

Social Networks and Privacy

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Usable Privacy and Security

What are social networking sites?



What are unifying traits of SNSs?

- Communication between people
 - Two-way? Multi-user threads? Group messaging?
 - Text? Images? Video? Sound? Other media?
 - Synchronous or asynchronous?
 - Broadcast or private?
 - Anonymous, pseudonymous, or named?
- Platform enables communication
 - Registered account or not?
 - App, website, or both?
 - Privacy settings of shared content?

Common Issues with SNS Privacy

Change in Terms of Service

- What happens to your data when an SNS changes its privacy policy?
 - What recourse does a user have?
- Stutzman et al. (2012):
 - Privacy settings wizard changes and addition of FB Pages made many users' private info public
 - These changes were a major part of 2011 FTC action against Facebook [1]

[1] <https://www.ftc.gov/news-events/press-releases/2011/11/facebook-settles-ftc-charges-it-deceived-consumers-failing-keep>

Forgetting my audience

- Who can see what you share online?
- Bernstein et al. (2013):
 - Users estimate their audience is 27% of its actual size
 - Likes, comments, and friend count are bad indicators of audience size for a post

Audience changes over time

- What are the privacy implications of using an SNS for multiple years?
- Bauer et al. (2013):
 - People want same audience to have access to a post over time
 - People were bad at predicting how their privacy preferences for a post would change

Audience: Context collapse

- Context collapse is the flattening of a person's multiple audiences into one large audience, caused by SNSs
- Marwick and boyd (2011):
 - Twitter users cannot vary their self-presentation by audience, so they must self-censor or balance their content
 - Users create an imagined audience for whom they construct their identity

Regret about over-sharing

- What are you likely to regret posting?
- Sleeper et al. (2013):
 - Twitter users tended to regret tweets where they had criticized something, made an error, or shared a lot
 - Users would realize regret hours or days later, and delete or apologize for tweet

Manya Sleeper, Justin Cranshaw, Patrick Gage Kelley, Blase Ur, Alessandro Acquisti, Lorrie Faith Cranor, and Norman Sadeh. "I read my Twitter the next morning and was astonished": A Conversational Perspective on Twitter Regrets. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems, 2013. (CHI '13)

Privacy interventions on SNSs

- What are some privacy strategies used by SNSs?
 - Some scenarios: making a new post, managing friends lists, changing settings on old content
 - What do you think they're doing well?
 - What do you think needs improvement?

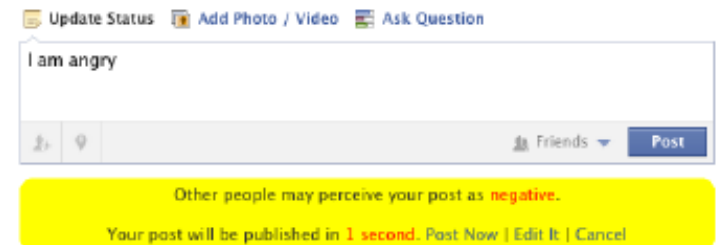
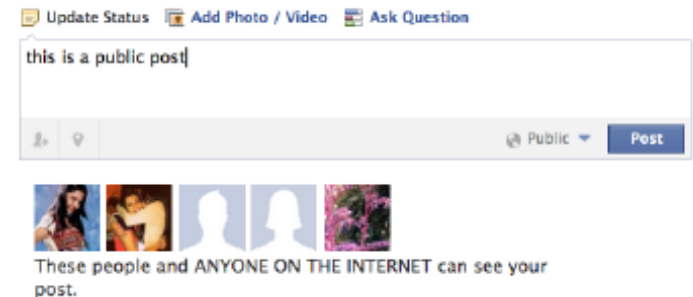


Scenario: posting to Facebook

- I want to share something with my female friends. How do I do it?
 - I could create a group... but I have to sort all my friends individually
- Facebook could infer gender—what privacy risks exist there?
 - How could a user abuse a feature like this?

