008 5:21 pm 31.1 KB
	Illness_Project_Consent.pdf		Actions ▾	Entire site Emilee Rader	Jun 2, 2008 5:21 pm 113.2 KB
	info seeking of college freshmen Consent Form_IRBApproved.pdf		Actions ▾	Entire site Emilee Rader	Jun 2, 2008 5:21 pm 38.4 KB
	institutional repositories Interview Consent Form.pdf		Actions ▾	Entire site Emilee Rader	Jun 2, 2008 5:21 pm 30.4 KB
	Shape Factory Consent Form _approved ver_.pdf		Actions ▾	Entire site Emilee Rader	Jun 2, 2008 5:21 pm 33.9 KB
	using social science data Consent Form-interview.pdf		Actions ▾	Entire site Emilee Rader	Jun 2, 2008 5:21 pm 22.2 KB
	Dissertation Examples and Info	Add ▾	Actions ▾	Entire site R Garrett	Apr 11, 2007 11:39 am 9 items
	Dissertation Proposal Examples and Info	Add ▾	Actions ▾	Entire site Erik Johnston	Apr 3, 2007 11:27 am 17 items
	Doctoral Poster Session	Add ▾	Actions ▾	Entire site Eric Cook	Aug 9, 2007 1:33 pm 1 item
	Doctoral Student Photosheet	Add ▾	Actions ▾	Entire site Jude Yew	Sep 23, 2007 4:36 pm 6 items
	DSO Elections	Add ▾	Actions ▾	Entire site Erik Johnston	Feb 18, 2007 10:41 pm 5 items
	Field Prelim Examples	Add ▾	Actions ▾	Entire site Emilee Rader	Feb 18, 2007 10:36 pm 3 items

Documents				
Name	Date Modified	Date Created	Size	Kind
dragon	28 Aug 07, 10:21 PM	18 Jul 07, 3:40 PM	--	Folder
idea list.oo3	29 Sep 07, 8:41 PM	8 Mar 06, 10:04 AM	8 KB	OmniOutliner 3
job search	29 Sep 07, 8:39 PM	27 Sep 07, 1:42 PM	--	Folder
PAPERS	26 Oct 07, 5:48 PM	10 Oct 04, 2:18 PM	--	Folder
Parallels	18 Jul 07, 4:50 PM	18 Jul 07, 11:01 AM	--	Folder
PERSONAL	2 Nov 07, 5:46 PM	5 May 05, 2:08 PM	--	Folder
RESEARCH METHODS	13 Oct 07, 2:13 PM	----	--	Folder
SCHOOL	23 Sep 07, 10:53 PM	10 Dec 04, 1:05 AM	--	Folder
2004 fall	7 Jan 06, 8:21 PM	3 Sep 04, 11:56 PM	--	Folder
2005 01-winter	31 Mar 05, 8:13 PM	6 Dec 04, 7:29 PM	--	Folder
2005 02-summer	25 Jul 05, 12:03 PM	13 Apr 05, 1:35 PM	--	Folder
2005 03-fall	28 Sep 07, 2:27 AM	28 Jun 05, 5:04 PM	--	Folder
2006 01-winter	26 Jul 06, 3:14 PM	5 Dec 05, 9:01 PM	--	Folder
2006 03-fall	28 Sep 07, 2:28 AM	6 Jun 06, 2:14 PM	--	Folder
2007 03-fall	Today, 3:59 PM	9 Apr 07, 10:16 PM	--	Folder
administrivia	3 Oct 07, 7:31 PM	23 Jan 05, 12:00 AM	--	Folder
calendar.doc	3 Jul 07, 10:27 PM	3 Jul 07, 7:34 PM	72 KB	DOC File
dso	11 May 06, 8:49 AM	12 Jul 05, 1:44 PM	--	Folder
ejrader HTML on SKINNER	8 Jun 06, 1:48 PM	3 Jan 05, 6:01 PM	4 KB	Alias
ejrader Private on Skinner	18 Jul 06, 9:53 AM	15 Sep 05, 12:24 PM	4 KB	Alias
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projects	25 Apr 07, 12:13 PM	30 Mar 05, 8:08 AM	--	Folder
ctools	25 Apr 07, 12:06 PM	17 Dec 05, 3:11 PM	--	Folder
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media comparison study	6 Oct 07, 11:04 PM	----	--	Folder
proposal	Today, 3:58 PM	20 Sep 06, 6:17 PM	--	Folder
tagging	23 May 07, 5:44 PM	17 Dec 05, 3:11 PM	--	Folder
the list	Yesterday, 11:16 AM	6 Sep 04, 1:00 PM	8 KB	OmniOutliner 3
WEBSITE	3 Nov 07, 12:07 AM	----	--	Folder
workspace	24 Oct 07, 3:16 PM	5 Aug 05, 10:08 PM	--	Folder

