

Privacy and Security in Online Social Media

Course on NPTEL

NOC21-CS28

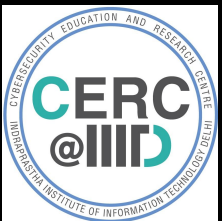
Week 7.2

Ponnurangam Kumaraguru (“PK”)

Full Professor

ACM Distinguished Speaker

fb/ponnurangam.kumaraguru, @ponguru



Cost of reading privacy policies

- What would happen if everyone read the privacy policy for each site they visited once each month?
- Time = 244/hours year
- Cost = USD 3,534/year
- National opportunity cost for reading privacy policy = 781 billion USD



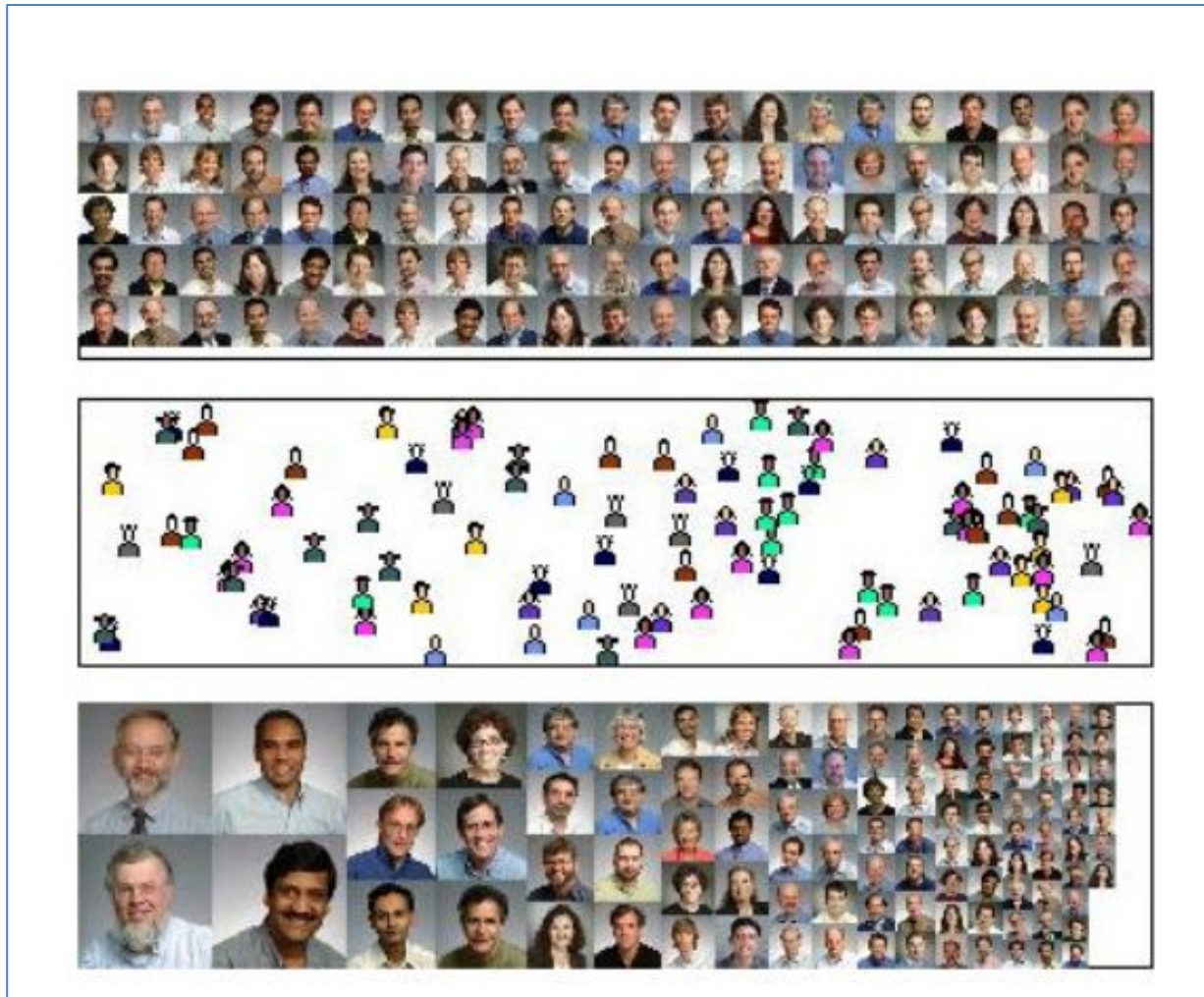
A. McDonald and L. Cranor. The Cost of Reading Privacy Policies. I/S: "A Journal of Law and Policy for the Information Society. 2008 Privacy Year in Review Issue. <http://lorrie.cranor.org/pubs/readingPolicyCost-authorDraft.pdf>

