What makes Social Computing hard?



Psy broke YouTube!

http://www.dailymail.co.uk/sciencetech/article-2859043/Gangnam-Style-views-YouTube-count-Site-upgrade-digits-displayed-song-s-popularity.html

Gangnam Style 'breaks' YouTube: Site to

- YouTube had to upgrade the way figures are shown on the website



you're probably still humming it.



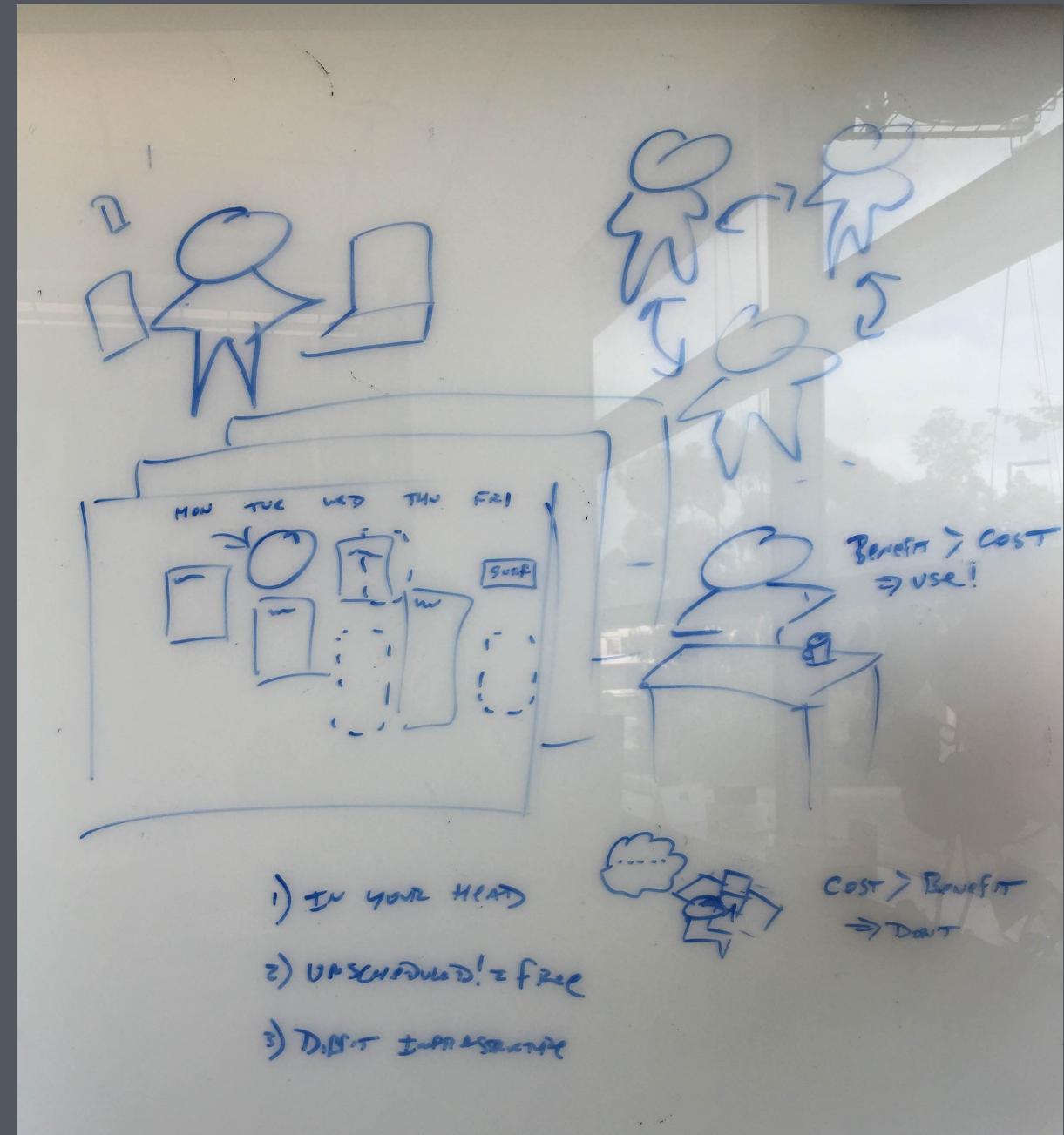
upgrade the way figures are shown on the website. A screenshot is pictured

Hey, are you free on Thursday at 3?



Social Life is Contextual

Challenge: Disparity of Work and Benefit





Challenge: Disparity of Work and Benefit

Who does work and who benefits?