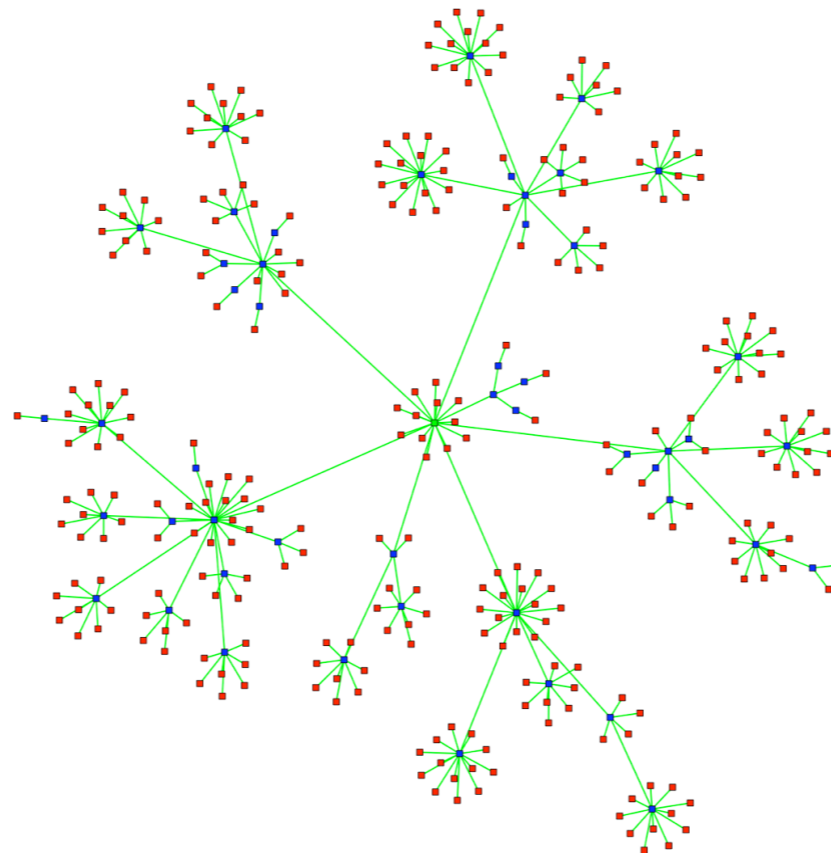
32 items, 55.27 GB available

- Sixteen users of six different CTools project sites (4 men); at least 2 respondents per site
- Sites selected for variety (extracurricular, staff/admin, research group), activity level
- Respondents ranged from undergraduates to graduate students to long-time staff members
- Semi-structured interviews, focus on project, how the CTools site is used, site walkthrough
- Interviews were recorded, transcribed and coded

