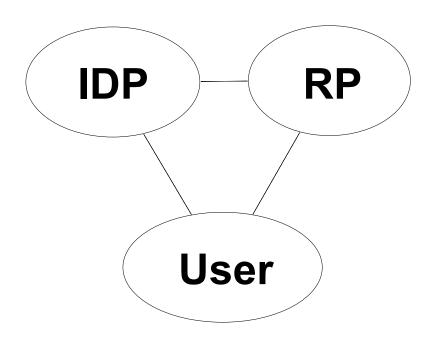
Incentives and information flows in online identity

Seth Schoen
Electronic Frontier Foundation
June 28, 2011

Parties



... do these parties *actually agree* about how information should flow?

Congruence of individual's and relying party's desires

- Wells Fargo Bank sent me an RSA SecurID token, at my request, to secure access to my bank account
- Wells Fargo and I both agree that this is preferable to password-only authentication for EFTs from my account

NSTIC aspires to a world of harmony on this point

 "Relying parties shouldn't ask for more information than they need"

•

Gaps between user's and other parties' desires

Yesterday Google sent me this PREF cookie:

```
ID=bd2227be51143a4e:TM=13091854
17:LM=1309185417:S=1jbD5rpx67lQu3
Yz
```

The gap

- New online identity mechanisms are great for users' interests when users and RPs have similar goals about the "desired" or "appropriate" level and kind of authentication or identification
 - Especially attribute-based systems like Microsoft's U-Prove
- But this is only sometimes true!

Authentication vs. identification

- One example is that we might prefer to be very strongly authenticated without being identified at all (with PII)
- We may want to protect accounts against unauthorized access and use, without revealing who own them
- People may call this "anonymity", but it's strictly pseudonymity

Effects of ID mechanisms

- ID providers learn & store transactional, location data (Aaron Titus)
- Trust framework rules are not necessarily aligned with end-user preferences
 - E.g., credit card transactional data is governed by rules but they don't let me get it destroyed quickly

Effects of ID mechanisms

- Increased pressure to provide identity in new contexts, more difficulty resisting or evading identity demands
- Attribute proving could enable proof demands in new contexts by making them seem more reasonable or less intrusive

Incentives question

- You may have a very different notion of what information some entity "needs"
- Aaron Titus: the FIPPs don't judge uses
- What incentives will IDPs and RPs really have to align their information collection and ID demands with end users' preferences?