Goals

- To help individuals avoid regrettable online disclosures



Facemail from MIT



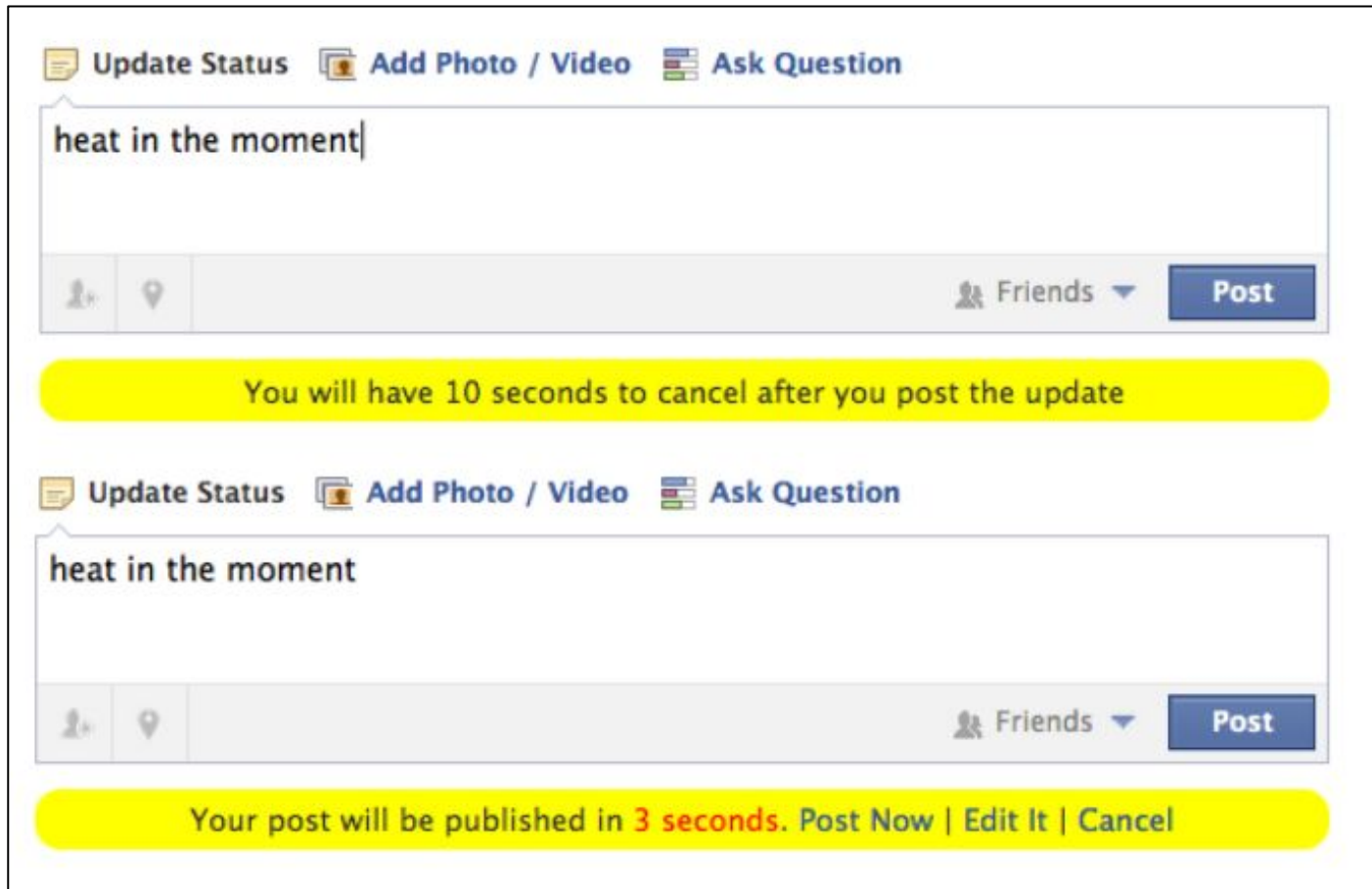
Experimental setup

- Picture nudge
- “These people, your friends, and FRIENDS OF YOUR FRIENDS can see your post.”



Experimental setup

● Timer nudge



Experimental setup

● Sentiment nudge



The screenshot shows a Facebook status update interface. At the top, there are three options: "Update Status" (with a text icon), "Add Photo / Video" (with a photo icon), and "Ask Question" (with a question mark icon). Below these is a text input field containing the text "I am angry". Underneath the text field is a row of controls: a person icon with a plus sign, a location pin icon, a dropdown menu set to "Friends", and a blue "Post" button. Below the main input area is a yellow warning box with the text: "Other people may perceive your post as **negative**." and "Your post will be published in **1 second**. Post Now | Edit It | Cancel".

Methodology

- Chrome browser
- Exit survey, follow-up interviews
- IRB approved
- Recruitment
 - Craigslist, flyers, emails, etc.
- 21 participants who completed the field study and 13 participated in the interviews

Analysis metrics

- Number of changes in inline privacy settings
- Number of cancelled or edited posts
- Posts frequency
- Topic sensitivity



Profile picture nudge

- One participant changed from “Friends” to “Friends except acquaintances” when she posted “Survived one of the craziest, most exhausting days ever!”
- Another participant ended up cancelling “a couple of posts” because of the profile picture nudge



Timer nudge

- One participant mentioned “at times annoying and at time handy”
 - Wait for timer to expire or hit “post now”
 - Make it more public when it was “venting” type
- Another participant said, made me think about the posts
 - Cancelled a few because of thinking



Sentiment nudge

- Nudge was missing the context
 - Error in finding the sentiment
- Many participants cancelled their posts because of the nudge
- Post frequency reduced for sensitive information, 13 → 7



Conclusion

- Interventions help users make better decision
- More work is needed to understand which type of nudge works in which context



Thank you

pk@iiitd.ac.in

precog.iiitd.edu.in

fb/ponnurangam.kumaraguru