Groupware applications often require additional work from individuals who do not perceive a direct benefit from the use of the application

Inspired by J. Grudin, Groupware and Social Dynamics: Eight Challenges for Developers, CACM 1994



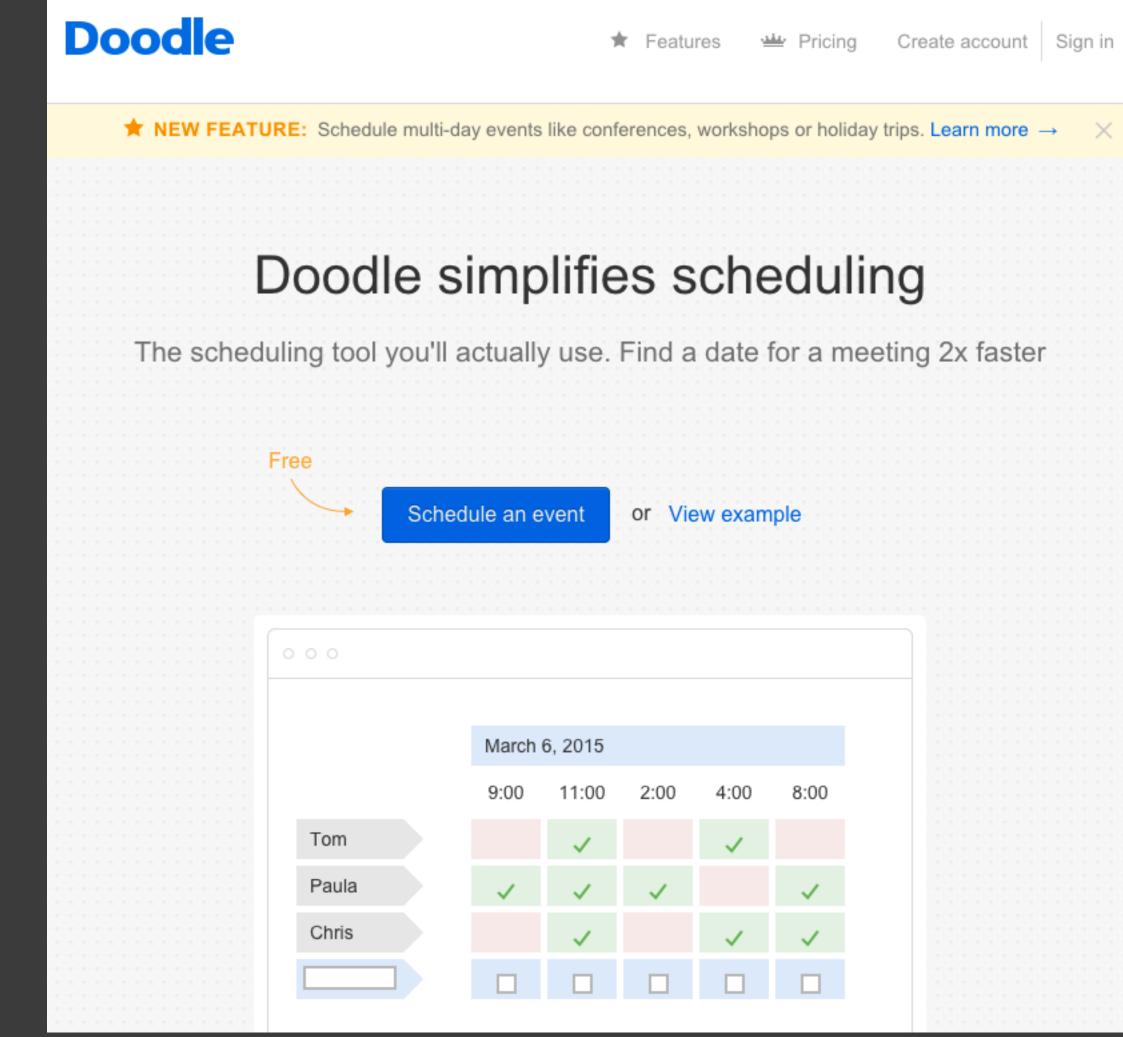
Example: How Workers Use Calendars

- Information is in your head not in the system
- Unscheduled time is when work gets done
- Different infrastructure
- Available depends on who's asking



Addressing the Challenges

- Information is in your
 head not in the system
- Unscheduled time is when work gets done
- Different infrastructure
- Available depends on who's asking



