



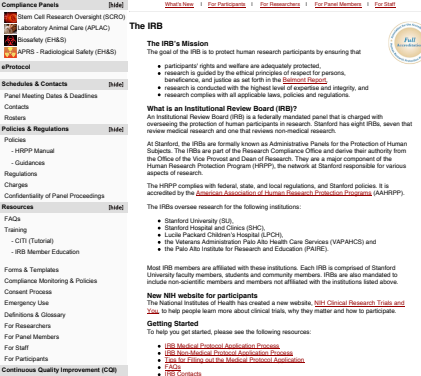
	Advanced Design and Evaluation of Interactive Systems
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	ExSitu lab, Inria & Univ. Paris-Sud 19 February 2018




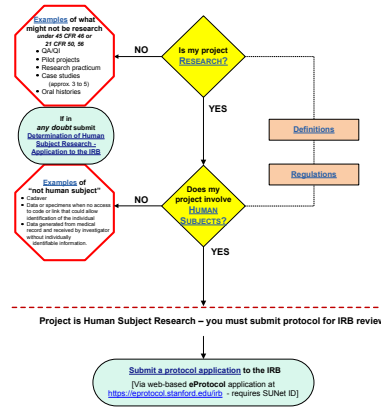
	Informed consent
	Give participants enough information to make an informed decision whether or not to participate in the study
Purpose:	What is the study for?
Procedures:	What will they do and for how long?
Risks:	Should be 'none'
Benefits:	Who benefits and how?
Anonymity:	How will their identity be kept secret?
Compensation:	Often voluntary and unpaid
Withdrawal:	User may withdraw at any time without a reason
Approval:	If it has undergone IRB review

	Common sense when discussing user results
	Protect people's privacy Don't put their data out on the web...
	Don't make people look foolish No Youtube videos
	Educate the audience Tell them how to view errors
	Summarize results fairly Don't over-emphasize your favorite issue
	Don't change the intended use No post-hoc marketing

Ethics ... from different perspectives		
Each profession has rules to protect someone ... but not always the same person.		
Scientists	protect	users / subjects
Journalists		public
Consultants		clients
Corporations		corporation
Institutional Review Board (IRB) designed to protect participants in experiments Primarily in medical studies, but also when using technology		

 <b>STANFORD UNIVERSITY</b> RESEARCH COMPLIANCE OFFICE	
	
<b>IRB</b>  Institutional Review Board  Mandated by the government	

Milgram's 'Obedience to Authority' experiment	
Will ordinary people give a stranger a lethal electric shock in the name of science? "Teachers" administer shocks to "students" Start with a sample 45v shock Paired-associate learning task	
	

Does a project need an IRB review?	
"Human subjects" are users or participants	
 <pre> graph TD     Q1{Is my project RESEARCH?} -- NO --&gt; A1[Examples of what might not be research: &lt;ul&gt;&lt;li&gt;CRP or CRP as a service&lt;/li&gt;&lt;li&gt;CRP&lt;/li&gt;&lt;li&gt;CRP&lt;/li&gt;&lt;li&gt;CRP&lt;/li&gt;&lt;li&gt;CRP&lt;/li&gt;&lt;/ul&gt;]     Q1 -- YES --&gt; Q2{Does my project involve SUBJECTS?}     Q2 -- NO --&gt; A2[Examples of "not human subject": &lt;ul&gt;&lt;li&gt;CRP&lt;/li&gt;&lt;li&gt;CRP&lt;/li&gt;&lt;li&gt;CRP&lt;/li&gt;&lt;li&gt;CRP&lt;/li&gt;&lt;li&gt;CRP&lt;/li&gt;&lt;/ul&gt;]     Q2 -- YES --&gt; A3[Submit a protocol application to the IRB]     A3 --&gt; A4[Submit a protocol application to the IRB]     A4 --&gt; A5[Submit a protocol application to the IRB]     A5 --&gt; A6[Submit a protocol application to the IRB]     A6 --&gt; A7[Submit a protocol application to the IRB]     A7 --&gt; A8[Submit a protocol application to the IRB]     A8 --&gt; A9[Submit a protocol application to the IRB]     A9 --&gt; A10[Submit a protocol application to the IRB]     A10 --&gt; 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## Diary studies

Ask users to keep a diary as they use the system to keep track of problems, successes, comments and suggestions

