Privacy notice and choice

Lorrie Faith Cranor
September 23, 2014

8-533 / 8-733 / 19-608 / 95-818: Privacy Policy, Law, and Technology
Summary and highlight example

**Question 1:**

**Brandimarte – Summary:** The experiments described in this paper tested personal privacy attitudes in relation to the amount of control over the personal information being revealed. By varying control over information release in three separate studies, the experiments revealed a paradoxical effect such that increased control over the release of information increased willingness to share sensitive information, independent of how accessible the information is to others. This result raises the concern that technologies that give users greater control over the release of their information may actually expose them to greater risk if they lead to users being more willing to disclose information [1].

**Brandimarte – Highlight:** It is very interesting to me that perceived control over the dissemination of personal information has a greater effect on people’s willingness to disclose information than the objective risk of the disclosure. Though all three experiments supported this conclusion, I think it was best reflected in Study 1, where students who were told their profiles would definitely be published online answered intrusive questions at a greater rate than students who were told that 50% of the profiles would be published at random. Even though the first set of students had a 100% chance of disclosure and the second set 50%, the perceived lack of control in the publication of the information seems to have had an influence on the privacy attitudes of those students [1].
US government privacy reports

• U.S. FTC and White House reports released in 2012

• U.S. Department of Commerce multi-stakeholder process to develop enforceable codes of conduct
Privacy self regulation

Notice and Choice
Notice and choice

Protect privacy by giving people control over their information

**Notice** about data collection and use

**Choices** about allowing their data to be collected and used in that way
“In theory there is no difference between theory and practice. In practice there is.”

—Yogi Berra
How effective is privacy notice and choice in practice?
Global Privacy Enforcement Network
Internet Privacy Sweep
Questions and Answers

May 6, 2013

What will happen during the Internet Privacy Sweep? What is the goal?

Privacy enforcement authorities participating in the Sweep will designate individuals within their organizations to search the Internet in a coordinated effort to assess privacy practices related to a predetermined theme – this year the theme is Privacy Practice Transparency.

The Sweep will provide flexibility for privacy enforcement authorities to tailor their search within this common theme to focus on issues that are relevant in the context of domestic legislation, market factors and strategic priorities.

The purpose of the Sweep is not to conduct an in-depth analysis of the privacy practice transparency of each website, but to replicate the consumer experience by spending a few minutes per site checking for performance against set common indicators.

The Sweep is not an investigation, nor is it intended to conclusively identify...
Nobody wants to read privacy policies

“the notice-and-choice model, as implemented, has led to long, incomprehensible privacy policies that consumers typically do not read, let alone understand”

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 = $3,534/year
  - National opportunity cost for time to read policies: $781 billion

Privacy Icons

http://www.azarask.in/blog/post/privacy-icons/
Smartphone App Privacy Icon Study Conducted for LifeLock, Inc. by Cranor et al., 2013
Towards a privacy “nutrition label”

- Standardized format
  - People learn where to find answers
  - Facilitates policy comparisons

- Standardized language
  - People learn terminology

- Brief
  - People find info quickly

- Linked to extended view
  - Get more details if needed
Iterative design process

- Series of studies
  - Focus groups
  - Lab studies
  - Online studies

- Metrics
  - Reading-comprehension (accuracy)
  - Time to find information
  - Ease of policy comparison
  - Subjective opinions, ease, fun, trust

A “Nutrition Label” for Privacy. SOUPS 2009.

Privacy label for Android

**DESCRIPTION**
Like word games? Like weasels? This is the game for you. Word Weasel is a fast word game where you find as many words as you can from 9 letters in 50 seconds. Compete with everyone else playing at the same time, a new game starts every minute!

"The most fun you can have on your own with 9 random letters. Brilliantly simple, devilishly addictive." — Kim, Android Market

**Privacy score**
- 10,000+ downloads
- 1.9MB

**Privacy Facts**
- THIS APP COLLECTS YOUR
  - Personal information
  - Location
  - Calendar
  - Photos

- THIS APP USES
  - Advertising
  - Analytics

**REVIEW**
Average 4.6
- 5 stars: 534
- 4 stars: 210
- 3 stars: 37
- 2 stars: 5
- 1 star: 7
Role play studies

• Task for participants in lab or online
  – Select apps for friend with new Android phone
  – Choose from 2 similar apps w/ different permission requests in each of 6 categories
  – Click on app name to visit download screens
• Post-task questionnaire
• Participants who saw Privacy Facts more likely to select apps that requested fewer permissions
  – Other factors such as brand and rating reduce effect