Example: Google Calendar

Calendar	Today	< > Feb	22 – 28, 201	5				Da	y Week	Month	4 Days	Agend	a More ▼	_‡
CREATE V		Sun 2/22	Mo	on 2/23	Tue 2/24		Wed 2/25		Thu 2/26		Fri 2/27		Sat 2/28	3
/lini calendar	GMT-08					Michae	el in town							
ly calendars	9am		9 – 10 busy		9 – 10 busy		9 – 10 busy	9 – 10 busy	9 – 10 busy		w/Ja & So	cott at	9 – 10 busy	<u> </u>
Vanessa Birthdays	10am		10 – 11 busy		10-1 10-1 10-1 10-1 Direc busy busy bus 'Mee y	10 – 11 busy		10 – 11 busy		10 – 11 busy			10 – 11 busy	
CISA3 DLab Public Events	11am		11 – 12:30p busy				11 – 12p busy	11 – 12p busy		11 – 12: busy	30p 11:30 – bu	usy		
DLab Staff	12pm			12p – 1p busy	12:30p – 1:50p		12p – 1r busy busy	12:30p - 1	1:50p		12p – 1r busy	12p – 1r busy		
Assistant Sonic Arts Team Cale	1pm		1p – busy		busy	1p – 2p busy		busy						
Spat Lab Reservations	2pm		2p – 3p busy			2p – 3p busy		2p – 3p busy	2p – busy 2:30p – 3:30p	2p – 3p busy				
ther calendars	3pm		3p – 4p busy	3p – busy		3p – 4p busy	3:30p – busy	3p – bus	busy 3:15p – busy	3:30p –	6р			
Add a coworker's calendar	4pm		4p – 5p busy			4p – 5p busy		3:45p – 4: busy	45p	busy	4:15p busy	o – 5:15p /		
Karen Scott	5pm		5p – busy	5p – busy									5p – 6p busy	
Alex	6pm													
Alice	7pm													

Integrating Calendar and Email

Search Mail	Search the Web Show search options Create a filter	Title:			
2:00 PM - 3:00 PM December 11, 2009 Location: Scott's office @ Stanford Scott, Fabulous. Thanks very much. We would like to meet you next Friday at 2:00. Right now things look good for us to come to the students' final presentations too. My colleague David and I look forward to seeing you next week. Thanks! Ame ★ Reply to all ★ Forward					
		Invitee			

HCI Study Design 2 Meeting	Your Agenda for Fri Jan 22, 2010				
: Fri Jan 22 3:30pm – 4:30pm (PST)	12pm Lunch w/HCI Seminar Speaker				
: 4th Floor Wallenberg, Union Pacific	2:05pm Carrie Armel				
: acholonu@gmail.com,	2:30pm Ranjitha, Juho, Pao, Salman, Bri				
daniel.schwartz@stanford.edu, spdow@stanford.edu,	3:30pm HCI Study Design 2 Meeting				
srk@cs.stanford.edu	3:30pm HCI Study Design 2 Meeting				
Add to calendar »	8:45pm ragi dindial show				
	view my calendar »				

ollowing meeting has been modified:

ct: HCI Study Design 2 Meeting izer: "Ugochi Cynthia Acholonu" <<u>acholonu@stanford.edu</u>>