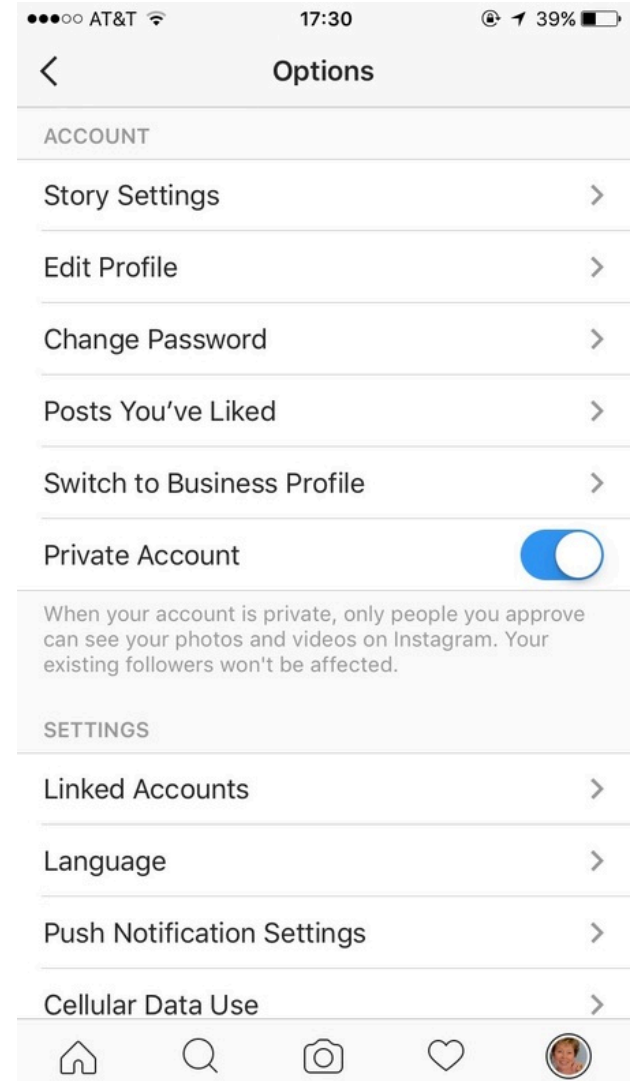
Intervention: Privacy nudges

- What if we prompt (“nudge”) people to reconsider their posts to social media while they are making the post?
- Wang et al. (2014):
 - Varied responses—some liked the nudges, others found them intrusive/annoying



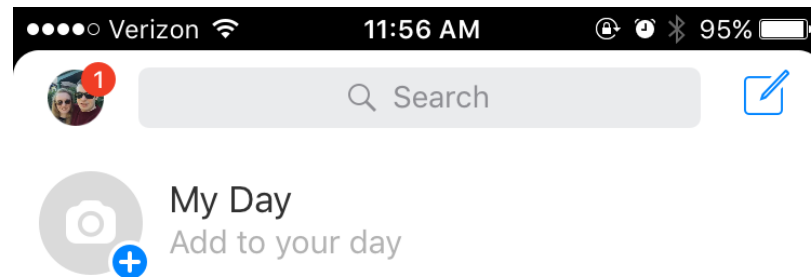
Intervention: Simple settings

- Instagram, Twitter, Tumblr, others use simple toggles for privacy
- What works about this?
- What could be improved?