P.G. Kelley, L.F. Cranor, and N. Sadeh. Privacy as part of the app decision-making process. CHI 2013.
Let your computer read for you

- Platform for Privacy Preferences (P3P)
- W3C specification for XML privacy policies
  - Proposed 1996
  - Adopted 2002
- Optional P3P compact policy HTTP headers to accompany cookies
- Lacks incentives for adoption
P3P in Internet Explorer

- P3P implemented in IE 6, 7, 8, 9, 10 ...
- Default privacy setting
  - Rejects third-party cookies without a CP
  - Rejects unsatisfactory third-party cookies
No P3P syntax checking in IE

- IE accepts P3P policies containing bogus tokens or missing required tokens

- Example of valid compact policy:

  CAO DSP COR CURa ADMa DEVa OUR IND PHY ONL UNI COM NAV INT DEM PRE

- Examples of invalid policies accepted by IE:

  AMZN
  Facebook does not have a P3P policy.
  Learn why here: http://fb.me/p3p

Microsoft uses a “self-declaration” protocol (known as “P3P”) dating from 2002 .... It is well known – including by Microsoft – that it is impractical to comply with Microsoft’s request while providing modern web functionality.
Do not track

- Proposed W3C standard
- User checks a box
- Browser sends “do not track” header to website
- Website stops “tracking”
- W3C working group trying to define what that means
Lots of tools to stop tracking

• Browser privacy settings
  – Cookie blocking
  – P3P
  – Tracking Protection Lists
  – Do Not Track

• Browser add-ons

• Opt-out cookies

• Digital Advertising Alliance (DAA) AdChoices icon
  and associated opt-out pages
Are any of these tools effective?

• Do the tools work?
  – Does technology do what it is supposed to do?
  – Do companies respect user choices?

• Can consumers use them?
  – Do users understand tracking?
  – Do users understand what tools do?
  – Can users make tools do what they want?

Pedro G. Leon, Blase Ur, Rebecca Balebako, Lorrie Faith Cranor, Richard Shay, and Yang Wang

CHI 2012
### Three types of tools tested

<table>
<thead>
<tr>
<th>Blocking Tools</th>
<th>Opt-out Tools</th>
<th>Privacy built in browser</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AdBlock Plus</strong></td>
<td><strong>DAA</strong></td>
<td><strong>Mozilla Firefox</strong></td>
</tr>
<tr>
<td><strong>Ghostery</strong></td>
<td><strong>EVIDON</strong></td>
<td><strong>PrivacyMark</strong></td>
</tr>
<tr>
<td><strong>TPLs</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Methodology

• Part of previous interview study
• 45 participants evaluated 9 tools
  – Between subjects study
  – Random assignment, controlled for preferred web browser and operating system
Testing protocol

• Semi-structured interview

• Usability testing
  – Task 1: Learn about and install the tool
  – Task 2: Change tool settings
  – Task 3: Browsing scenarios

• Exit questionnaire
DAA website

Welcome to the online home of the Self-Regulatory Program for Online Behavioral Advertising.

Building on the Self-Regulatory Principles for Online Behavioral Advertising (Principles) released in July 2009, the nation’s largest media and marketing associations have come together to launch this Program, which gives consumers a better understanding of and greater control over ads that are customized based on their online behavior (also called “interest-based” advertising).

Our participating companies share a commitment to delivering consumers a robust and credible Program of notice and choice for online behavioral advertising, and to enhancing consumer confidence in the online medium.

For Consumers

Learn about Online Behavioral Advertising: If you’re an online user, you can find out more about online behavioral advertising and how it helps provide you with more relevant advertising on the websites you visit. You’ll learn how online advertising supports the free content, products and services you use online, what choices you have, and how to use browser controls to enhance your privacy.