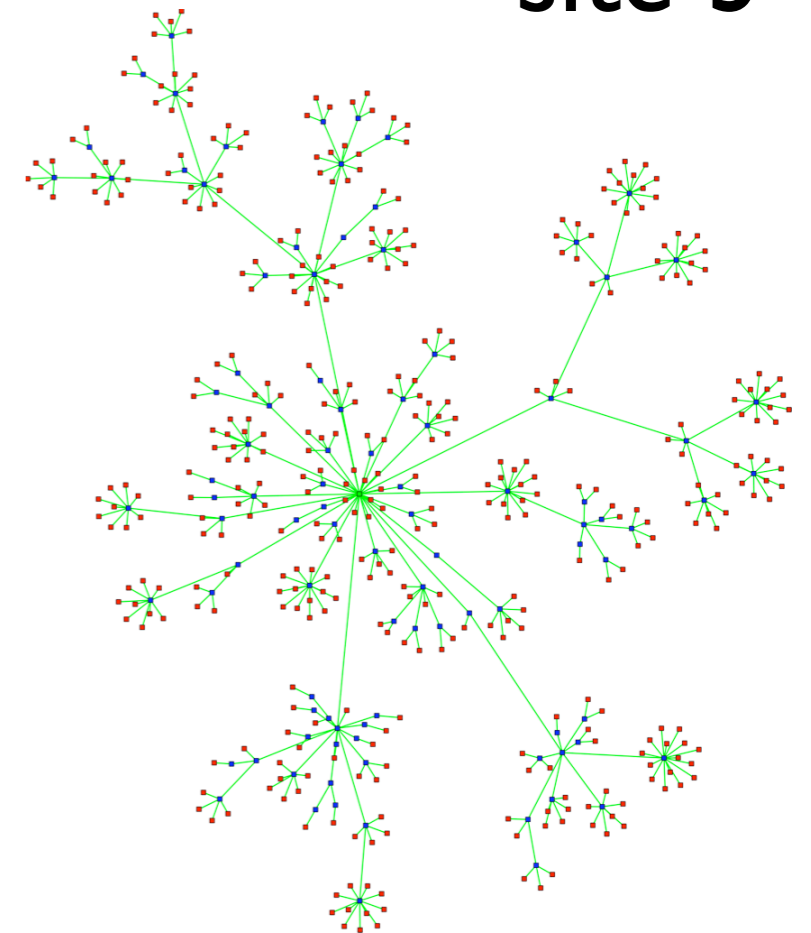
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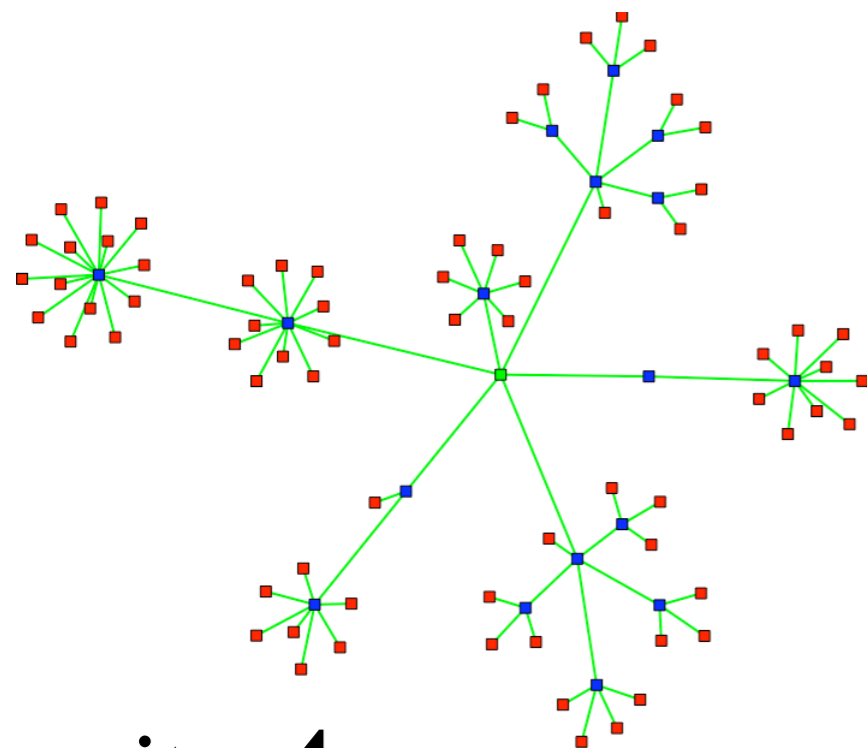
site 2