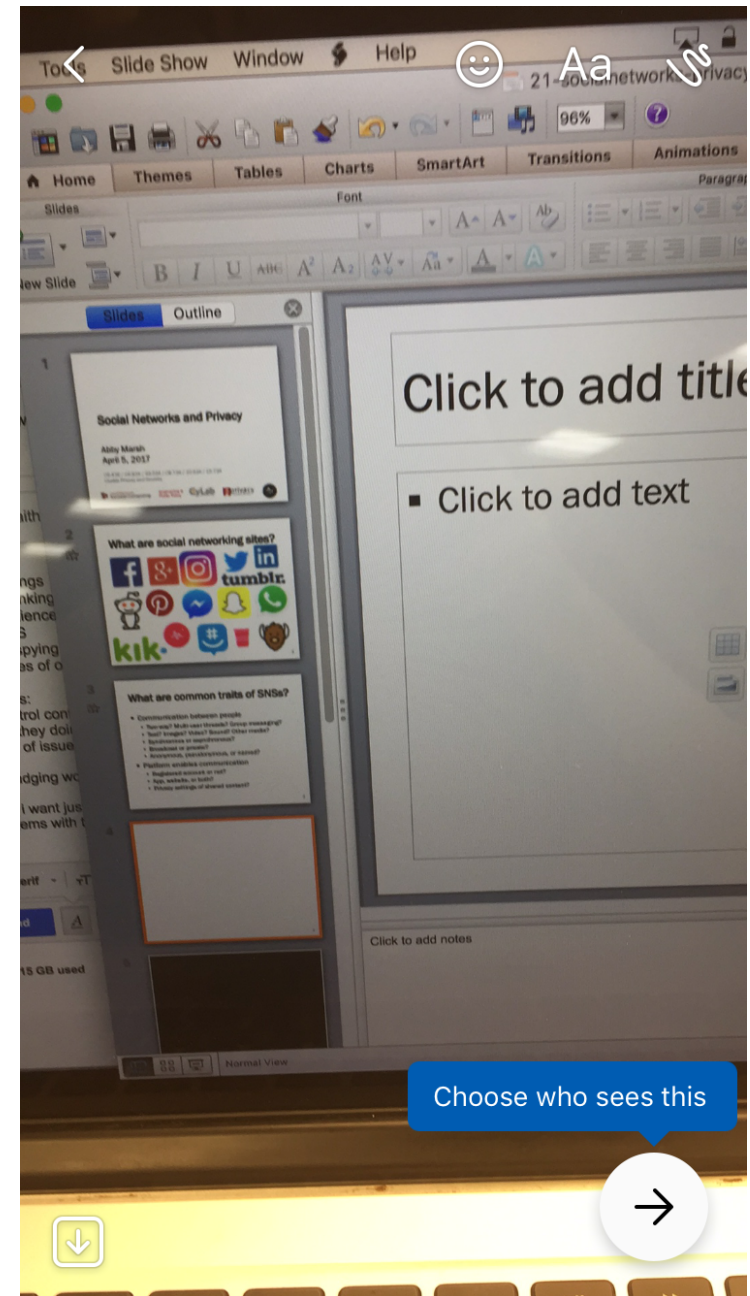


SNS privacy example: Messenger Day

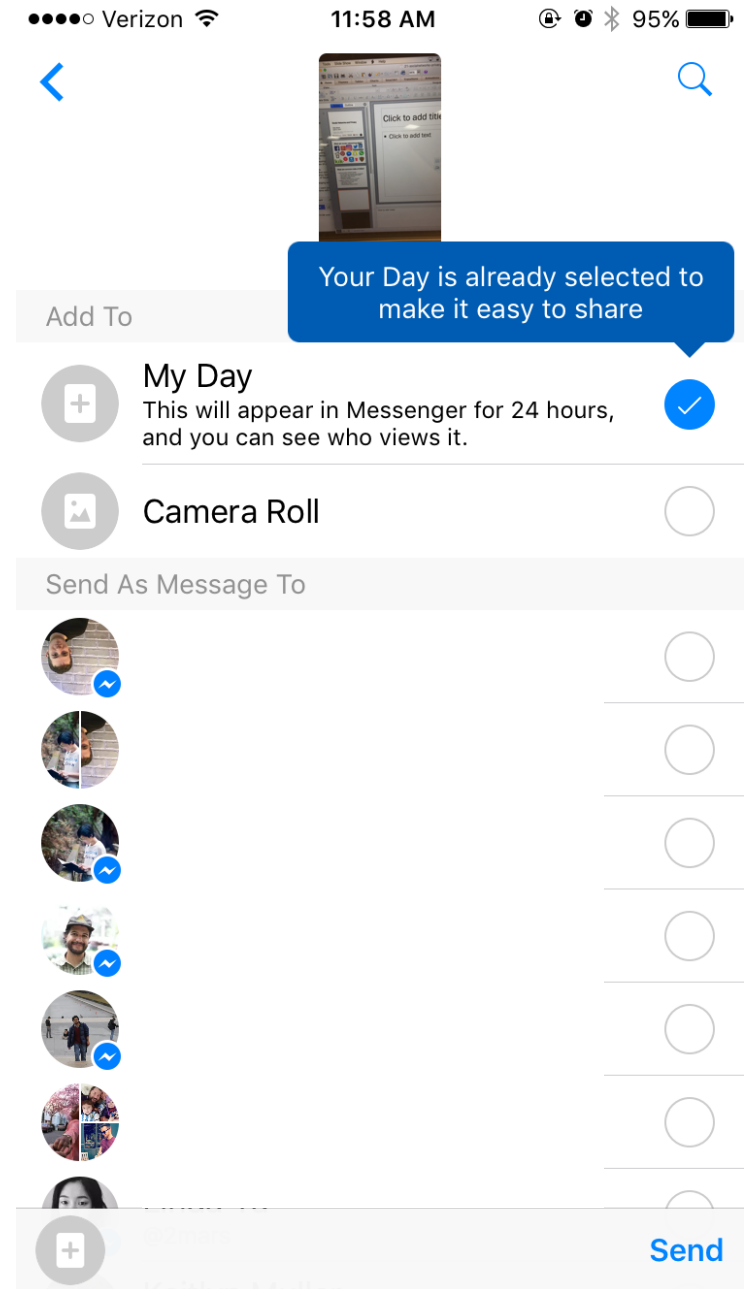
- Have you used the My Day feature in Messenger?
- What are some privacy concerns you have?