Exercise Your Choice: You can now visit the beta version of the Program’s Consumer Opt Out Page, which allows users to...
Opting out can be challenging
Ghostery configuration interface

Performance Options
- Scan and block images served off the matched tracker domain
- Scan and block iframes served off the matched tracker domain
- Scan and block embed and object tags served off the matched tracker domain
- Look for and prevent redirection from known trackers
- Scan for dynamically inserted page elements

Blocking Options
- Enable web bug blocking
- Enable cookie protection [experimental]

659 bugs & 396 cookies (click for more info)

<table>
<thead>
<tr>
<th>_bug</th>
<th>_app</th>
<th>_domain</th>
<th>_user</th>
<th>_other</th>
</tr>
</thead>
<tbody>
<tr>
<td>24/7 Real Media</td>
<td>IAB</td>
<td>NAIE</td>
<td>NAIE</td>
<td>NAIE</td>
</tr>
<tr>
<td>21eep</td>
<td>IAB</td>
<td>NAIE</td>
<td>NAIE</td>
<td>NAIE</td>
</tr>
<tr>
<td>33Across</td>
<td>IAB</td>
<td>NAIE</td>
<td>NAIE</td>
<td>NAIE</td>
</tr>
<tr>
<td>3DStats</td>
<td>NAIE</td>
<td>NAIE</td>
<td>NAIE</td>
<td>NAIE</td>
</tr>
<tr>
<td>5min Media</td>
<td>IAB</td>
<td>NAIE</td>
<td>NAIE</td>
<td>NAIE</td>
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<tr>
<td>[x+1]</td>
<td>NAIE</td>
<td>NAIE</td>
<td>NAIE</td>
<td>NAIE</td>
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<tr>
<td>Accelerator Media</td>
<td>NAIE</td>
<td>NAIE</td>
<td>NAIE</td>
<td>NAIE</td>
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<tr>
<td>Access Media</td>
<td>NAIE</td>
<td>NAIE</td>
<td>NAIE</td>
<td>NAIE</td>
</tr>
</tbody>
</table>
IE-TPL configuration interface

View and manage your Internet Explorer add-ons

Add-on Types
- Toolbars and Extensions
- Search Providers
- Accelerators
- Tracking Protection

Name | Status | Address
--- | --- | ---
Your Personalized List | Enabled | 

Get a Tracking Protection List online...

Learn more about Tracking Protection
Takeaways

• Problematic defaults
• Poorly designed interfaces and jargon
• Feedback
• Misconceptions about opt-out tools
• Users unable to make meaningful decisions on a per-company basis
What Do Online Behavioral Advertising Disclosures Communicate to Users?

Pedro Giovanni Leon, Justin Cranshaw, Lorrie Faith Cranor, Jim Graves, Manoj Hastak, Blase Ur, and Guzi Xu. WPES 2012
The industry claims total success

“The DAA has revolutionized consumer education and choice by delivering a real-time, in-ad notice more than 10 billion times every day through the increasingly ubiquitous DAA Advertising Option Icon (also known as the ‘Ad Choices’ Icon)”

Objectives

• Evaluate the effectiveness of different OBA disclosures at communicating notice and choice about OBA

• Find ways to improve effectiveness of OBA disclosures
Methodology

• Large scale between-subjects online study
  – 1,505 participants
  – Over 100 participants per treatment

• Participants recruited through Amazon Mechanical Turk

• Guided browsing scenario

• Online survey
First exposure to OBA disclosures
Second exposure to OBA disclosures

- Why did I get this ad?
- Interest based ads
- AdChoices
- Sponsor ads
- Learn about your ad choices
- Configure ad preferences
- ‘No tagline’
Exposure to landing pages

- AOL
- Yahoo!
- Microsoft
- Google
- Monster
Do icons and taglines suggest tailored ads?

• To what extent, if any, does this combination of the symbol and phrase, placed on the top right corner of the above ad suggest the following?
  – This ad has been tailored based on websites you have visited in the past. [true]
This ad has been tailored based on websites you have visited in the past

- **Why did I get this ad?**
  - Definitely not: 0%
  - Probably not: 20%
  - Not sure: 40%
  - Probably: 60%
  - Definitely: 80%

- **Interest based ads**
  - Definitely not: 80%
  - Probably not: 68%
  - Not sure: 66%
  - Probably: 58%
  - Definitely: 58%

- **Learn about your ad choices**
  - Definitely not: 66%
  - Probably not: 58%
  - Not sure: 34%
  - Probably: 26%
  - Definitely: 26%

- **Configure ad preferences**
  - Definitely not: 58%
  - Probably not: 34%
  - Not sure: 26%
  - Probably: 26%
  - Definitely: 26%