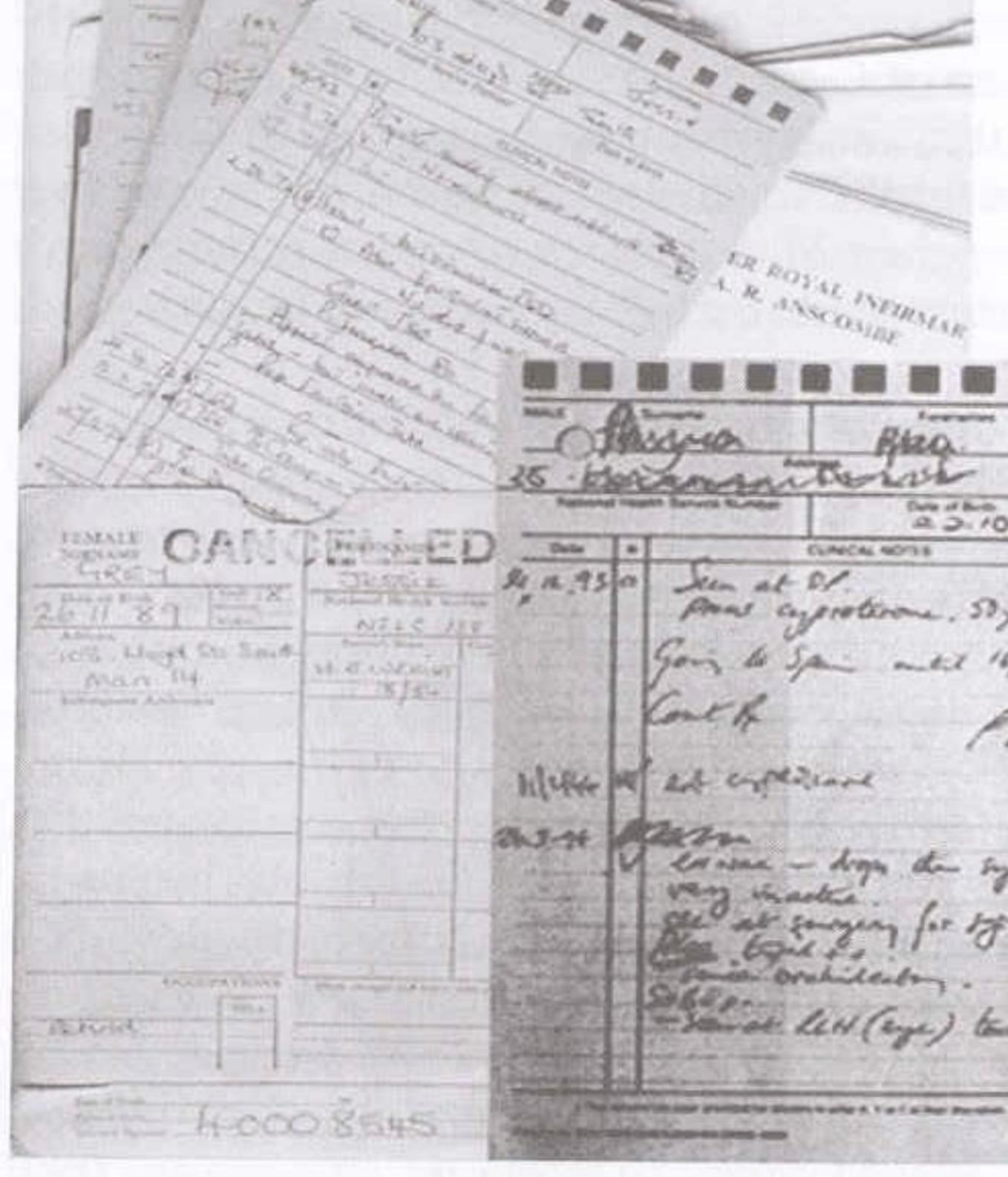
on: 4th Floor Wallenberg, Union Pacific [MODIFIED] Friday, January 22, 2010, 3:30:00 PM - 4:30:00 PM GMT -08:00 US/Canada Pacific

es: "Dan Schwartz" ; "Scott R Klemmer" ; "Steven Paul Dow" ; acholonu@gmail.com

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Challenge: Exception Handling

Groupware may not accommodate the wide range of exception handling and improvisation that characterizes much group activity



S.R. ROYAL INFINALAR

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Electronic Health Records

💐 Handy patients enterprise edition			_ 7 🛛
Eile Edit View Help			
David (8 month and 10 day John (2 years and 3 month) Mother: Teacher Father: Financial advisor Parents: Maried	Digestive Digestive inspection Normal	Thursday, 22 Jan 2009 Liver	
Last Anderson P			-
First David Boy			
Birth 5 January 2009 🗸	Digestive auscultation	Rectal	
Age: 8 month and 10 days Patient nb: 3 Appointments Forms Sheets	Normal abdomen noises		~
Meeting (Doctor) O: Neurologic Full status (Doctor) O: Vascular	Digestive palpation		
Assistant Billing Reports Statistics Statistics SOAP Sum. T R-V T, P, PC Admission Agenda	Little pain on the right lower area	Page 1/1 Draw V	
Meetings 2 month checkup 5 Mar 09 2m.0d 1 month checkup 5 Feb 09 1m.0d Respiration problem 22 Jan 09 17d 10 days chekup 13 Jan 09 8d Control for return at home 9 Jan 09 4d Birth 5 Jan 09 0d Diagnosis × New documents General ✓ Abdomen palpat		Liver Stomach Ben	
My Diagnosis Social Image: Social Ima	Documents manager	gall bladder	
Menu 1 Menu 2 Menu 3 Search	manager	Previous page N	lext page

source: <u>http://en.wikipedia.org/wiki/Electronic_health_record</u>

Paper Flight Strips

14:45:03

Image courtesy Wendy Mackay



"If technology is to provide an advantage, the correspondence to the real world must break down at some point." - Jonathan Grudin

CURRENT PRACTICE

NEW TECHNOLOGY

minimize this distance

How to build social computing that a world of extemporizers actually adopts

- Less structure beats more
- •Twitter didn't start with hashtags
- •Flexible lightweight tools are often more used than highly proscribed ones
- Paper is one of the most flexible tools we have