### Diary of ....

Name: \_\_\_\_\_

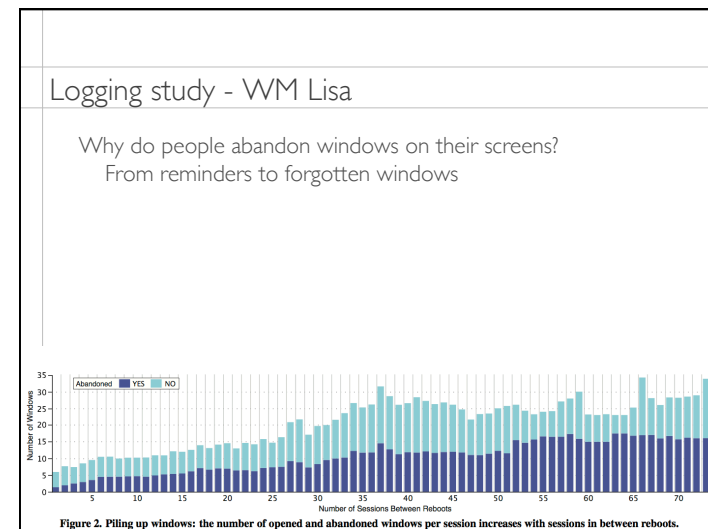
Dates: \_\_\_\_\_

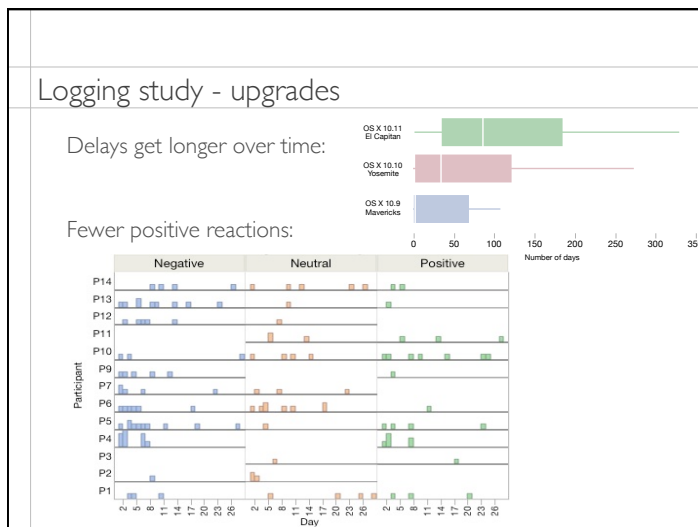
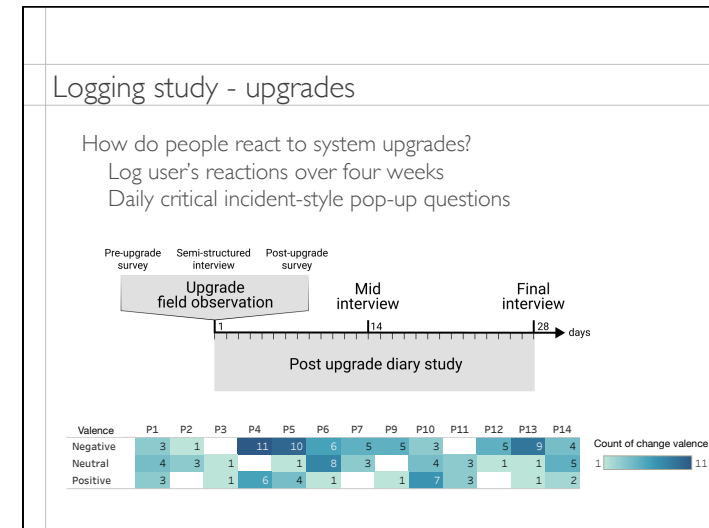
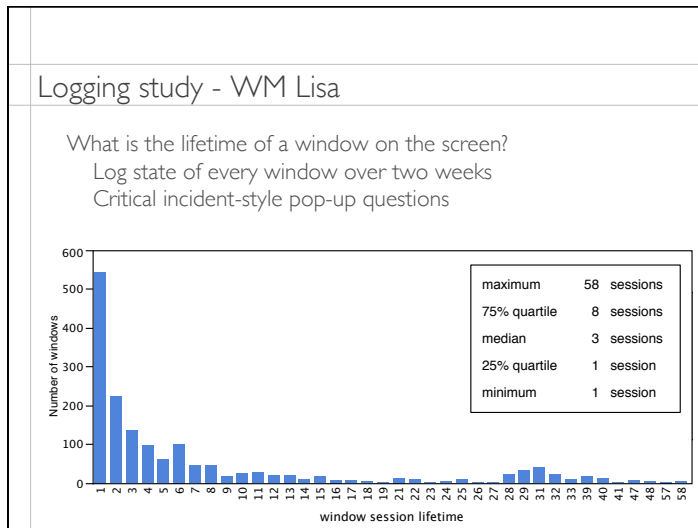
### Problems or Suggestions

page	date	observation

### Problems or Suggestions

page	date	observation





## Field experiments

Dan Russell (Google) creates huge controlled field experiments with a million subjects per condition

Example:

Does the background color affect likelihood of buying?  
(Yes! 20% more with certain colors)

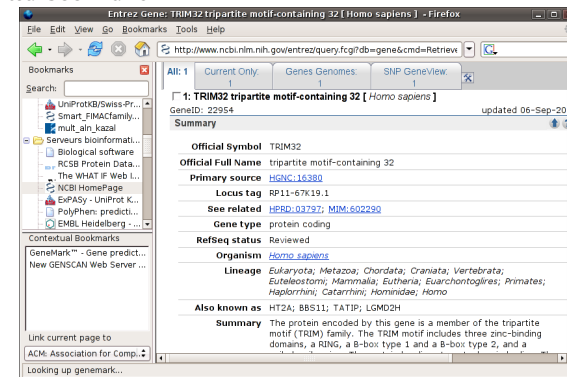
Obama's campaign:

Send different ads to randomly selected people  
Follow up calls: Which work best and on whom?

Discovered Republican women who were affected by national healthcare proposal

## Controlled field study: PageLinker

Contextual bookmarks



## Field experiment: PageLinker

4-week field experiment: ABAB within-subjects design

Scenarios with 5 search tasks:

Perform task 1, then 2 or 3, then 4 when tasks 1-3 complete.

Task 5 is independent of tasks 1-4.