- **AdChoices**
  - Definitely not: 58%
  - Probably not: 34%
  - Not sure: 26%
  - Probably: 26%
  - Definitely: 26%

- **Blank**
  - Definitely not: 34%
  - Probably not: 26%
  - Not sure: 26%
  - Probably: 26%
  - Definitely: 26%

- **Sponsor Ads**
  - Definitely not: 26%
  - Probably not: 26%
  - Not sure: 26%
  - Probably: 26%
  - Definitely: 26%
Willingness to click

• What do you think would happen if you click on that symbol or that phrase?
  – It will take you to a page where you can tell the advertising company that you do not want to receive tailored ads. [true]
  – More ads will pop up. [false]
  – It will take you to a page where you can buy advertisements on this website. [false]
Will take you to a page where you can tell the advertising company that you do not want to receive tailored ads

Configure ad preferences: 50%
Learn about your ad choices: 34%
Why did I get this ad?: 28%
AdChoices: 27%
Blank: 20%
Interest based ads: 17%
Sponsor Ads: 16%

Definitely not
Probably not
Not sure
Probably
Definitely
Will take you to a page where you can buy advertisements on this website

- AdChoices: 45% Definitely or Probably
- Sponsor Ads: 45% Definitely or Probably
- Learn about your ad choices: 32%
- Interest based ads: 29%
- Blank: 27%
- Why did I get this ad?: 18%
- Configure ad preferences: 15%

- Definitely not
- Probably not
- Not sure
- Probably
- Definitely
More ads will pop up

- **Configure ad preferences**: 42%
- **Why did I get this ad?**: 46%
- **Learn about your ad choices**: 51%
- **AdChoices**: 56%
- **Interest based ads**: 57%
- **Blank**: 57%
- **Sponsor Ads**: 63%

Colors:
- **Definitely not**
- **Probably not**
- **Not sure**
- **Probably**
- **Definitely**
Takeaways

- OBA icons and taglines are not noticed
- “AdChoices” was outperformed by other tagline treatments at communicating notice and choice about OBA
- Users are afraid to click on icon
How effective is privacy notice and choice in practice?
<table>
<thead>
<tr>
<th>Notice and Choice Mechanism</th>
<th>Effectiveness in Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Privacy policies</td>
<td></td>
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<td>Privacy nutrition labels</td>
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<td>Privacy Facts for Android</td>
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<td>P3P</td>
<td></td>
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<tr>
<td>Do Not Track</td>
<td></td>
</tr>
<tr>
<td>Tools to opt-out of tracking</td>
<td></td>
</tr>
<tr>
<td>AdChoices icon</td>
<td></td>
</tr>
<tr>
<td>Model financial privacy notice</td>
<td></td>
</tr>
<tr>
<td>Notice and Choice Mechanism</td>
<td>Effectiveness in Practice</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>---------------------------------------------------------------------</td>
</tr>
<tr>
<td>Privacy policies</td>
<td>Nobody reads</td>
</tr>
<tr>
<td>Privacy nutrition labels</td>
<td>Promising research, not used</td>
</tr>
<tr>
<td>Privacy Facts for Android</td>
<td>Promising research, not used</td>
</tr>
<tr>
<td>P3P</td>
<td>Used to circumvent browser privacy settings</td>
</tr>
<tr>
<td>Do Not Track</td>
<td>No agreement on what it means</td>
</tr>
<tr>
<td>Tools to opt-out of tracking</td>
<td>Difficult to use</td>
</tr>
<tr>
<td>AdChoices icon</td>
<td>Nobody knows what it means and people are afraid to click on it</td>
</tr>
<tr>
<td>Model financial privacy notice</td>
<td>Adopted by thousands of websites, could be more useful with directory</td>
</tr>
</tbody>
</table>
How to make notice and choice more effective

- Incentives for adoption
- Enforcement (legal and technical)
- Baseline requirements
- Standardized notice formats
- Machine-readable notice formats
- Reduce ambiguity
- Link to full disclosure
- Comparison tools
- More research
Are They Actually Any Different? Comparing Thousands of Financial Institutions’ Privacy Practices

Lorrie Faith Cranor, Kelly Idouchi, Pedro Giovanni Leon, Manya Sleeper, Blase Ur, WEIS 2013
## FACTS

### WHAT DOES PNC DO WITH YOUR PERSONAL INFORMATION?

#### Why?
Financial companies choose how they share your personal information. Federal law gives consumers the right to limit some but not all sharing. Federal law also requires us to tell you how we collect, share, and protect your personal information. Please read this notice carefully to understand what we do.