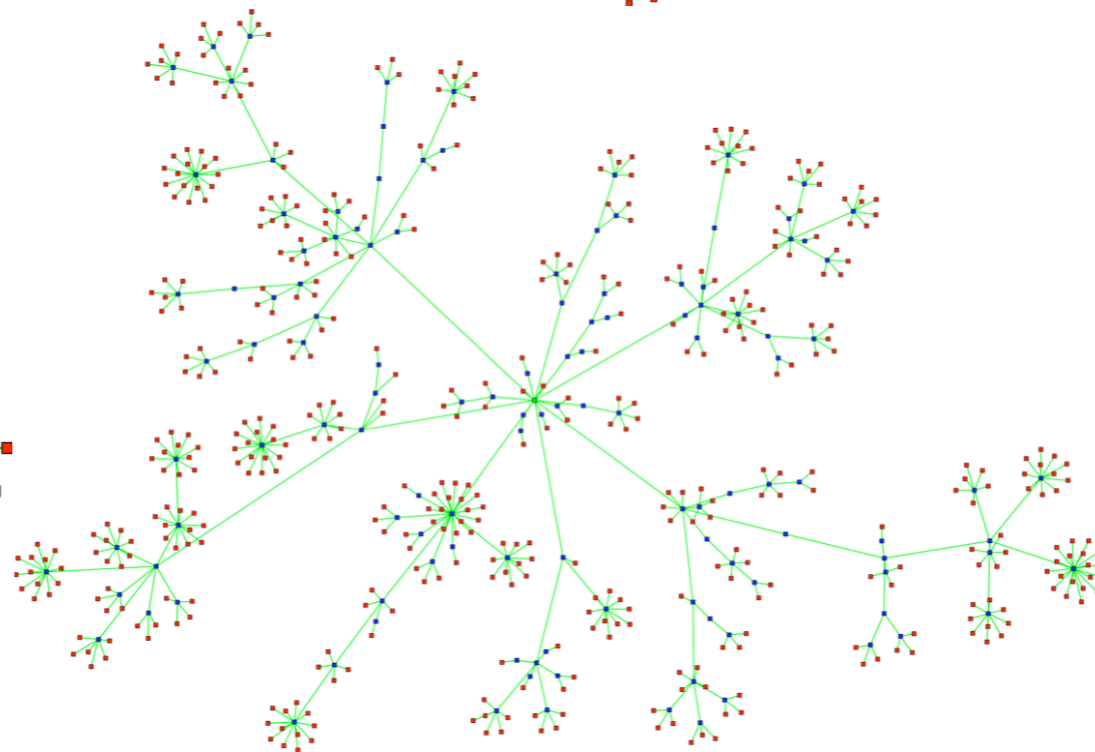
site 3



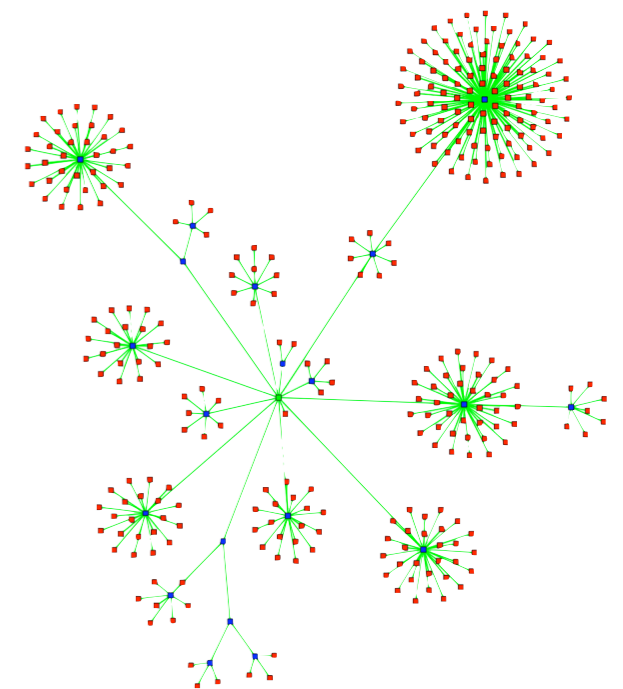
site 4



site 5



site 6



site 1

site 2

site 3

Despite the differences between sites, **four common themes**:

1. MY stuff vs. YOUR stuff
2. First Do No Harm
3. Consequences of Clutter
4. Unmet Social Expectations

site 4

site 5

site 6

MY stuff vs. YOUR stuff

“Probably the biggest problem we have with CTools is that **people tend to organize information different ways**, you know like you have a picture in your mind of how you think it should be organized, and that’s not exactly how someone else’s brain works to organize things”

[-- Nancy, Site 3]

First Do No Harm

“I try not to [delete files]... so if another person goes looking for it, they can find it. The only times I delete, is when I post something more updated. And I’m sure that **no one else will need the old version.** Interviewer: How do you become sure that no one wants the old version? Josh: I only delete things I’ve posted.”

[-- Josh, Site 6]

Consequences of Clutter

“...You keep going and going and going and it’s more folders and some more folders and some more folders, so if you don’t really know, you’re not really familiar with... let’s see. 1,2,3,4,5 [levels]... yeah. So you really **have to know your way around** here or it can be quite intimidating.”

[-- Jennifer, Site 5]

Unmet Social Expectations

“I did stop doing it [posting meeting minutes to CTools] for like a month, in January. The January meeting minutes are missing from CTools. I didn’t do it and **nobody said anything**. And I’m like, why do I keep doing this?”

[-- Linda, Site 2]

Users' choices about what to **contribute** to a repository, how the information within it is **organized**, and their **reuse** of the information are all **influenced** by **social practices**.

conclusion



Thank You!

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- Socio-technical gap -- Ackerman (2000): *The Intellectual Challenge of CSCW*
- Mental models influence how groupware is used -- Orlikowski (1992): *Learning from Notes*
- Studies of shared workspace / group memory systems
 - Berlin et al. (1993): *Where Did You Put It?*
 - Mark and Prinz (1997): *What Happened to our Document in the Shared Workspace?*
- Knowledge management
 - Markus (2001): *Toward a Theory of Knowledge Reuse*
 - Lutters et al. (2007): *Group Information Management*

related work

	type	users	site age	# files	accesses per wk.
site 1	extracurricular	26	2.5 yrs.	115	20.40
site 2	staff/admin	89	1 yr.	452	76.08
site 3	research group	11	4 yrs.	580	26.96
site 4	research group	11	1 yr.	120	24.88
site 5	research group	13	2.5 yrs.	894	22.73
site 6	extracurricular	18	1.5 yrs.	407	19.10

the sample

MY stuff vs.YOUR stuff:

Feedback / awareness information
showing others' aggregate use

First Do No Harm:

Automatically generated usage metadata

Consequences of Clutter:

Help users see “hidden” commonalities
and linkages across sites

Unmet Social Expectations:

Communicate information about recent
views, additions and changes

implications