Messenger helpfully includes a flag for new users to guide them toward audience controls

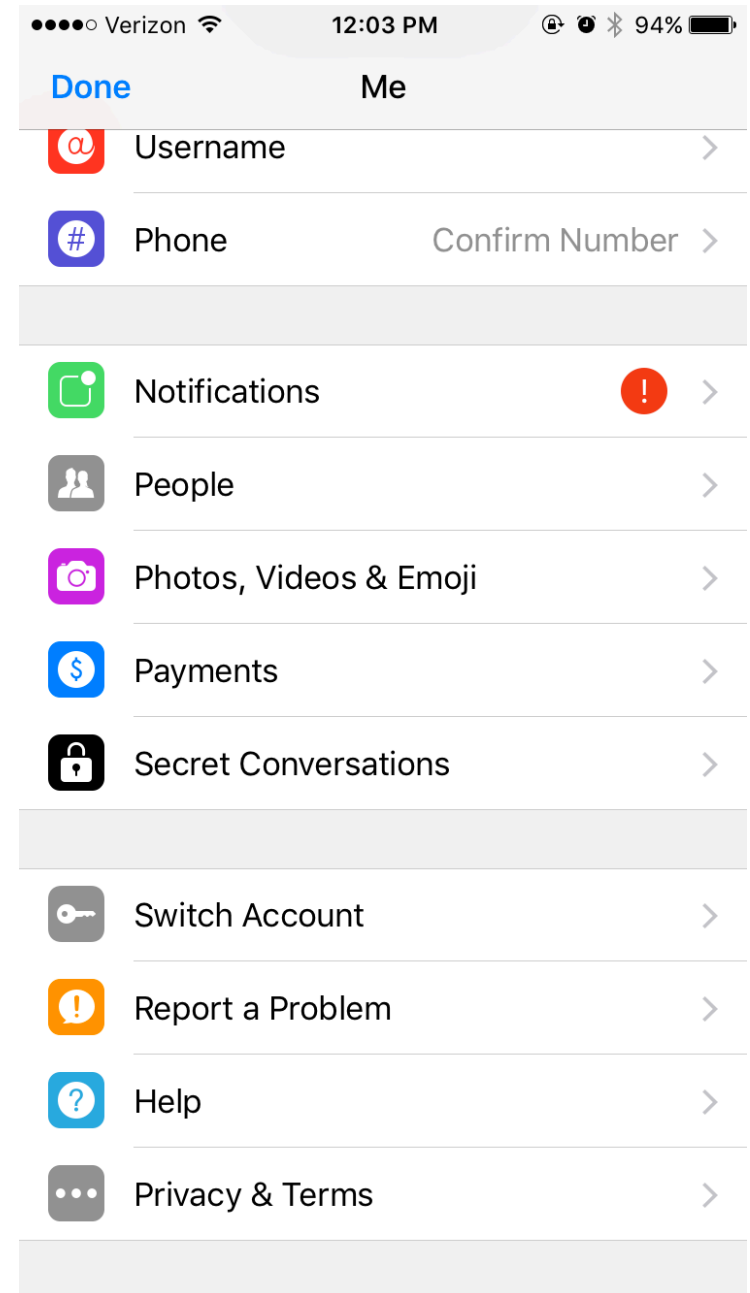


But what do I do on this screen to prevent My Day from sharing to all friends?



Maybe the My Day
privacy control is in the
settings page?


Nope, nothing there.




If you've never posted your day before, you won't see Messenger Day settings yet. To control the audience on your first post:

1. [Create your post](#) and tap **My Day** to add it to your day.
2. Before it's added, a screen will pop up that lets you choose your audience. Tap **Choose People**.
3. Tap the people who you want to share your day with.

If you've shared something to your day, you can access audience controls in Settings. To choose who can't see your day:

1. Tap .
2. Tap **My Day**.
3. Tap **Everyone Except**.
4. Choose who can't see your day.

Or, to choose certain people who can see your day:

1. Tap .
2. Tap **My Day**.
3. Tap **Custom**.
4. Choose who can see your day.

Note: You can't hide the Day section in Messenger, but you can [hide someone's day from your Messenger inbox](#).

Privacy problems: Messenger Day

- No audience controls at time of posting
 - Except for new users, but the process is not clearly described
- Audience controls for My Day only available while I have an active post
- Audience controls are person-by-person