#### What?
The types of personal information we collect and share depend on the product or service you have with us. This information can include:
- Social Security number and income
- Account balances and account transactions
- Credit scores and payment history

#### How?
All financial companies need to share customers' personal information to run their everyday business. In the section below, we list the reasons financial companies can share their customers' personal information, the reasons PNC chooses to share, and whether you can limit this sharing.

### Reasons we can share your personal information

<table>
<thead>
<tr>
<th>Reasons we can share your personal information</th>
<th>Does PNC share?</th>
<th>Can you limit this sharing?</th>
</tr>
</thead>
<tbody>
<tr>
<td>For our everyday business purposes — such as to process your transactions, maintain your account(s), respond to court orders and legal investigations, or report to credit bureaus</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>For our marketing purposes — to offer our products and services to you</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>For joint marketing with other financial companies</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>For our affiliates’ everyday business purposes — information about your transactions and experiences</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>For our affiliates’ everyday business purposes — information about your creditworthiness</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>For our affiliates to market to you</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>For nonaffiliates to market to you</td>
<td>No</td>
<td>We don’t share</td>
</tr>
</tbody>
</table>

### To limit our sharing
- Call 1-800-762-2118 — our menu will prompt you through your choice(s)
- Visit us online: [www.PNC.com/privacy](http://www.PNC.com/privacy) (Online Banking customers only.)

**Please note:**
If you are a new customer, we can begin sharing your information 30 days from the date we sent this notice. When you are no longer our customer, we continue to share your information as described in this notice. However, you can contact us at any time to limit our sharing.

### Questions?
Call 1-800-762-2118
Gramm-Leach Bliley Act (1999)

- Mandated annual privacy disclosures
- Disclosures were full of fine print, difficult to read and compare
Standardized notice

• Eight federal agencies jointly released a model privacy form (2009)
  – Two pages
  – Optional, but widely adopted
  – Safe harbor
**Model Privacy Form**

**Facts**

**What does [NAME OF FINANCIAL INSTITUTION] do with your personal information?**

**Why?**
Financial companies choose how they share your personal information. Federal law gives consumers the right to limit some but not all sharing. Federal law also requires us to tell you how we collect, share, and protect your personal information. Please read this notice carefully to understand what we do.

**What?**
The types of personal information we collect and share depend on the product or service you have with us. This information can include:
- Social Security number and [income]
- Account balances and [payment history]
- [credit history] and [credit scores]

**How?**
All financial companies need to share customers’ personal information to run their everyday business. In the section below, we list the reasons financial companies can share their customers’ personal information, the reasons [name of financial institution] chooses to share, and whether you can limit this sharing.

**Reasons for sharing**

<table>
<thead>
<tr>
<th>Reason for sharing</th>
<th>Does [name of financial institution] share?</th>
<th>Can you limit this sharing?</th>
</tr>
</thead>
<tbody>
<tr>
<td>For our everyday business purposes—such as processing your transactions, maintain your account(s), and respond to court orders and legal investigations, or report to credit bureaus</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>For our marketing purposes—to offer our products and services to you</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>For joint marketing with other financial companies</td>
<td>Yes</td>
<td>No</td>
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<td>For our affiliates’ everyday business purposes—information about your transactions and experiences</td>
<td>Yes</td>
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<td>For our affiliates’ everyday business purposes—information about your creditworthiness</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>For our affiliates to market to you</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>For nonaffiliates to market to you</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

**To limit our sharing**

- Call [phone number]—our menu will prompt you through your choices
- Visit us online—[website]
- Mail the form below

Please note:
If you are a new customer, we can begin sharing your information [90] days from the date we sent this notice. When you are not longer our customer, we continue to share your information as described in this notice.

However, you can contact us at any time to limit our sharing.

**Questions?**
Call [phone number] or go to [website]

**Mail-in Form**

Leave blank or fill in. Return this form to [Name of Financial Institution] [Address] [City, [State], [Zip] [Account].]

**Who we are**
Who is providing this notice? [insert]

**What we do**
How does [name of financial institution] protect my personal information?
To protect your personal information from unauthorized access and use, we use security measures that comply with federal law. These measures include computer safeguards and secured files and buildings.

[insert]

How does [name of financial institution] collect my personal information?
We collect your personal information, for example, when you
- [open an account] or [deposit money]
- [pay your bills] or [apply for a loan]
- [use your credit or debit card]

[We also collect your personal information from other companies.] OR
[We also collect your personal information from others, such as credit bureaus, affiliates, or other companies.]

**Why can’t I limit all sharing?**
Federal law gives you the right to limit only
- sharing for affiliates’ everyday business purposes—information about your creditworthiness
- affiliates from using your information to market to you
- sharing for nonaffiliates to market to you

State laws and individual companies may give you additional rights to limit sharing. [See below for more on your rights under state law.]

**What happens when I limit sharing for an account I hold jointly with someone else?**
[Your choices will apply to everyone on your account.] OR
[Your choices will apply to everyone on your account—unless you tell us otherwise.]

**Definitions**

**Affiliates**
Companies related by common ownership or control. They can be financial and nonfinancial companies.
- [affiliate information]

**Nonaffiliates**
Companies not related by common ownership or control. They can be financial and nonfinancial companies.
- [nonaffiliate information]

**Joint marketing**
A formal agreement between nonaffiliated financial companies that together market financial products or services to you.
- [joint marketing information]

**Other important information**
[insert other important information]
Data collection and extraction

• FDIC directory of 7,072 institutions
• Searched for them all with Google queries
• Found model privacy form in HTML or PDF
• Parsed form and put it in a database
  – Many errors and deviations from model form had to be accounted for
  – Manual check shows our parsing accuracy to be >90%
• Currently collecting data for larger list FOIAed from the Federal Reserve
Sharing practices

Entire sample

- Our Everyday
- Our Marketing
- Joint Marketing
- Affiliates (Trans.)
- Affiliates (Credit.)
- Affiliates' Marketing*
- Nonaffiliates' Marketing

100 largest banks

- Our Everyday
- Our Marketing
- Joint Marketing
- Affiliates (Trans.)
- Affiliates (Credit.)
- Affiliates' Marketing*
- Nonaffiliates' Marketing

Legend:
- Don't share
- Share, opt-out
- Share, no opt-out
What Info is Collected, and How

- **What**: 24 options, SSN + choose exactly 5
  - Social Security number and income
  - [account balances] and [payment history]
  - [credit history] and [credit scores]

- **How**: 34 options, choose exactly 5
  - [open an account] or [deposit money]
  - [pay your bills] or [apply for a loan]
  - [use your credit or debit card]

- The most commonly used terms were the examples listed in the model
Curiosities Encountered

• Self-contradictory statements (15)

Does Geneva State Bank share?

Yes

Yes

Yes

Yes
Curiosities Encountered

• Self-contradictory statements (15)

<table>
<thead>
<tr>
<th>Does Geneva State Bank share?</th>
<th>Can you limit this sharing?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>We don't share</td>
</tr>
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<td>Yes</td>
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Curiosities Encountered

• Self-contradictory statements (15)

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<th>Can you limit this sharing?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>We don't share</td>
</tr>
<tr>
<td>Yes</td>
<td>We don't share</td>
</tr>
<tr>
<td>Yes</td>
<td>We don't share</td>
</tr>
</tbody>
</table>

• 24 institutions appear to be violating the Fair Credit Reporting Act (FCRA)
  – Not providing required opt-out
Takeaways

- Model form needs some improvement
- Adoption happens when there are incentives
- Institutions are actually different!
  - Largest institutions have the worst practices
  - Opportunity for consumer privacy choice
- But we need to help consumers find the banks with good privacy
We've collected 6,324 banks' privacy notices. See how your bank stacks up...

...or search for a privacy-protective bank.

Characteristic

<table>
<thead>
<tr>
<th>State</th>
<th>Privacy practice</th>
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</thead>
<tbody>
<tr>
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<table>
<thead>
<tr>
<th>Size</th>
<th>Privacy practice</th>
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</thead>
<tbody>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Specializations</th>
<th>Privacy practice</th>
</tr>
</thead>
<tbody>
<tr>
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<td>ANY</td>
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</tbody>
</table>

Carnegie Mellon University